ENVIRONMENTAL IMPACT ASSESSMENT REPORT

VOLUME III TECHNICAL APPENDICES

Direct Application for Approval to An Bord Pleanála in accordance with Section 175 of the Planning and Development Act 2000 (as amended)



PROPOSED RESIDENTIAL AND MIXED USE DEVELOPMENT

AT

EMMET ROAD, INCHICORE, DUBLIN 8

Prepared by

JSA John Spain Associates

Planning & Development Consultants

Chartered Town Planners & Chartered Surveyors

In Conjunction with

OCSC Consulting Engineers/Enviroguide/Byrne Environmental/IAC Archaeology/Blackwood Associates

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DOCUMENT CONTROL SHEET

Client:	**Dublin City Council**
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Final	Final	EIAR TEAM	RK	RK	30-9-2022

APPENDIX A – INTRODUCTION

Appendix A1 – EIAR Scoping

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Appendix A1 - Appendix A – EIAR Scoping

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29-4-2022
JSA Ref. 20104

Dear Sir/Madam,

RE: EIAR SCOPING RELATING TO PROPOSED PART 10 MIXED USE DEVELOPMENT OF 574 DWELLINGS AND COMMUNITY/RETAIL/COMMERCIAL FLOORSPACE AT EMMET ROAD, DUBLIN 8.

1.0 Introduction

1.1 John Spain Associates has been appointed by Dublin City Council to prepare an Environmental Impact Assessment Report (EIAR) to support a future planning application for a mixed-use development on lands at Emmet Road (formerly St. Michael's Estate), Inchicore, Dublin 8.

1.2 The planning application will be made directly to An Bord Pleanála under the provisions of Section 175(3) of the Planning and Development Acts 2000 (as amended).

1.3 As part of the EIA process, we wish to consult with those statutory and non-statutory bodies that may have an interest in the proposal. We would therefore be grateful if you could provide any information relevant to the proposed site that you may hold, and/or highlight any issues that you feel should be addressed within the scope of the EIAR.

1.4 We have set out hereunder the site characteristics and a brief description of the development proposal in order to provide a strategic overview of the development characteristics.

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Meadhbh Nolan BA MRUP MRTPI Kate Kerrigan BA MSc MRTPI

John Spain Associates Ltd. trading as John Spain Associates. Directors: J. Spain, S. Spain.
Registered in Ireland No. 396306. Registered Office: 39, Fitzwilliam Place, Dublin 2. VAT No. IE 6416306U

2.0 Site Location

2.1 Emmet Road is located 4km west of the city centre in Inchicore. The site extends to c. 3.73 hectares is bound to the north by Emmet Road, to the south by the Grand Canal and Goldenbridge Cemetery, to the east by the rear of residential dwellings on Connolly Avenue and Bulfin Court and to the west by St Vincent Street West.



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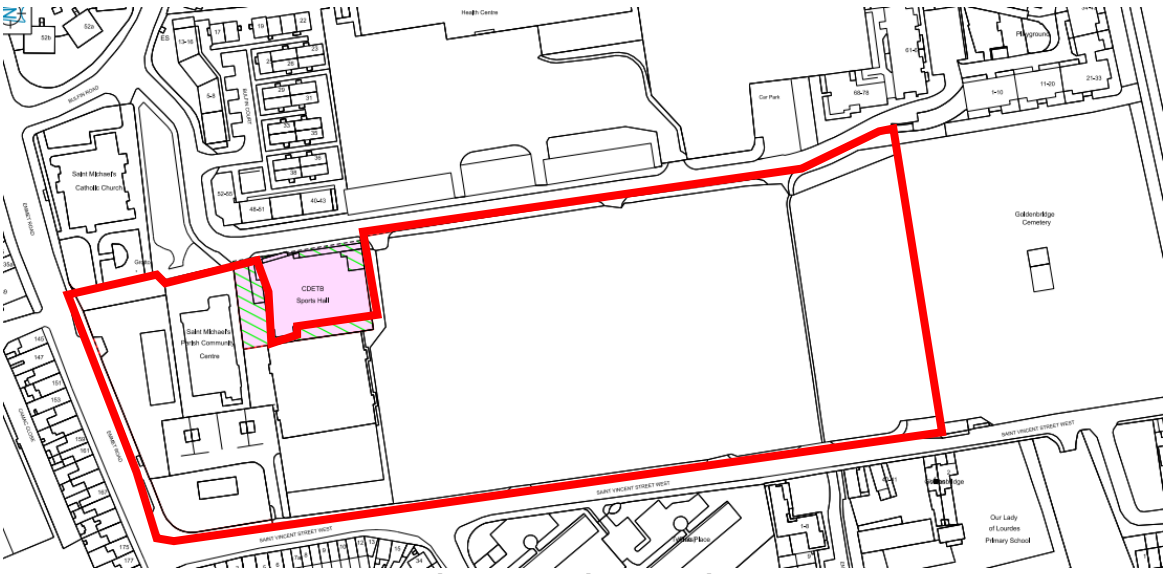


Figure 2 – Site Location

2.0 Background – Government Policy – Cost Rental

2.1 Housing for All - a New Housing Plan for Ireland', published in September 2021, is the government's housing plan to 2030. It is a multi-annual, multi-billion-euro plan which will improve Ireland's housing system and deliver more homes of all types for people with different housing needs.

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2.3 The Government plans to provide an average of 2,000 Cost Rental homes per year for the next 10 years. This model of housing is a first in type initiative for Dublin City Council.

2.4 In this regard, the proposed Emmet Road Development will provide a tenure mix of 24% social and 76% cost rental homes

3.0 Planning Context Summary – Dublin City Development Plan 2016-2022

3.1 The site at Emmet Road is zoned 'Z14' – a Strategic Development and Regeneration Area (SDRA) – in the Dublin City Development Plan 2016-2022, with a stated objective *'to seek the social, economic and physical development and/or rejuvenation of an area with mixed use, of which residential and 'Z6' would be the predominant uses."*

3.2 According to the Dublin City Development Plan, the SDRA areas have the capacity for a substantial amount of development in developing areas in the inner and outer city.

3.3 The City Development Plan 2016-2022 contains a number of key guiding principles for this site under the heading SDRA 9 which are set out below.

SDRA9 – Guiding Principles

3.4 The guiding principles for the remaining SDRA lands include:

- *The development of a high-quality, vibrant, mixed-use urban quarter will be promoted; new facilities will be located in accessible locations and will maximise the opportunities to connect with the wider neighbourhood.*
- *The development will complement the regeneration of Inchicore by encouraging a natural extension of the village centre eastwards along Emmet Road; the development will provide strong connections between the site and the functions of the village centre, for which a local environmental improvements plan is proposed.*
- *The development of high-quality streetscape onto Emmet Road with accessible civic spaces, active frontages and an appropriate transition in scale, height and character between the village centre and the site will be promoted*
- *Strong permeability will be sought through the site, including pedestrian and cyclist connections, to achieve strong north-to-south connections between Emmet Road and the Luas/ Grand Canal corridor and east-to west connections between St Vincent Street West and Bulfin Road; active streetscapes along these routes will be promoted.*
- *Variety in housing tenures and unit types will be sought in order to achieve a balanced and sustainable community The important heritage features on, and adjoining, the site, shall be respected and highlighted by urban design with particular regard to the tourism, heritage, community and amenity value of assets such as St Michael's Church, Richmond Barracks, Goldenbridge Cemetery and the Grand Canal.*

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- *Innovative proposals that create a landmark destination within the city for combined facilities of a community, recreational, leisure and sports nature will be promoted; such facilities shall integrate positively with the existing sports facilities on site The development of high-quality senior citizen housing. This will be located on the site between Thornton Heights and Richmond Barracks.*

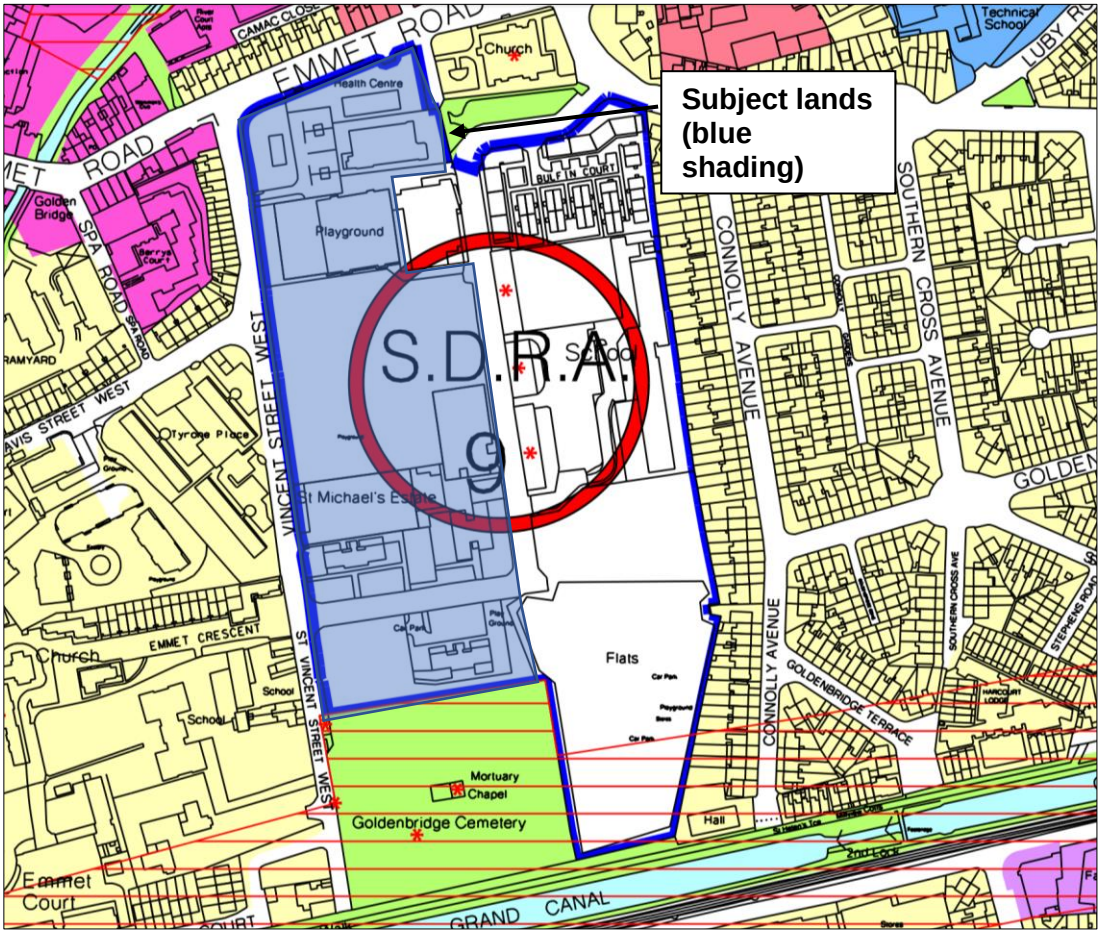


Figure 3 – SDRA 9. St Michael's Estate

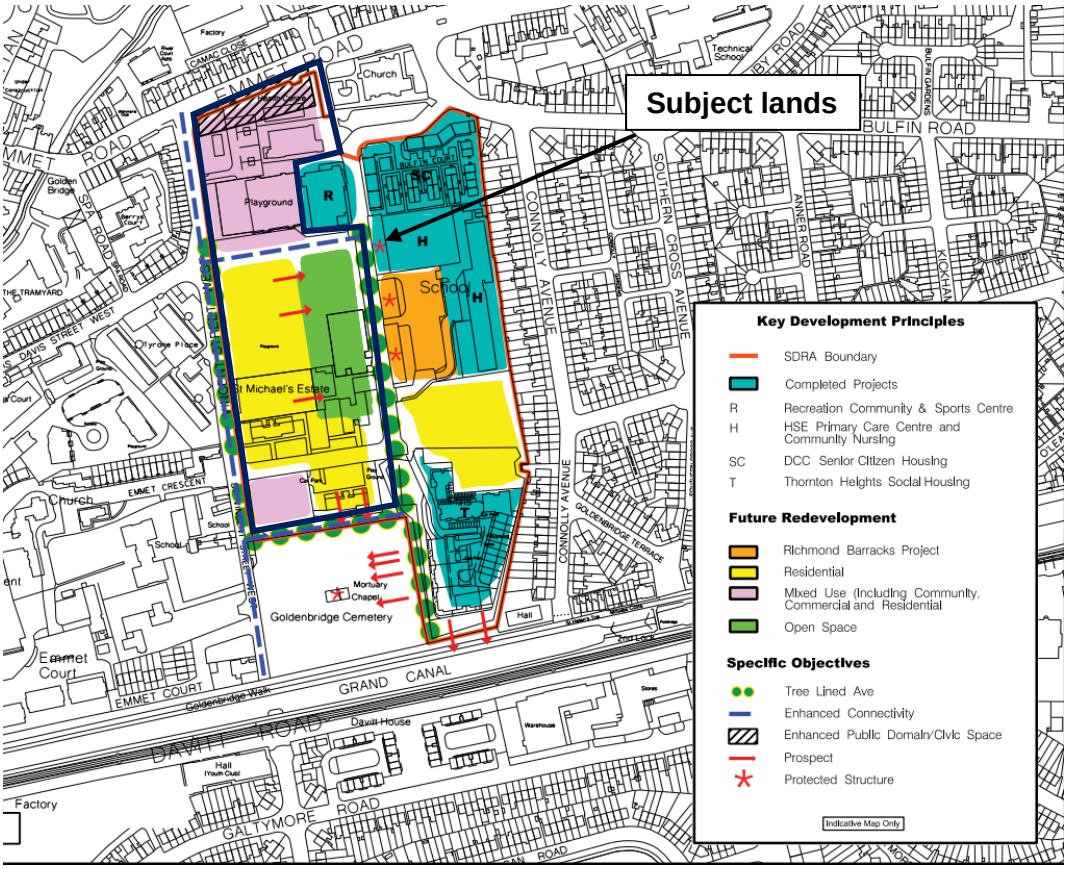


Figure 4 – Key Development Principles (Indicative Land Use Map)

4.0 Project Description Summary

4.1 The project is predominantly residential in nature, comprising c. 574 no. apartments supplemented and supported by community facilities (Library/Community Hub, Creche, Retail/Café units) in a neighbourhood centre which includes a supermarket fronting onto Emmet Road.

4.2 The proposal also includes 50 no. car parking spaces including 3 no. accessible spaces, 30 car share spaces and 10% Electric Vehicle charging points. In addition it is proposed to provide 939 no. bicycle spaces and 293 bicycle visitor spaces. The car parking spaces will be predominantly provided in a Village Mobility Hub located beneath the Supermarket. Car parking spaces will be located adjacent to Goldenbridge Cemetery.

Community and Commercial Elements of Proposed Development[1]

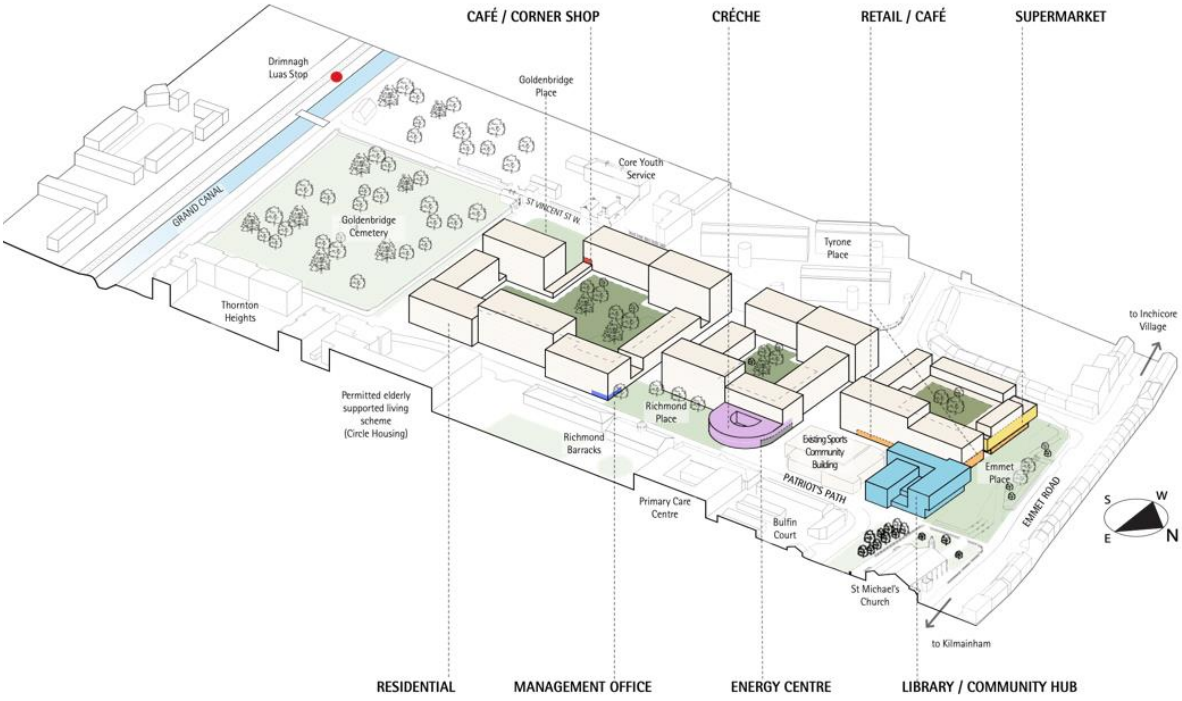
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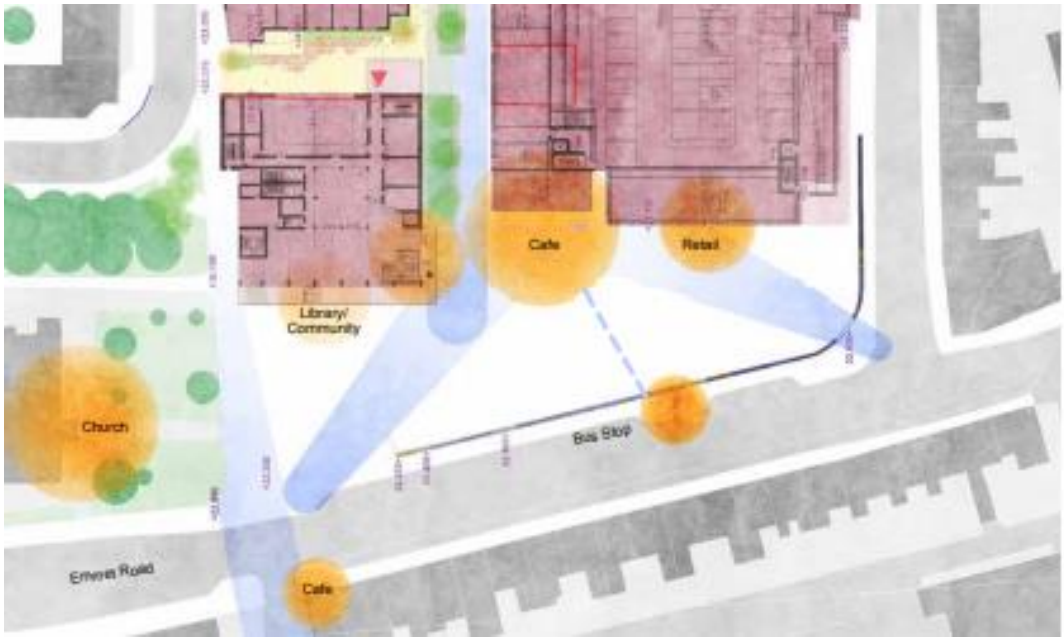
Creche	750 sq. m
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Management office	90 sq. m

OVERVIEW OF PROPOSED USES



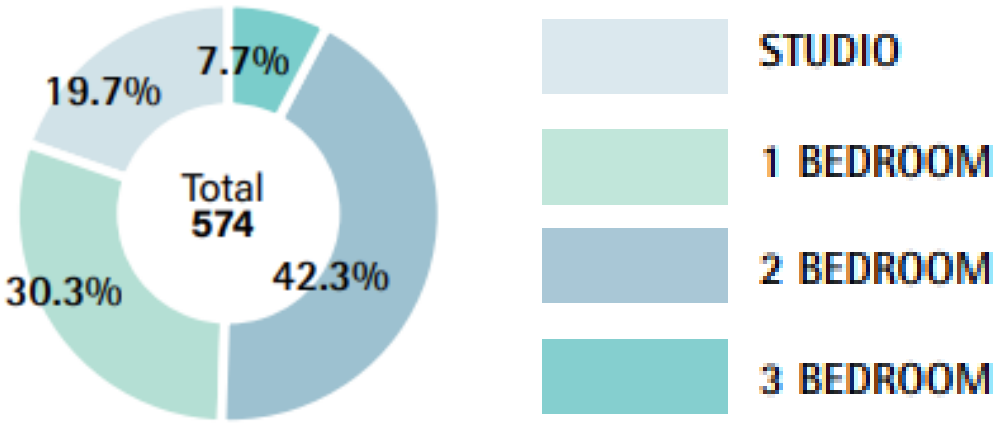


Residential Element of Proposed Development

4.4 The residential element of the proposed Emmet Road Development will provide a tenure mix of 24% social and 76% cost rental homes. The overall proposed apartment mix is envisaged as follows:

	Studio	1 bedroom	2 bedroom	3 bedroom	Total
Cost Rental Apartments	113	131	193		437
	25.8%	30.0%	44.2%		
Social Apartments	-	43	50	44	137
	0%	31.3%	36.5%	32.2%	
Total	113	174	243	44	574
% Mix	19.7%	30.3%	42.2%	7.7%	100%

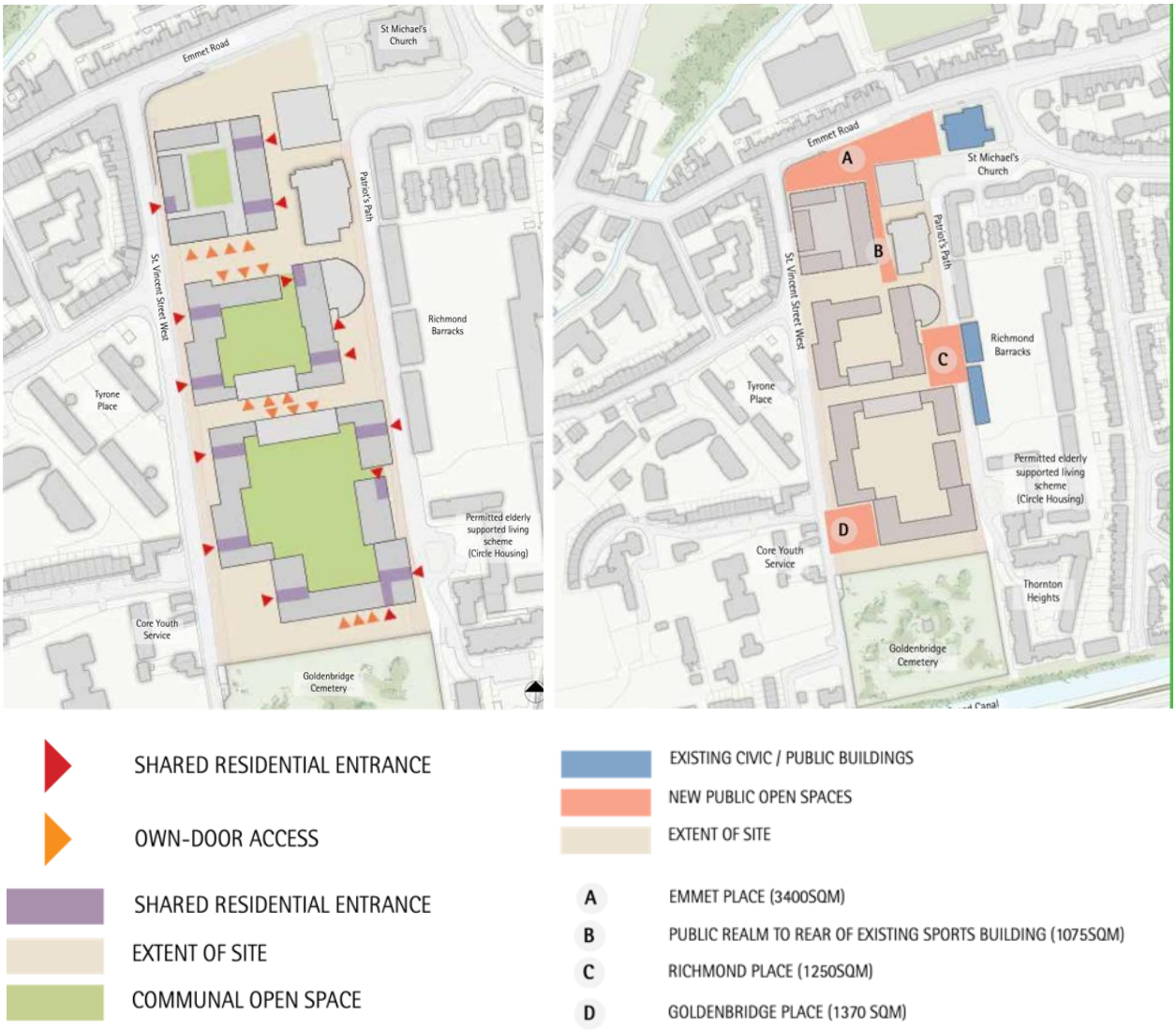
Table 1 Proposed Apartment Mix[2]



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Public Open Space/Communal Open Space

4.5 It is proposed to provide c. 7,095 sq. m of public open space (c. 19% of the site) in 4 no. areas distributed through the site as well as communal open space of c. 4,540 sq. m for the residents.



Scale and Massing

4.6 The proposed development is formed around 3 no. communal open space areas in a range of heights of 3,5 and 7 storey elements.



4.7 The EIAR will also include an assessment of the permitted (under Part 8) demolition of the former health centre and St. Michael's community centre and associated site clearance works which include the remains of a disused halting site (located in the northern portion of the subject lands) as well as a connection to Irish Water services from the subject site along Emmet Road for c. 200m to the Blackhorse Bridge located to the west, (adjacent to the Camac River) which will form part of the assessment.

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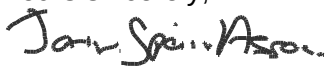
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Yours sincerely,



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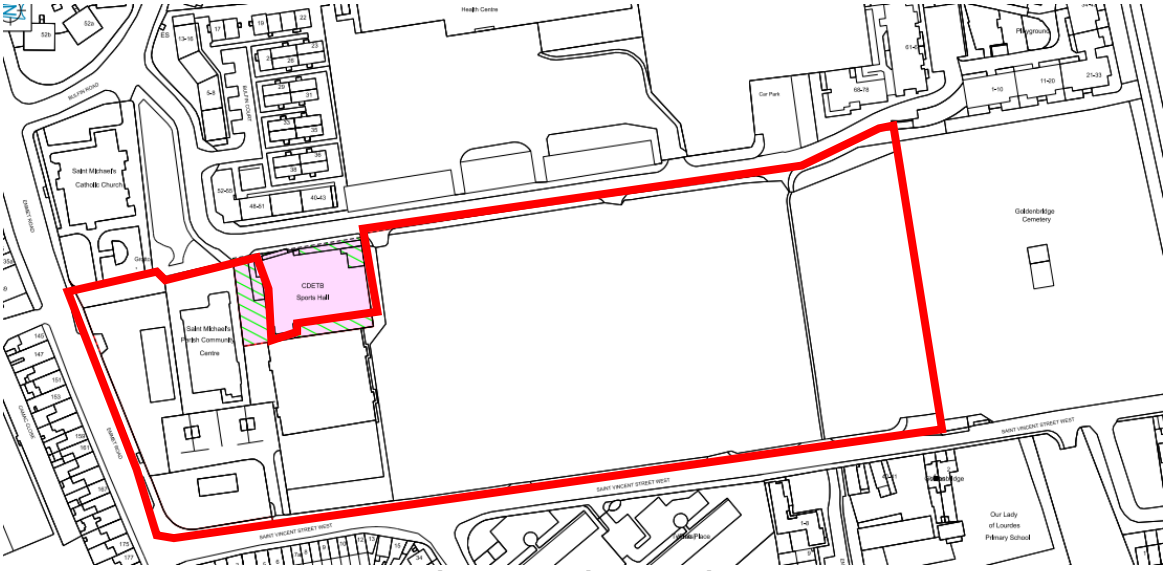


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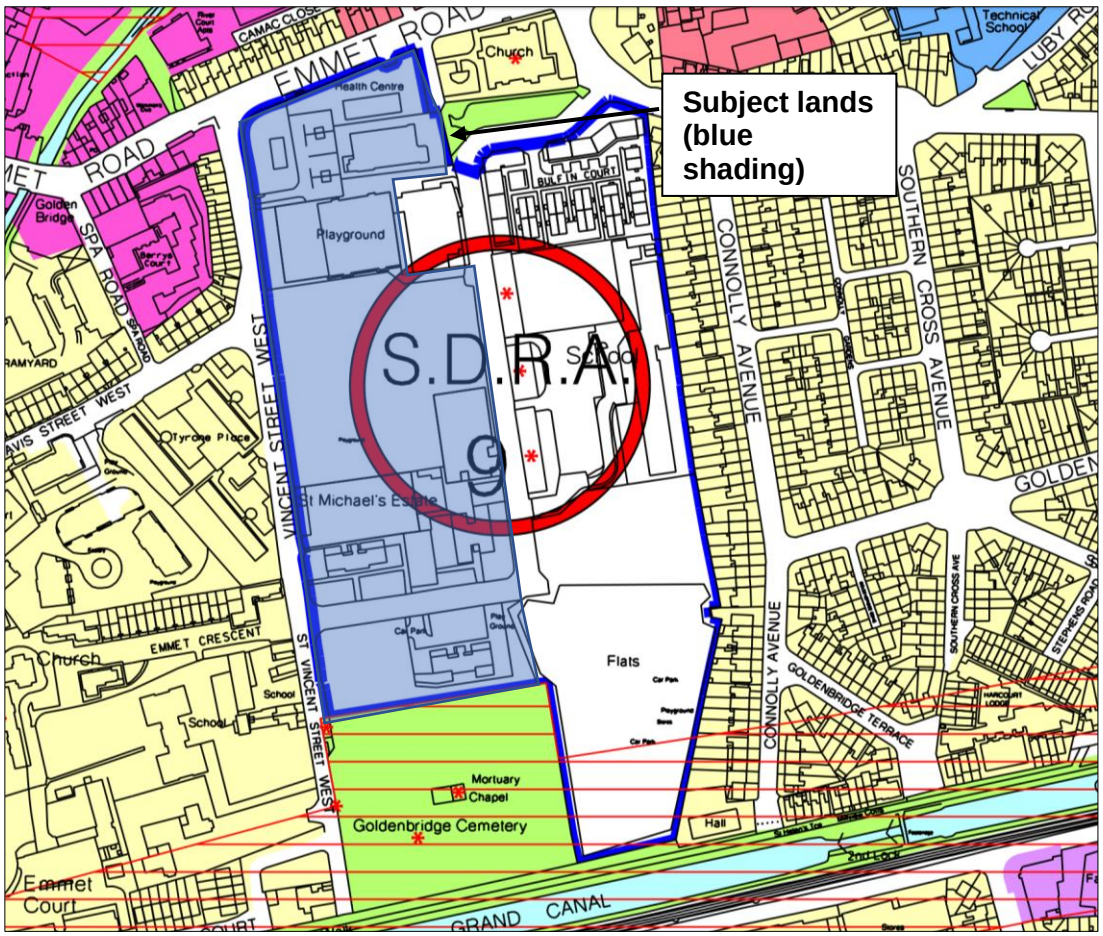


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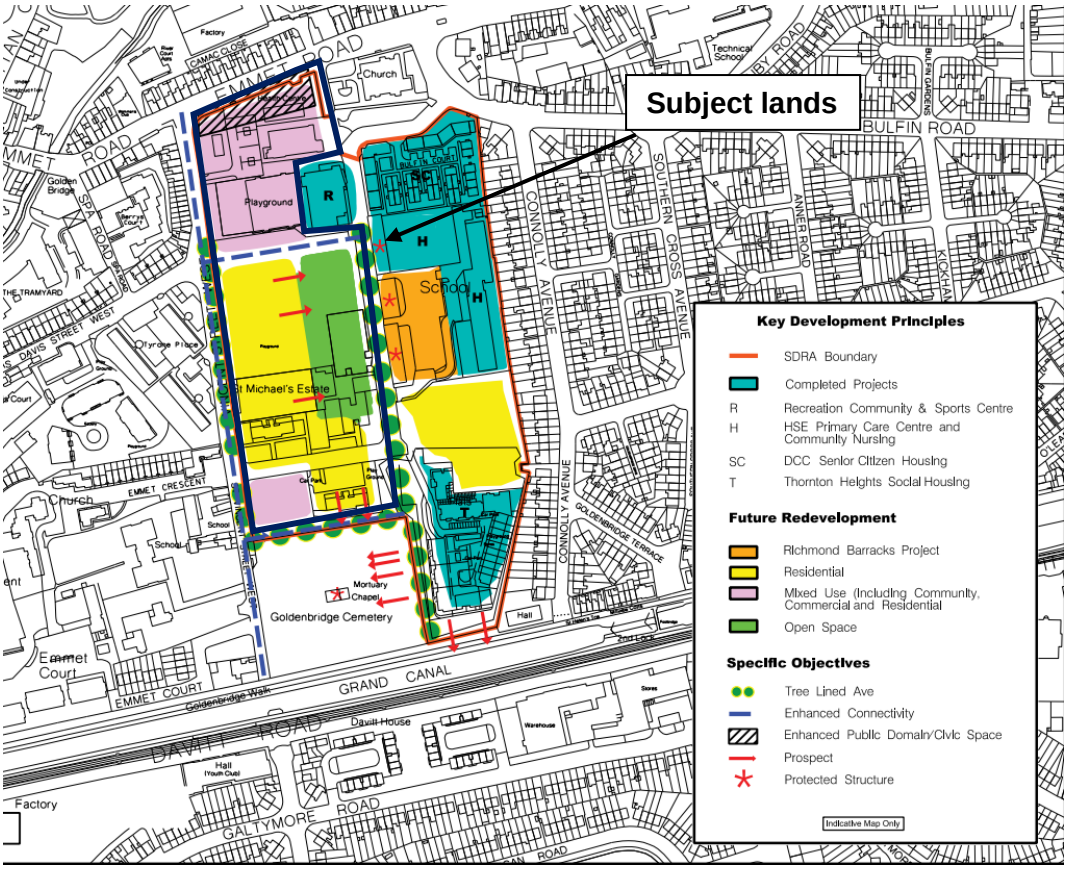


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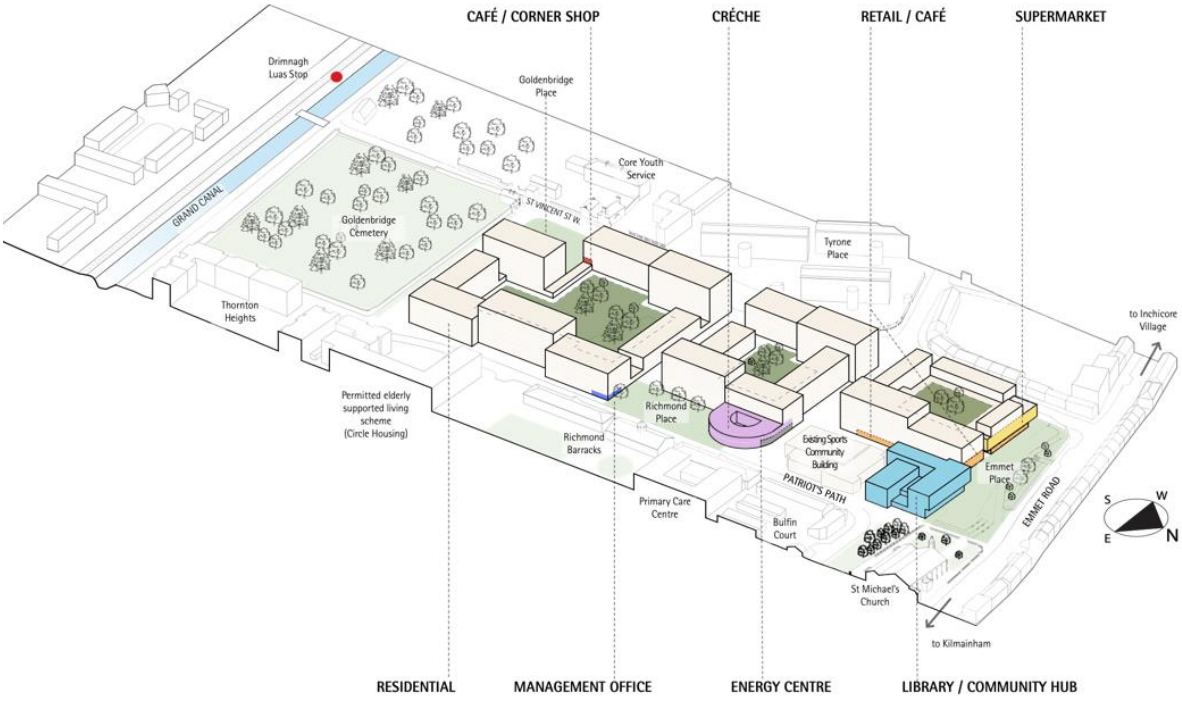
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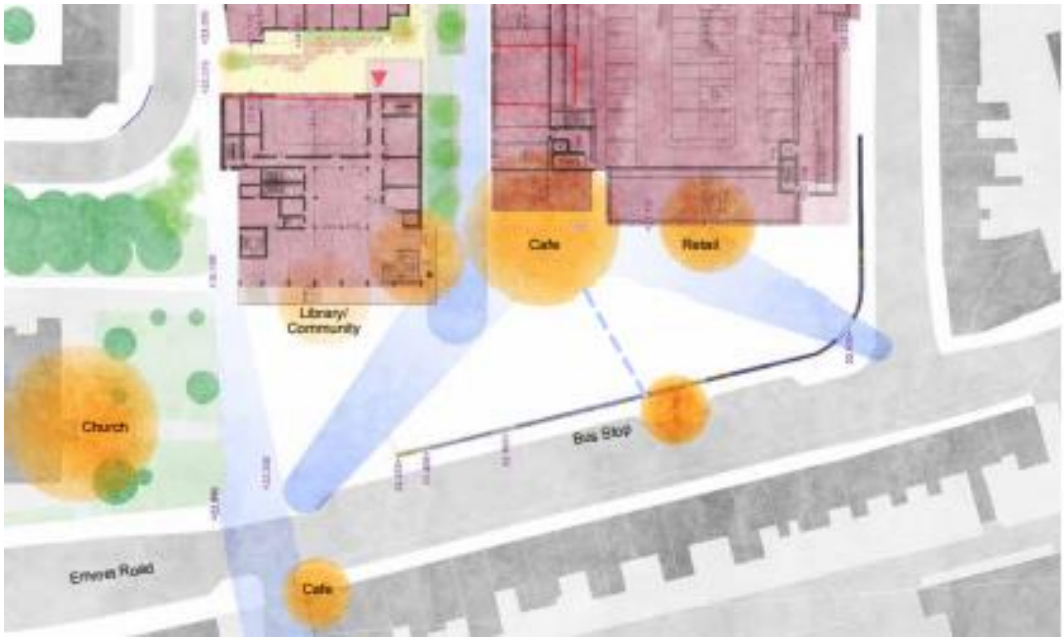
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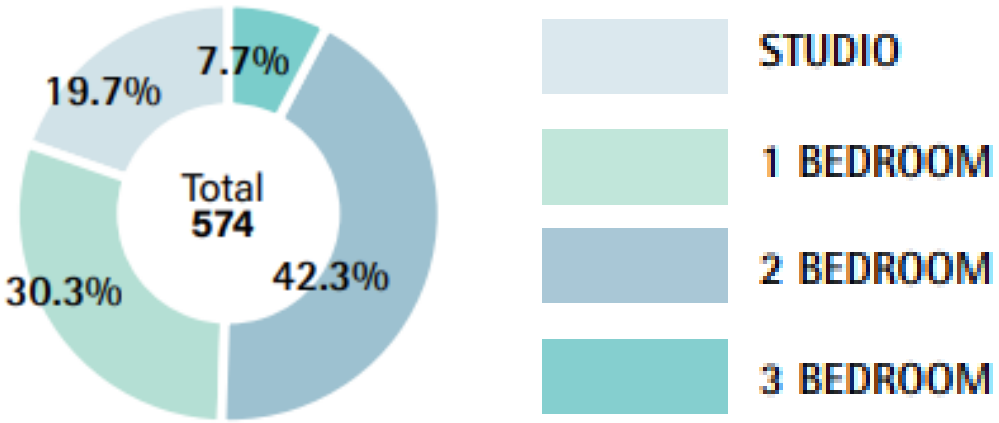


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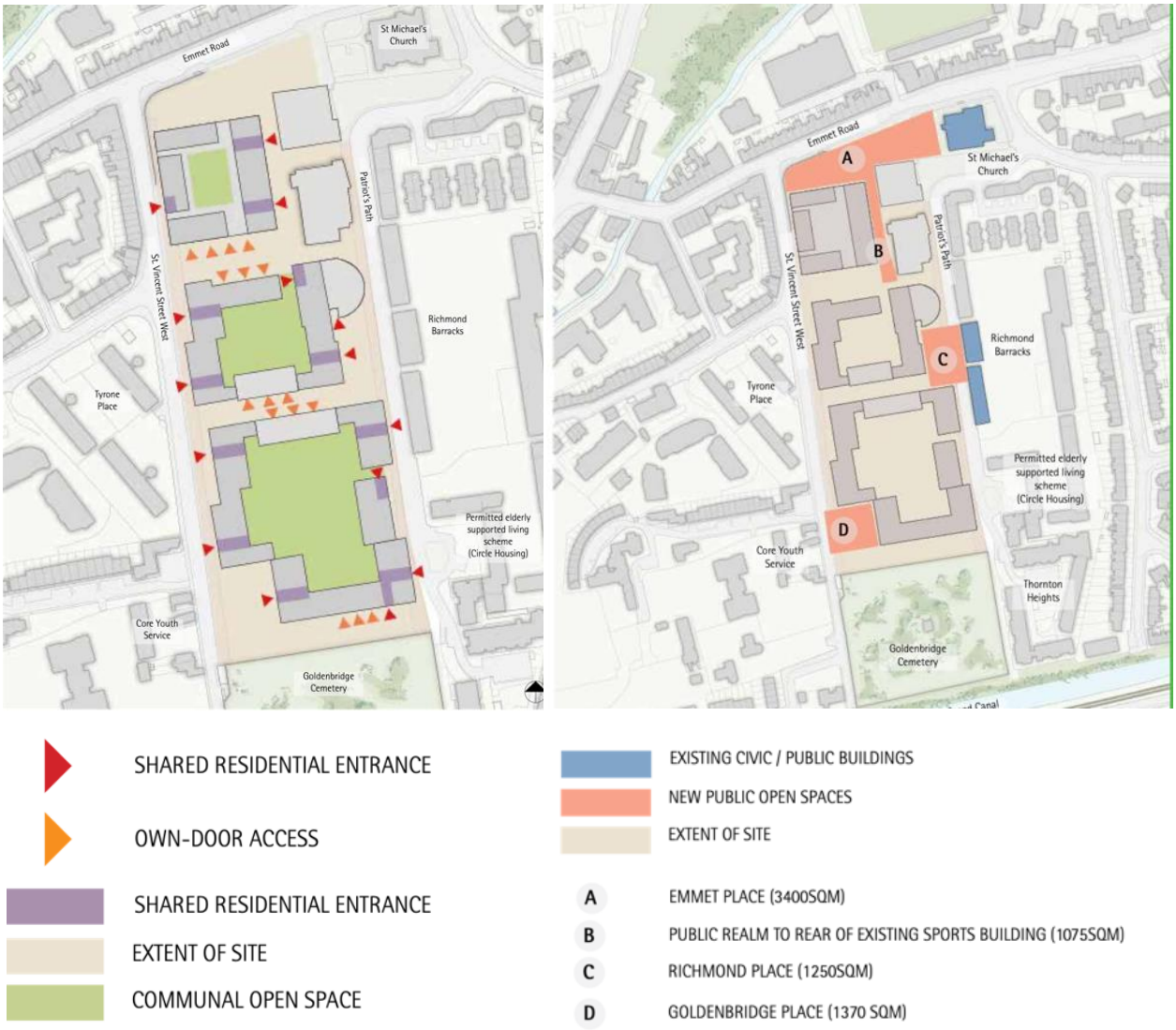
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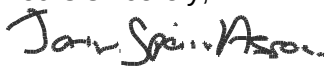
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Department of Culture, Heritage & the Gaeltacht
c/o The Manager, Development Applications Unit
Department of Culture, Heritage and the Gaeltacht
Newtown Road
Wexford
Manager.DAU@chg.gov.ie

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1.0 Introduction

1.1 John Spain Associates has been appointed by Dublin City Council to prepare an Environmental Impact Assessment Report (EIAR) to support a future planning application for a mixed-use development on lands at Emmet Road (formerly St. Michael's Estate), Inchicore, Dublin 8.

1.2 The planning application will be made directly to An Bord Pleanála under the provisions of Section 175(3) of the Planning and Development Acts 2000 (as amended).

1.3 As part of the EIA process, we wish to consult with those statutory and non-statutory bodies that may have an interest in the proposal. We would therefore be grateful if you could provide any information relevant to the proposed site that you may hold, and/or highlight any issues that you feel should be addressed within the scope of the EIAR.

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2.0 Site Location

2.1 Emmet Road is located 4km west of the city centre in Inchicore. The site extends to c. 3.73 hectares is bound to the north by Emmet Road, to the south by the Grand Canal and Goldenbridge Cemetery, to the east by the rear of residential dwellings on Connolly Avenue and Bulfin Court and to the west by St Vincent Street West.



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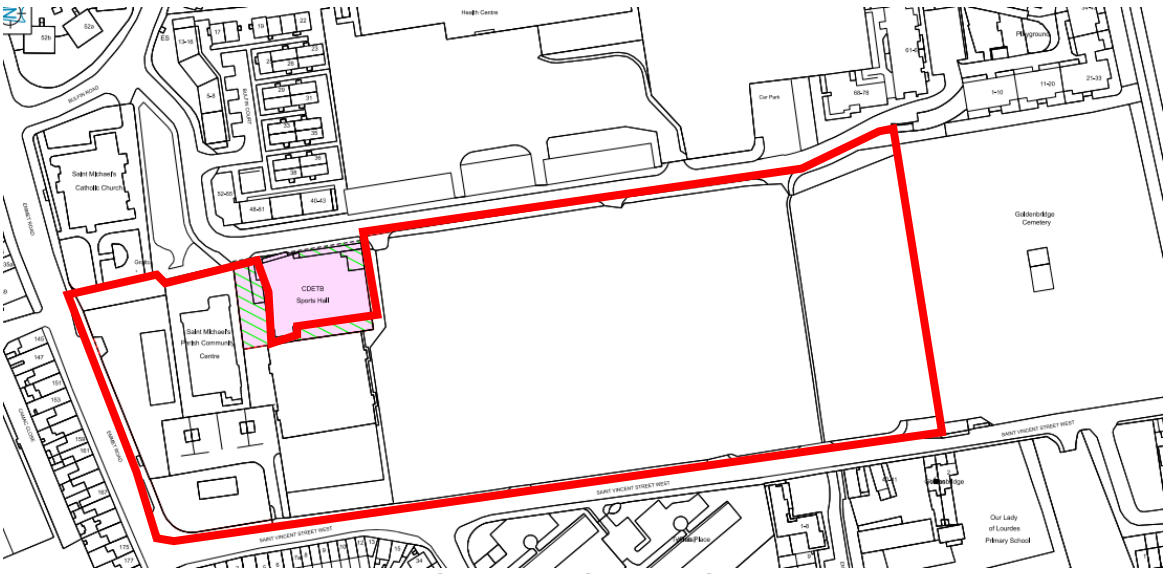


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2.1 Housing for All - a New Housing Plan for Ireland', published in September 2021, is the government's housing plan to 2030. It is a multi-annual, multi-billion-euro plan which will improve Ireland's housing system and deliver more homes of all types for people with different housing needs.

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2.3 The Government plans to provide an average of 2,000 Cost Rental homes per year for the next 10 years. This model of housing is a first in type initiative for Dublin City Council.

2.4 In this regard, the proposed Emmet Road Development will provide a tenure mix of 24% social and 76% cost rental homes

3.0 Planning Context Summary – Dublin City Development Plan 2016-2022

3.1 The site at Emmet Road is zoned 'Z14' – a Strategic Development and Regeneration Area (SDRA) – in the Dublin City Development Plan 2016-2022, with a stated objective *'to seek the social, economic and physical development and/or rejuvenation of an area with mixed use, of which residential and 'Z6' would be the predominant uses."*

3.2 According to the Dublin City Development Plan, the SDRA areas have the capacity for a substantial amount of development in developing areas in the inner and outer city.

3.3 The City Development Plan 2016-2022 contains a number of key guiding principles for this site under the heading SDRA 9 which are set out below.

SDRA9 – Guiding Principles

3.4 The guiding principles for the remaining SDRA lands include:

- *The development of a high-quality, vibrant, mixed-use urban quarter will be promoted; new facilities will be located in accessible locations and will maximise the opportunities to connect with the wider neighbourhood.*
- *The development will complement the regeneration of Inchicore by encouraging a natural extension of the village centre eastwards along Emmet Road; the development will provide strong connections between the site and the functions of the village centre, for which a local environmental improvements plan is proposed.*
- *The development of high-quality streetscape onto Emmet Road with accessible civic spaces, active frontages and an appropriate transition in scale, height and character between the village centre and the site will be promoted*
- *Strong permeability will be sought through the site, including pedestrian and cyclist connections, to achieve strong north-to-south connections between Emmet Road and the Luas/ Grand Canal corridor and east-to west connections between St Vincent Street West and Bulfin Road; active streetscapes along these routes will be promoted.*

- *Variety in housing tenures and unit types will be sought in order to achieve a balanced and sustainable community The important heritage features on, and adjoining, the site, shall be respected and highlighted by urban design with particular regard to the tourism, heritage, community and amenity value of assets such as St Michael's Church, Richmond Barracks, Goldenbridge Cemetery and the Grand Canal.*
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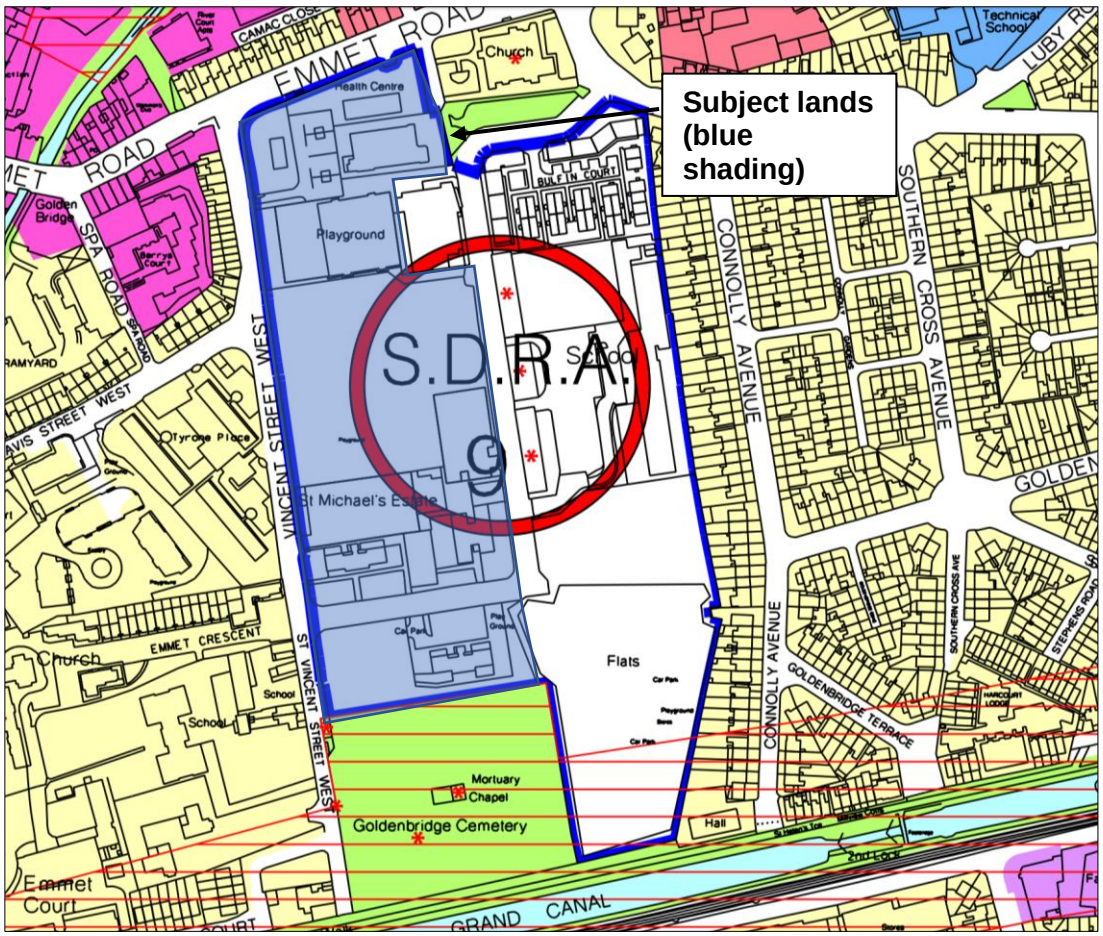


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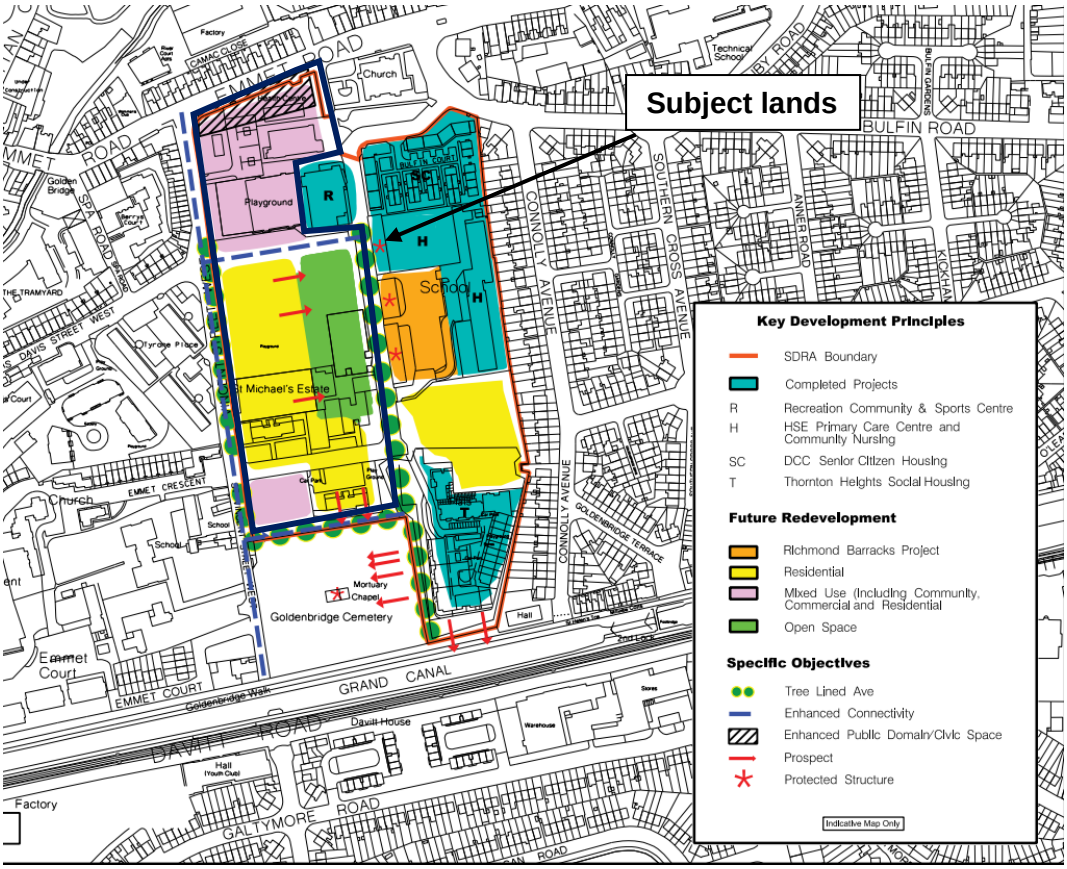


Figure 4 – Key Development Principles (Indicative Land Use Map)

4.0 Project Description Summary

4.1 The project is predominantly residential in nature, comprising c. 574 no. apartments supplemented and supported by community facilities (Library/Community Hub, Creche, Retail/Café units) in a neighbourhood centre which includes a supermarket fronting onto Emmet Road.

4.2 The proposal also includes 50 no. car parking spaces including 3 no. accessible spaces, 30 car share spaces and 10% Electric Vehicle charging points. In addition it is proposed to provide 939 no. bicycle spaces and 293 bicycle visitor spaces. The car parking spaces will be predominantly provided in a Village Mobility Hub located beneath the Supermarket. Car parking spaces will be located adjacent to Goldenbridge Cemetery.

Community and Commercial Elements of Proposed Development[1]

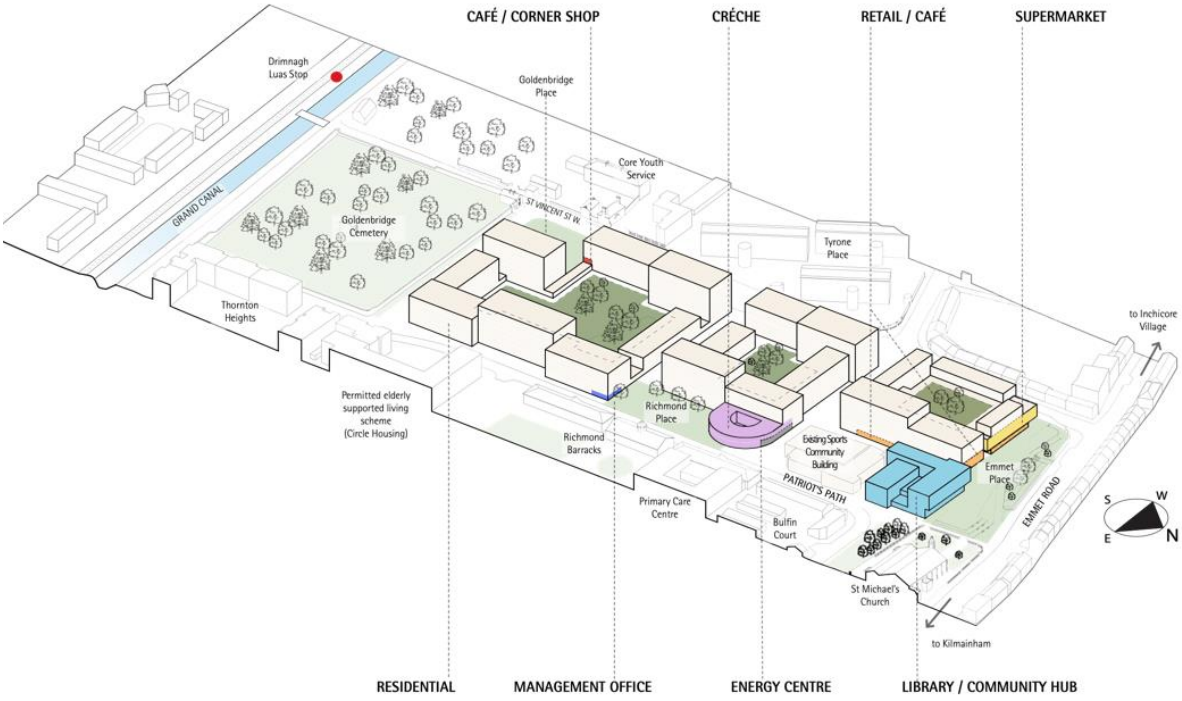
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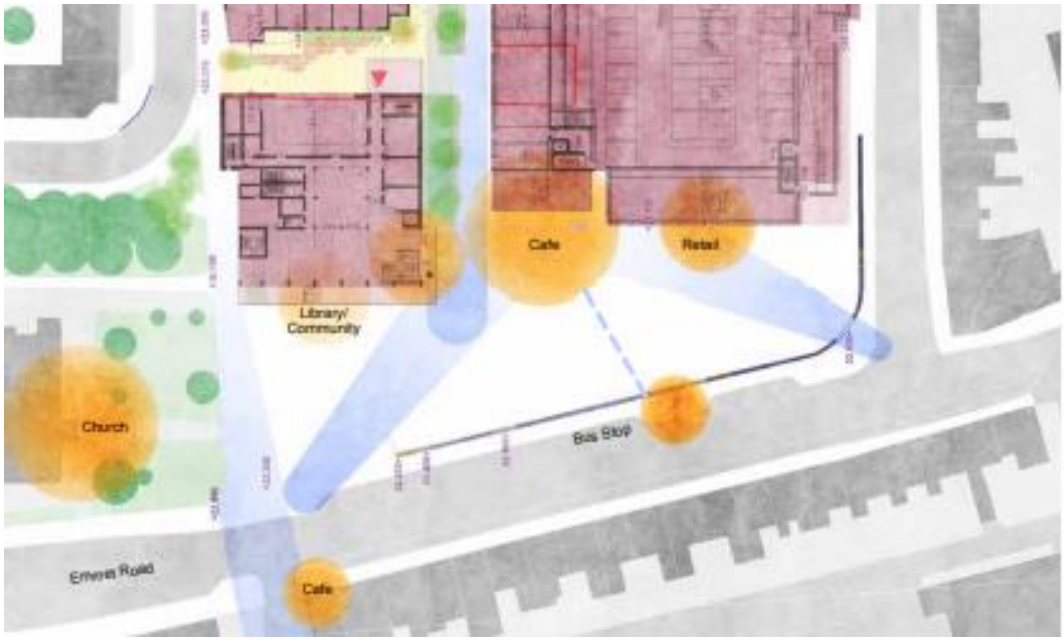
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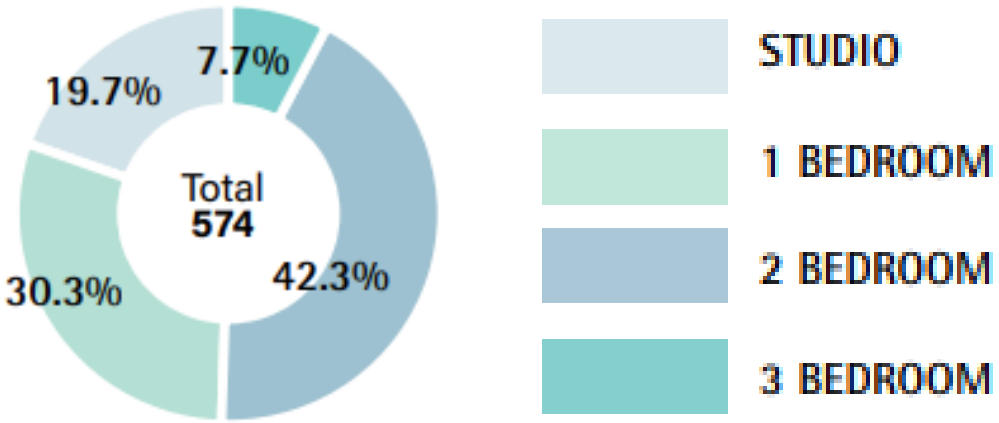


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4.4 The residential element of the proposed Emmet Road Development will provide a tenure mix of 24% social and 76% cost rental homes. The overall proposed apartment mix is envisaged as follows:

	Studio	1 bedroom	2 bedroom	3 bedroom	Total
Cost Rental Apartments	113	131	193		437
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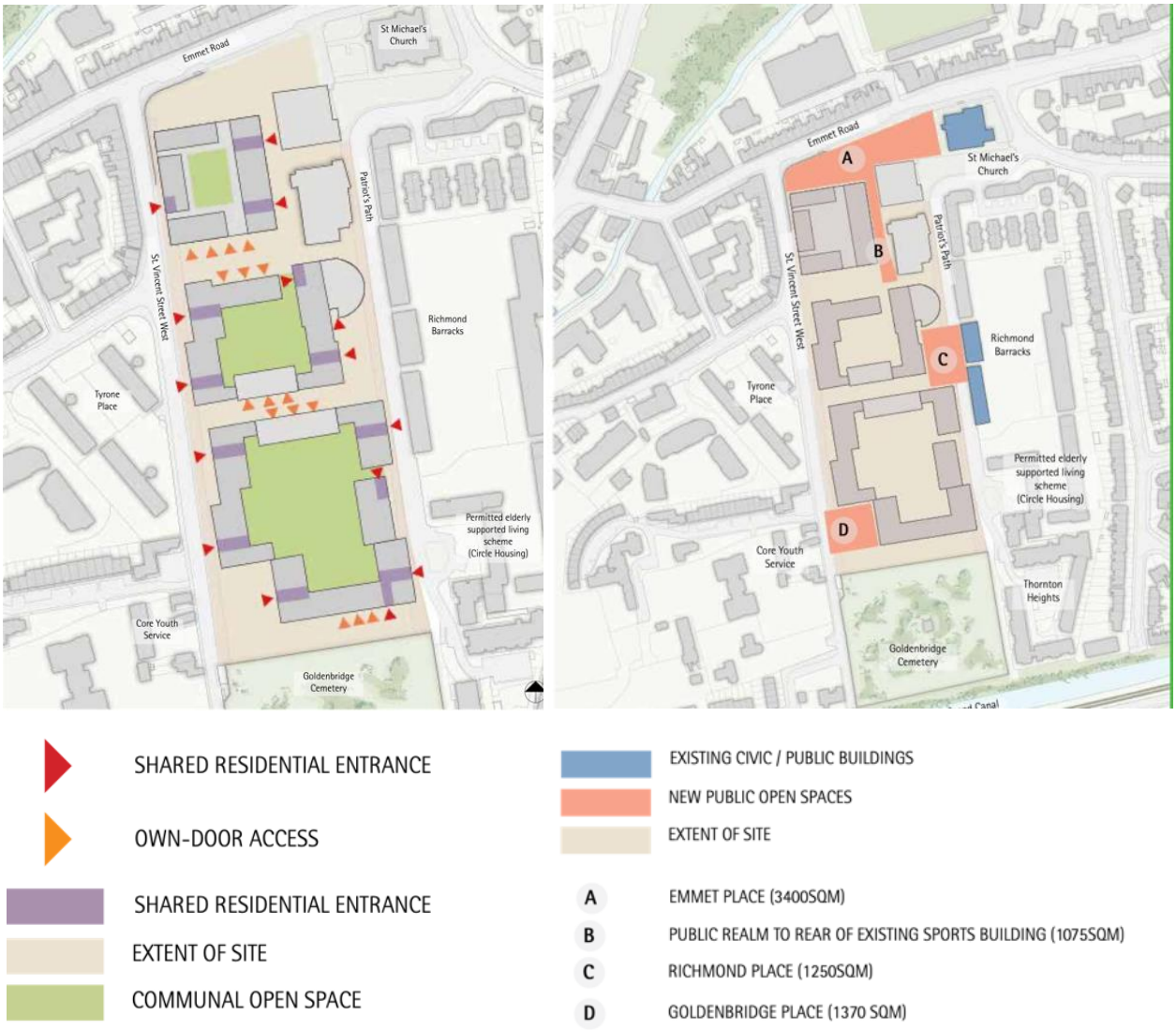
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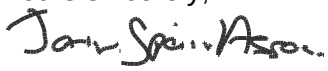
e-mail: RKunz@johnspainassociates.com

Rory Kunz, *Executive Director,*

John Spain Associates,
39 Fitzwilliam Place,
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Yours sincerely,



John Spain Associates

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Department of Housing, Planning and Local Government
Custom House,
Dublin D01 W6X0
gcsofficer@housing.gov.ie

29-4-2022
JSA Ref. 20104

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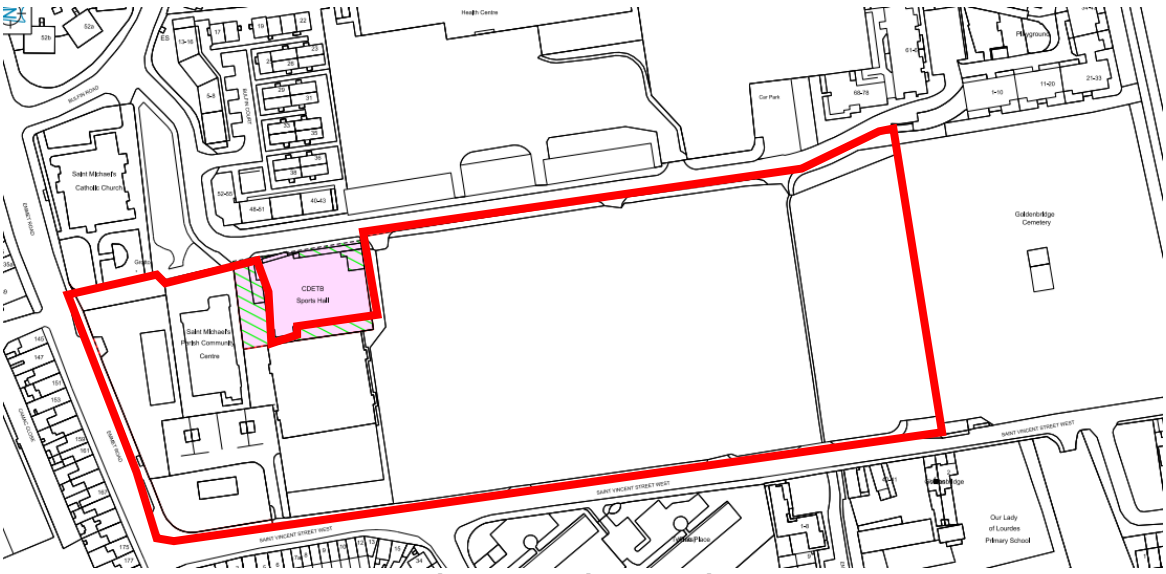


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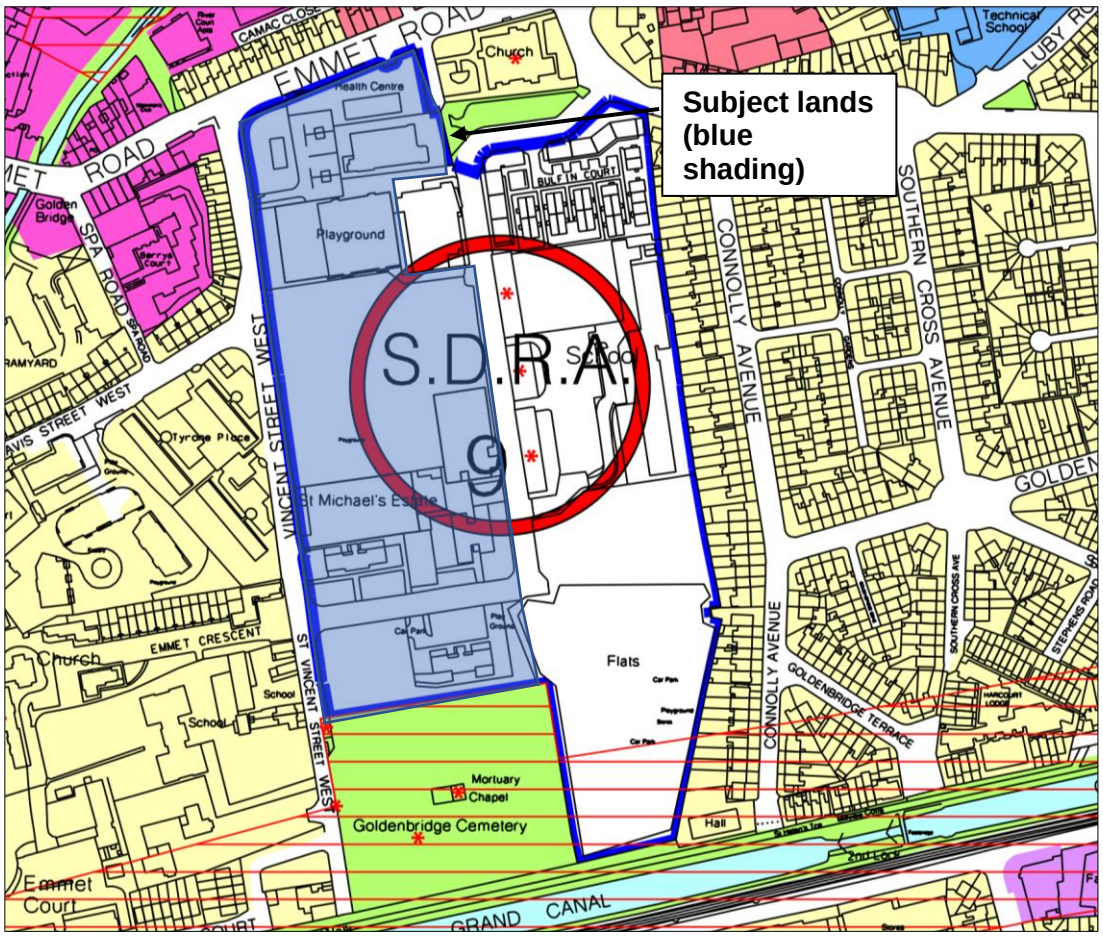


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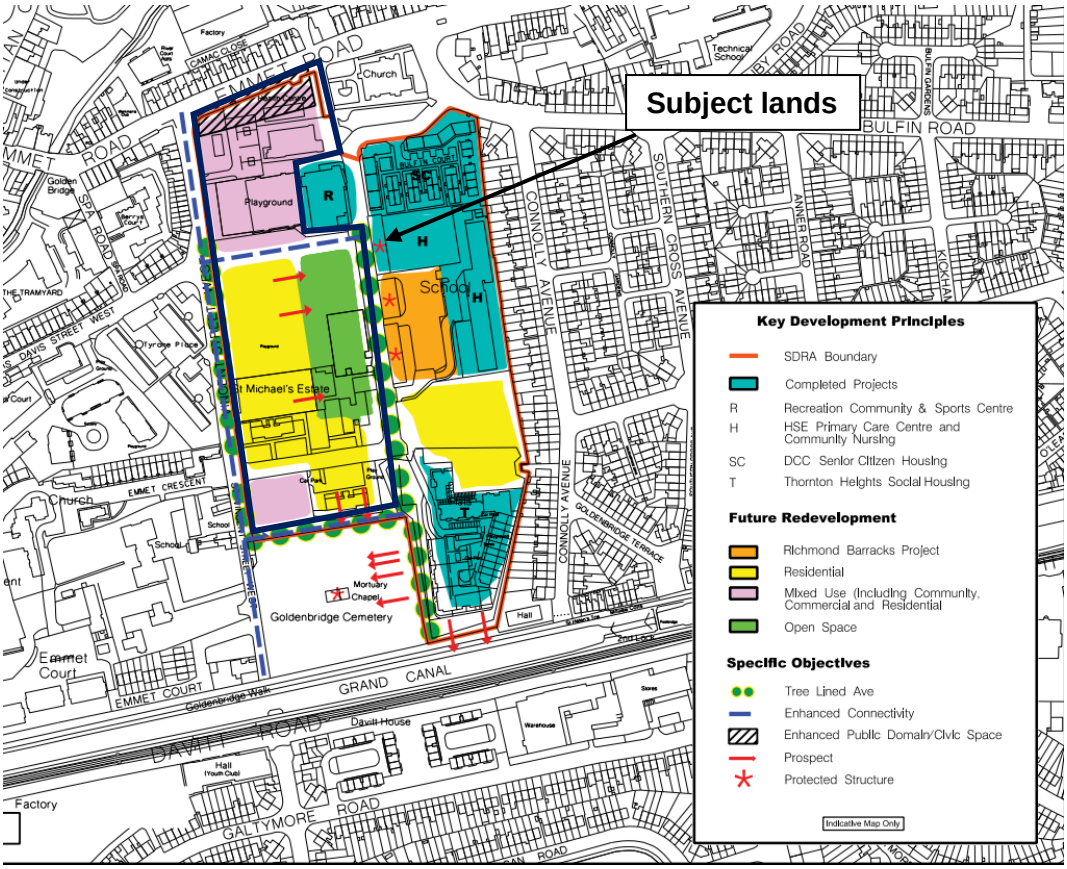


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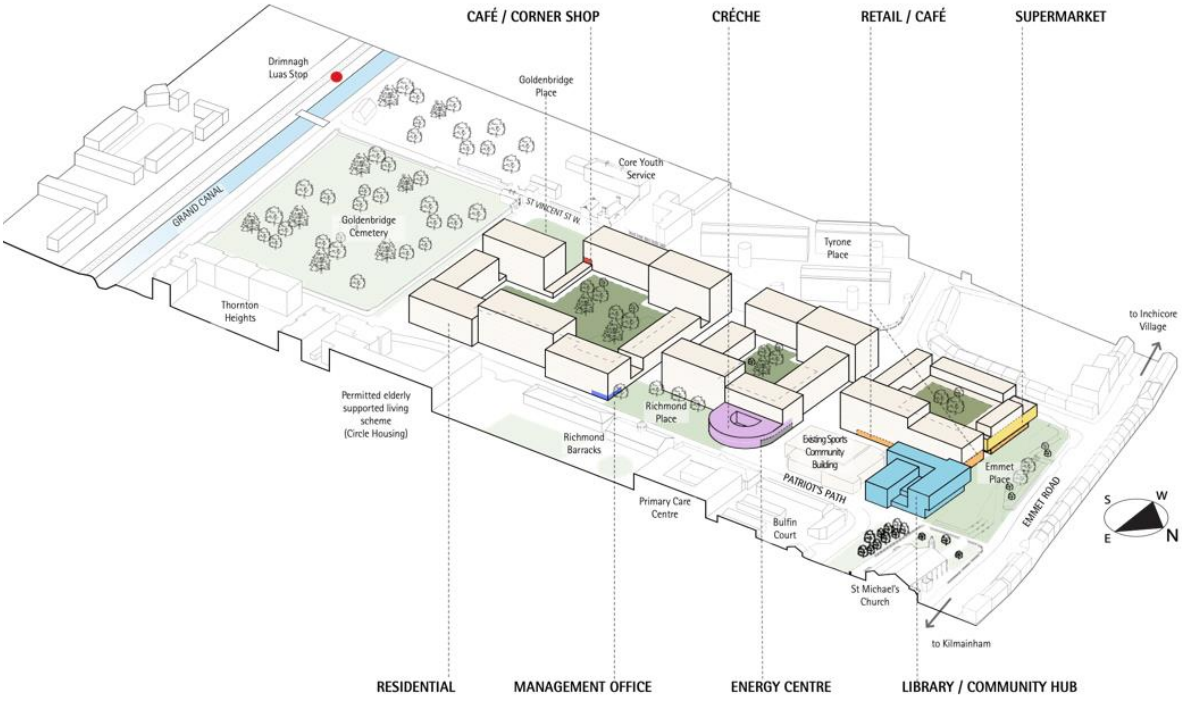
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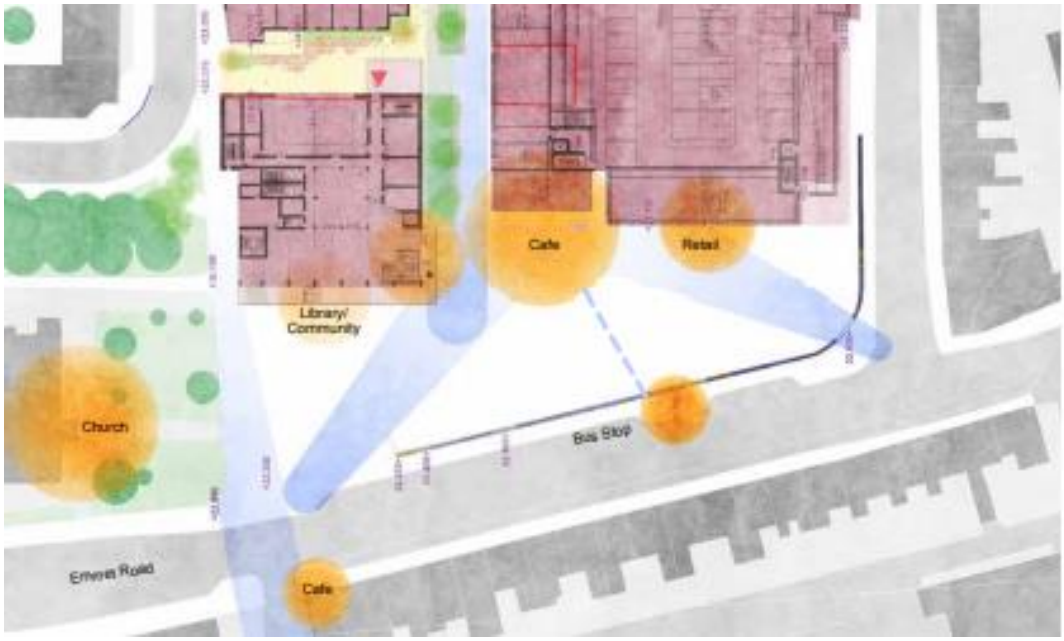
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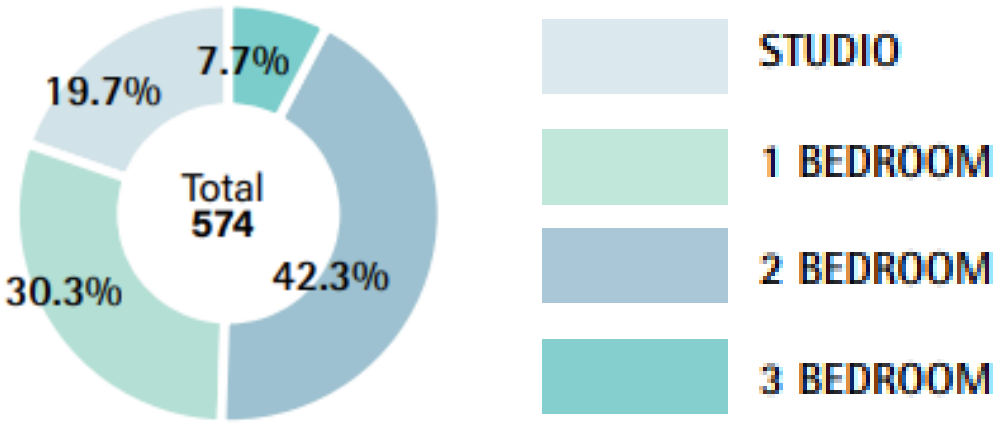


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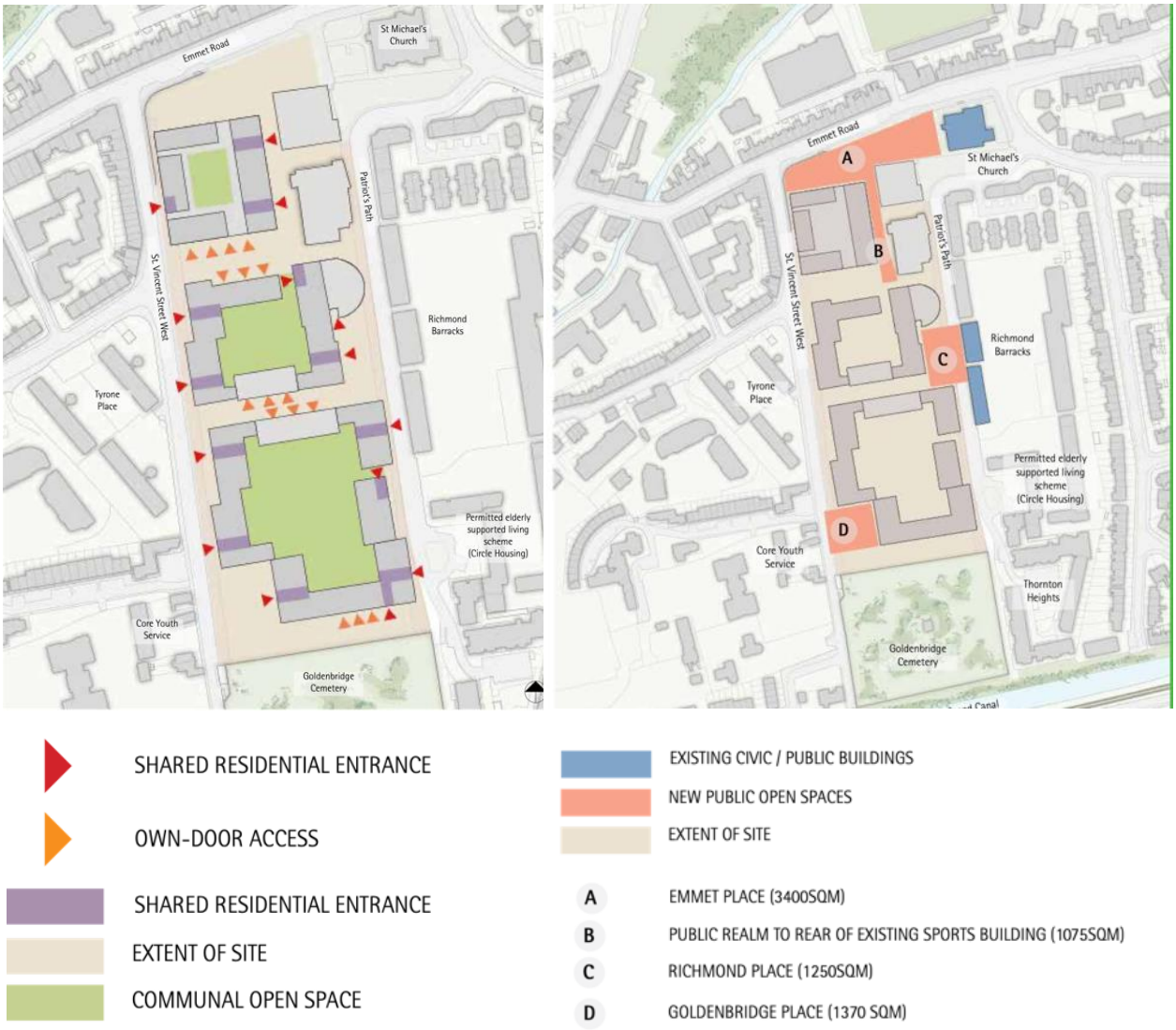
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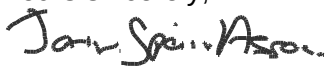
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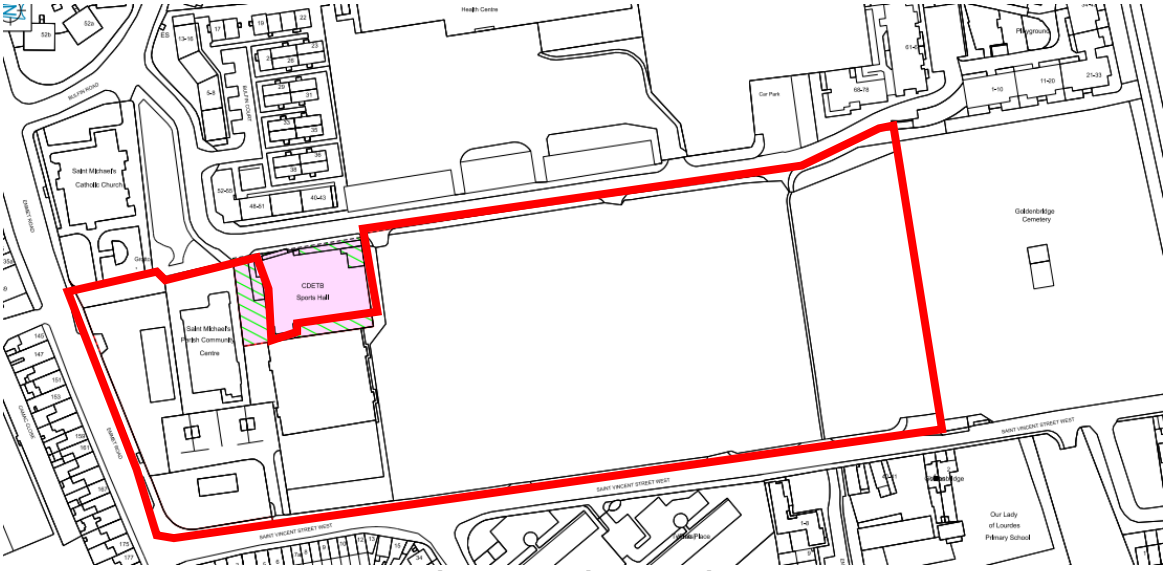


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SDRA9 – Guiding Principles

3.4 The guiding principles for the remaining SDRA lands include:

- *The development of a high-quality, vibrant, mixed-use urban quarter will be promoted; new facilities will be located in accessible locations and will maximise the opportunities to connect with the wider neighbourhood.*
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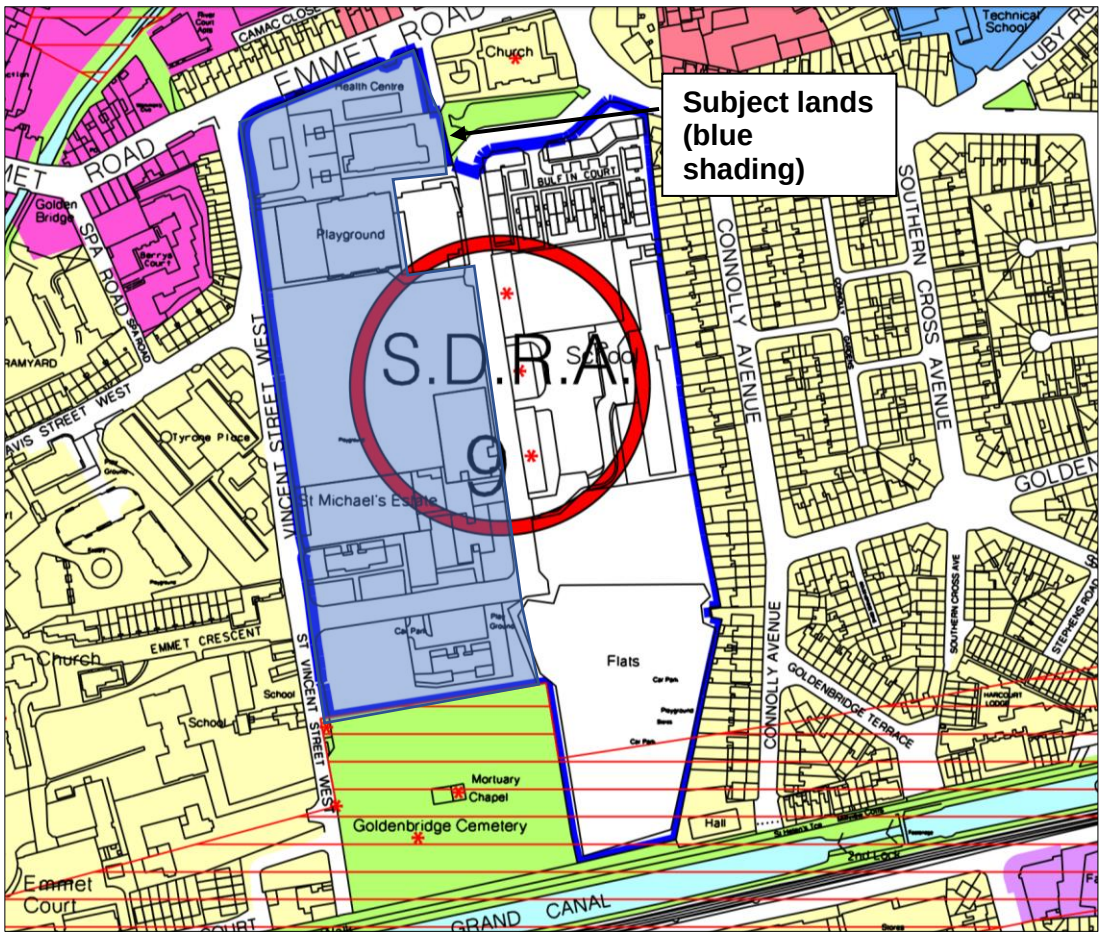


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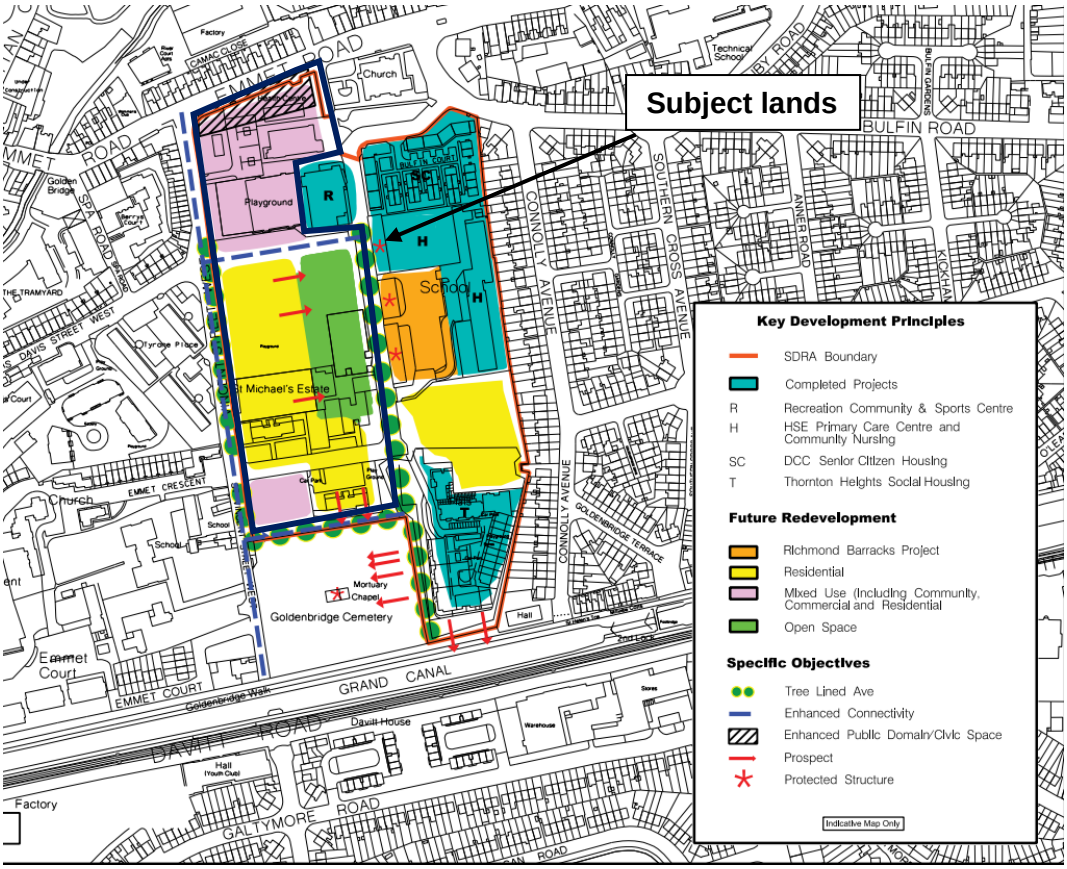


Figure 4 – Key Development Principles (Indicative Land Use Map)

4.0 Project Description Summary

4.1 The project is predominantly residential in nature, comprising c. 574 no. apartments supplemented and supported by community facilities (Library/Community Hub, Creche, Retail/Café units) in a neighbourhood centre which includes a supermarket fronting onto Emmet Road.

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Community and Commercial Elements of Proposed Development[1]

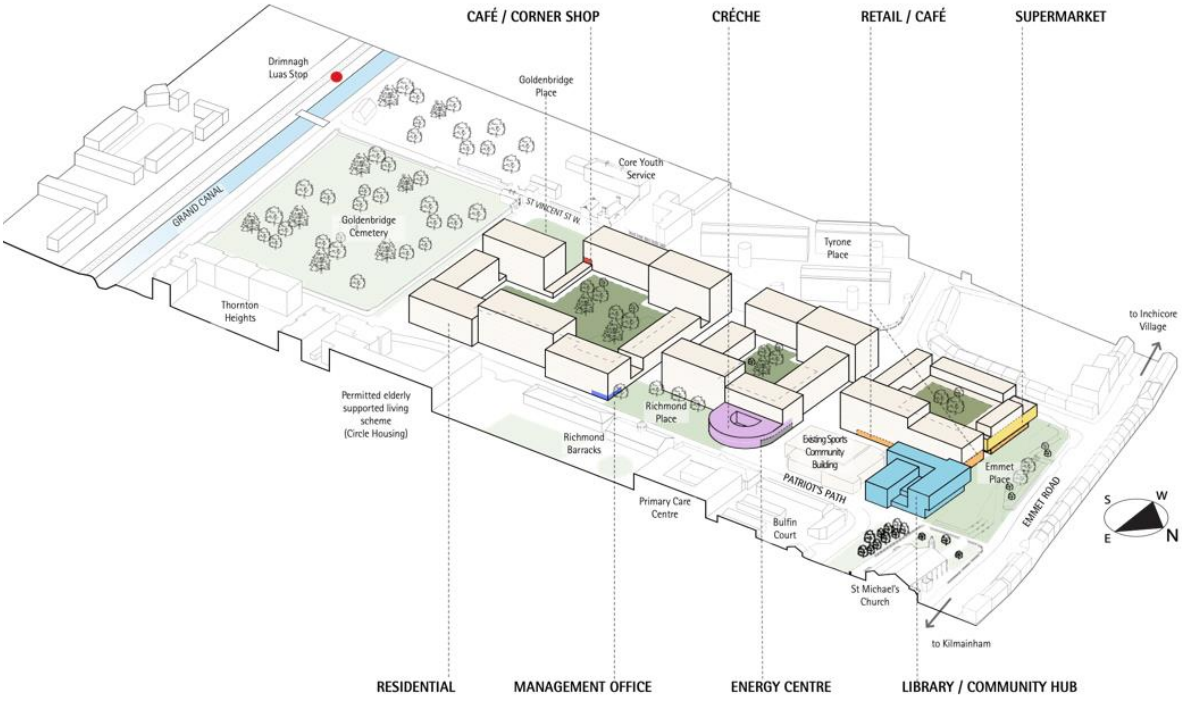
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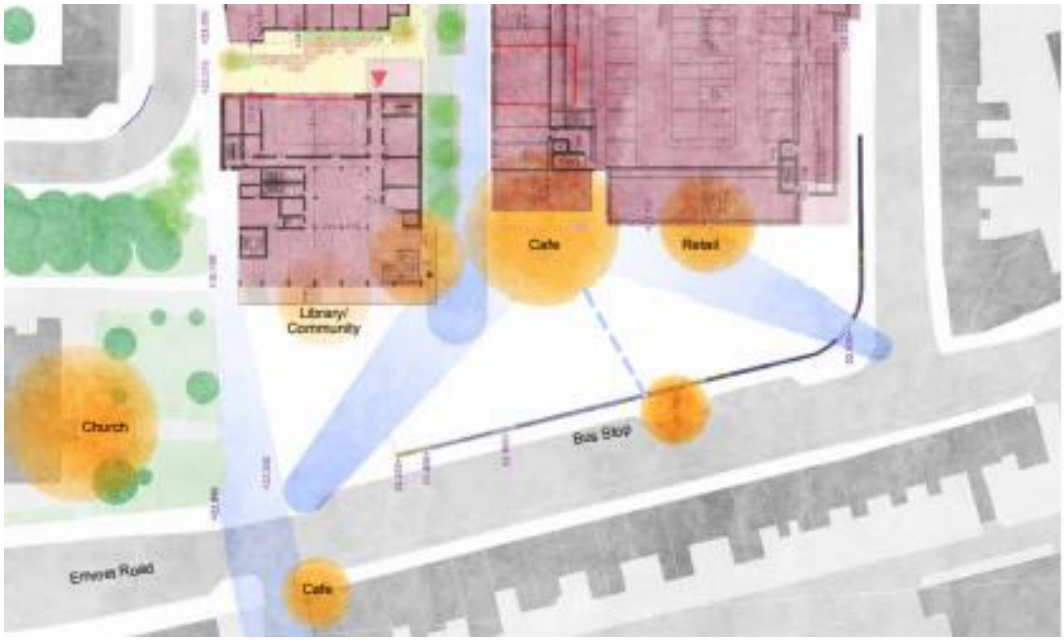
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OVERVIEW OF PROPOSED USES



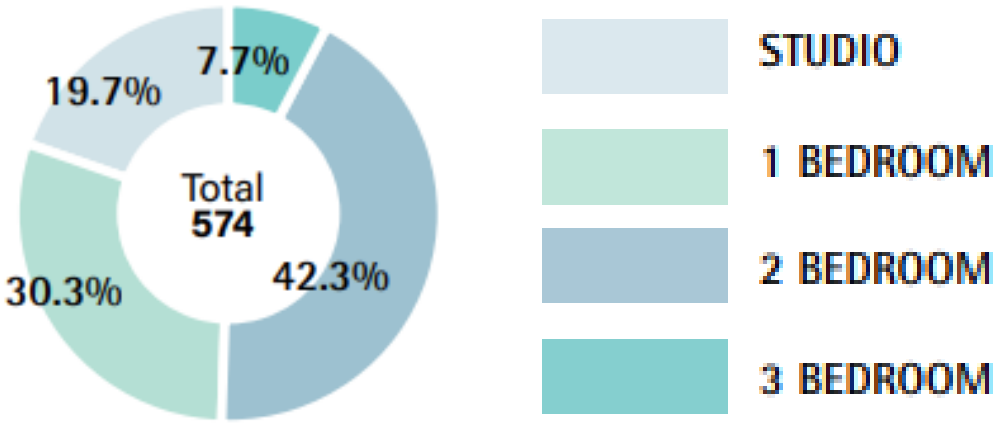


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	Studio	1 bedroom	2 bedroom	3 bedroom	Total
Cost Rental Apartments	113	131	193		437
	25.8%	30.0%	44.2%		
Social Apartments	-	43	50	44	137
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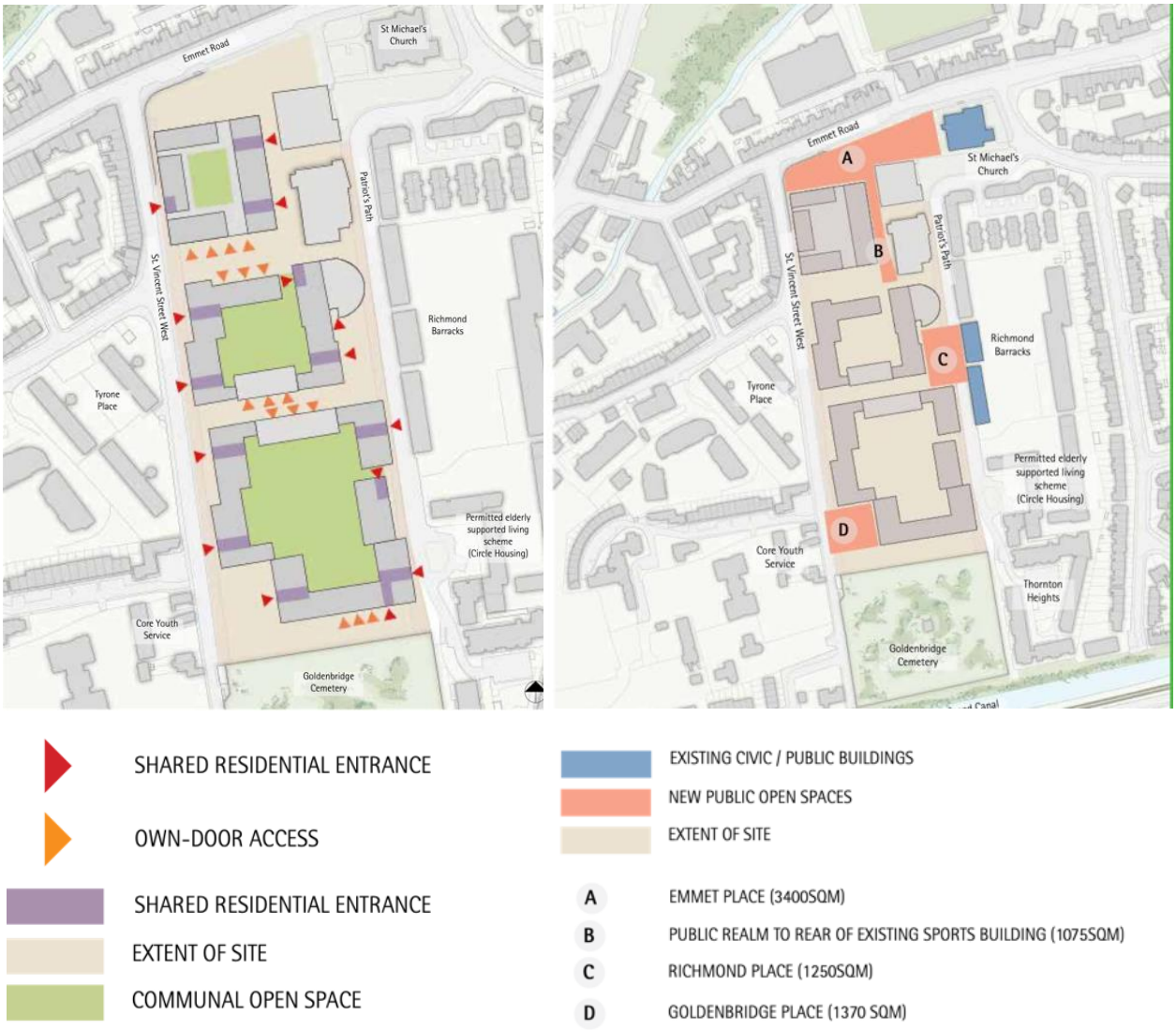
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4.5 It is proposed to provide c. 7,095 sq. m of public open space (c. 19% of the site) in 4 no. areas distributed through the site as well as communal open space of c. 4,540 sq. m for the residents.



Scale and Massing

4.6 The proposed development is formed around 3 no. communal open space areas in a range of heights of 3,5 and 7 storey elements.



4.7 The EIAR will also include an assessment of the permitted (under Part 8) demolition of the former health centre and St. Michael's community centre and associated site clearance works which include the remains of a disused halting site (located in the northern portion of the subject lands) as well as a connection to Irish Water services from the subject site along Emmet Road for c. 200m to the Blackhorse Bridge located to the west, (adjacent to the Camac River) which will form part of the assessment.

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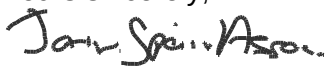
e-mail: RKunz@johnspainassociates.com

Rory Kunz, *Executive Director,*

John Spain Associates,
39 Fitzwilliam Place,
Dublin 2,
D02 ND61.

T: 01 662 5803
M: 087 322 5858
e-mail: RKunz@johnspainassociates.com

Yours sincerely,



John Spain Associates

JSA John Spain Associates
Planning & Development Consultants
Chartered Town Planners & Chartered Surveyors

39 Fitzwilliam Place,
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www.jsaplanning.ie

Tel 01 662 5803
info@johnspainassociates.com

Inland Fisheries Ireland
3044 Lake Drive
Citywest Business Campus
Co. Dublin D24 Y265
dublin@fisheriesireland.ie

29-4-2022
JSA Ref. 20104

Dear Sir/Madam,

RE: EIAR SCOPING RELATING TO PROPOSED PART 10 MIXED USE DEVELOPMENT OF 574 DWELLINGS AND COMMUNITY/RETAIL/COMMERCIAL FLOORSPACE AT EMMET ROAD, DUBLIN 8.

1.0 Introduction

1.1 John Spain Associates has been appointed by Dublin City Council to prepare an Environmental Impact Assessment Report (EIAR) to support a future planning application for a mixed-use development on lands at Emmet Road (formerly St. Michael's Estate), Inchicore, Dublin 8.

1.2 The planning application will be made directly to An Bord Pleanála under the provisions of Section 175(3) of the Planning and Development Acts 2000 (as amended).

1.3 As part of the EIA process, we wish to consult with those statutory and non-statutory bodies that may have an interest in the proposal. We would therefore be grateful if you could provide any information relevant to the proposed site that you may hold, and/or highlight any issues that you feel should be addressed within the scope of the EIAR.

1.4 We have set out hereunder the site characteristics and a brief description of the development proposal in order to provide a strategic overview of the development characteristics.

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John Spain Associates Ltd. trading as John Spain Associates. Directors: J. Spain, S. Spain.
Registered in Ireland No. 396306. Registered Office: 39, Fitzwilliam Place, Dublin 2. VAT No. IE 6416306U

2.0 Site Location

2.1 Emmet Road is located 4km west of the city centre in Inchicore. The site extends to c. 3.73 hectares is bound to the north by Emmet Road, to the south by the Grand Canal and Goldenbridge Cemetery, to the east by the rear of residential dwellings on Connolly Avenue and Bulfin Court and to the west by St Vincent Street West.



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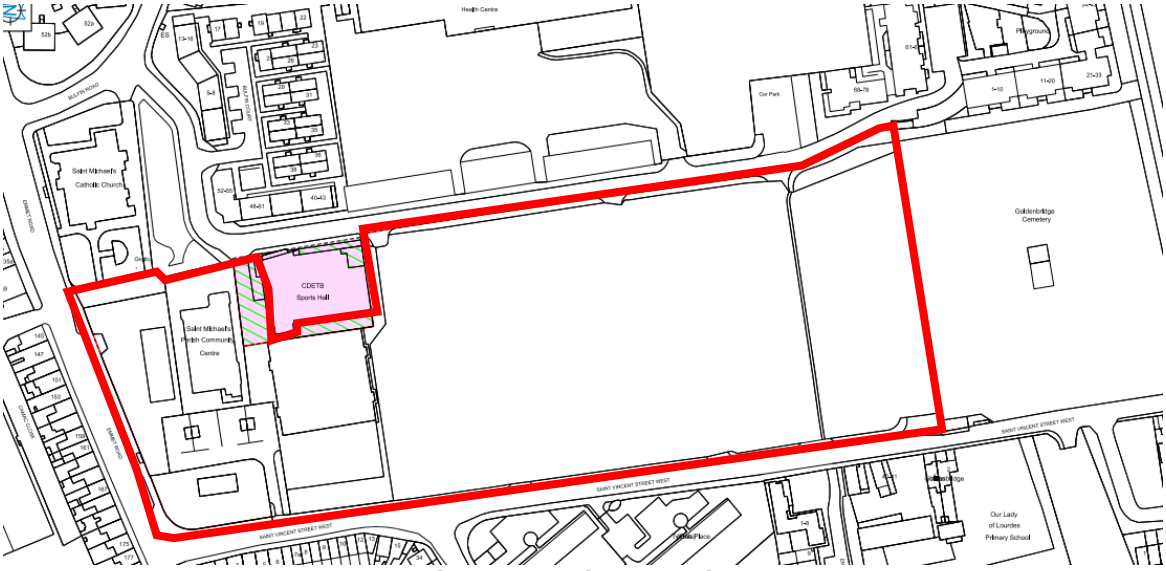


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2.1 Housing for All - a New Housing Plan for Ireland', published in September 2021, is the government's housing plan to 2030. It is a multi-annual, multi-billion-euro plan which will improve Ireland's housing system and deliver more homes of all types for people with different housing needs.

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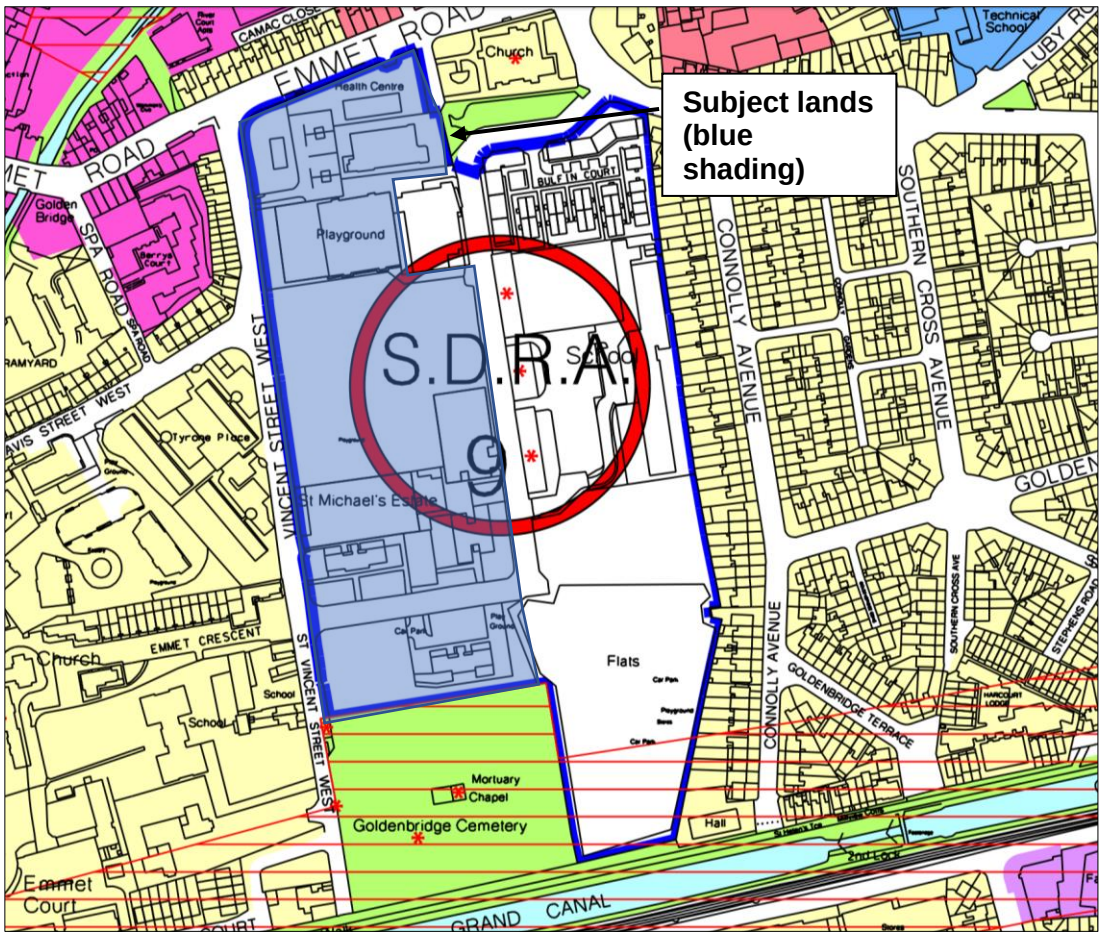


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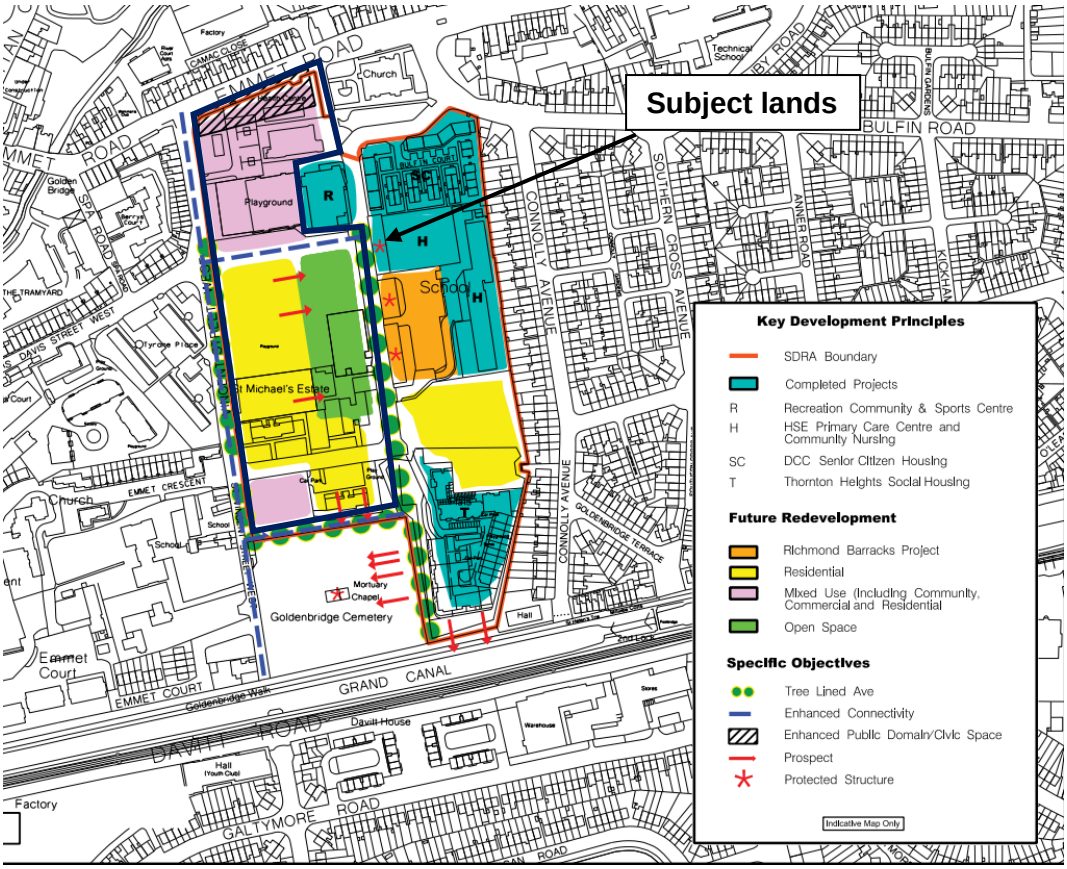


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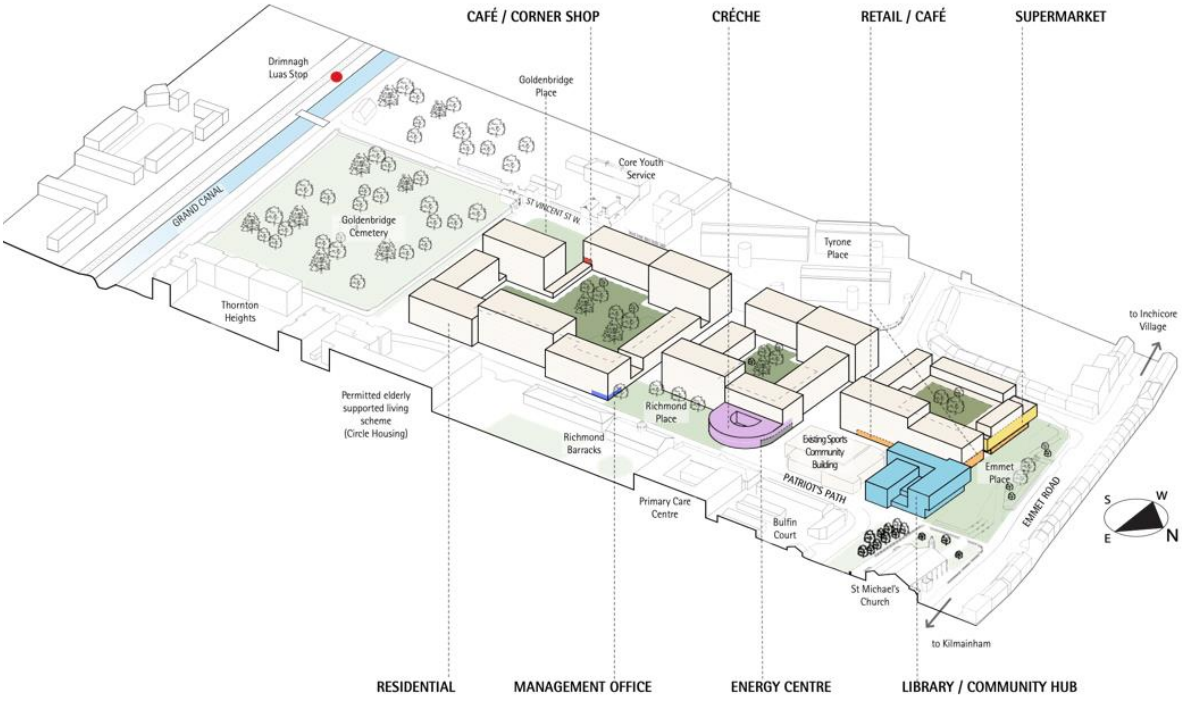
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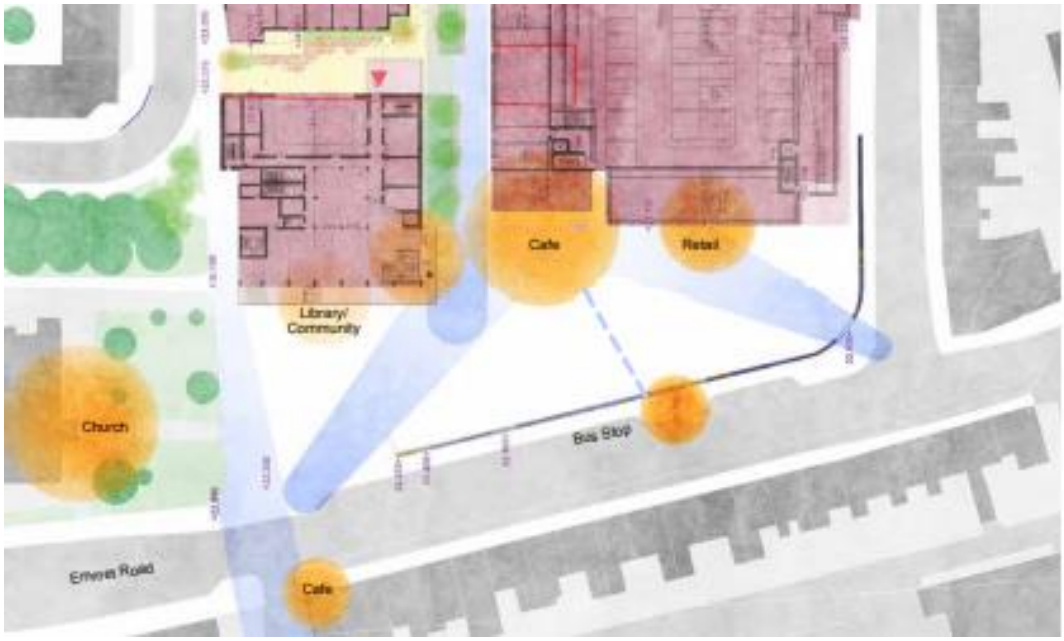
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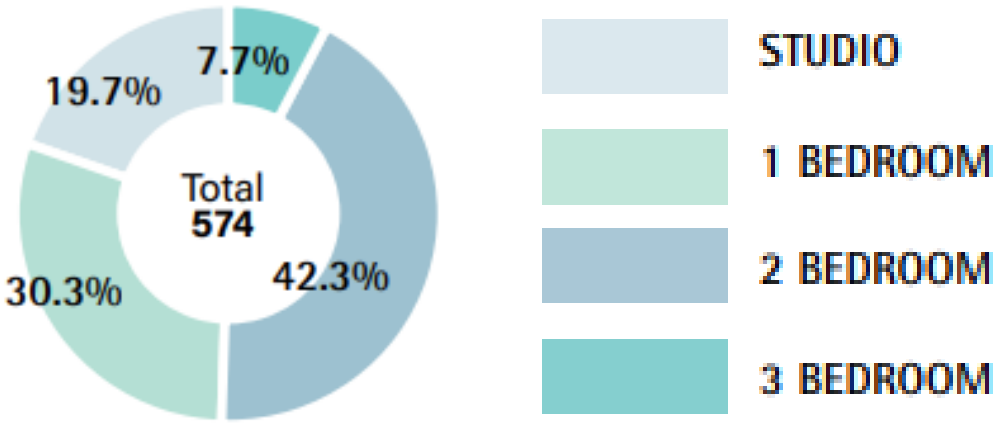


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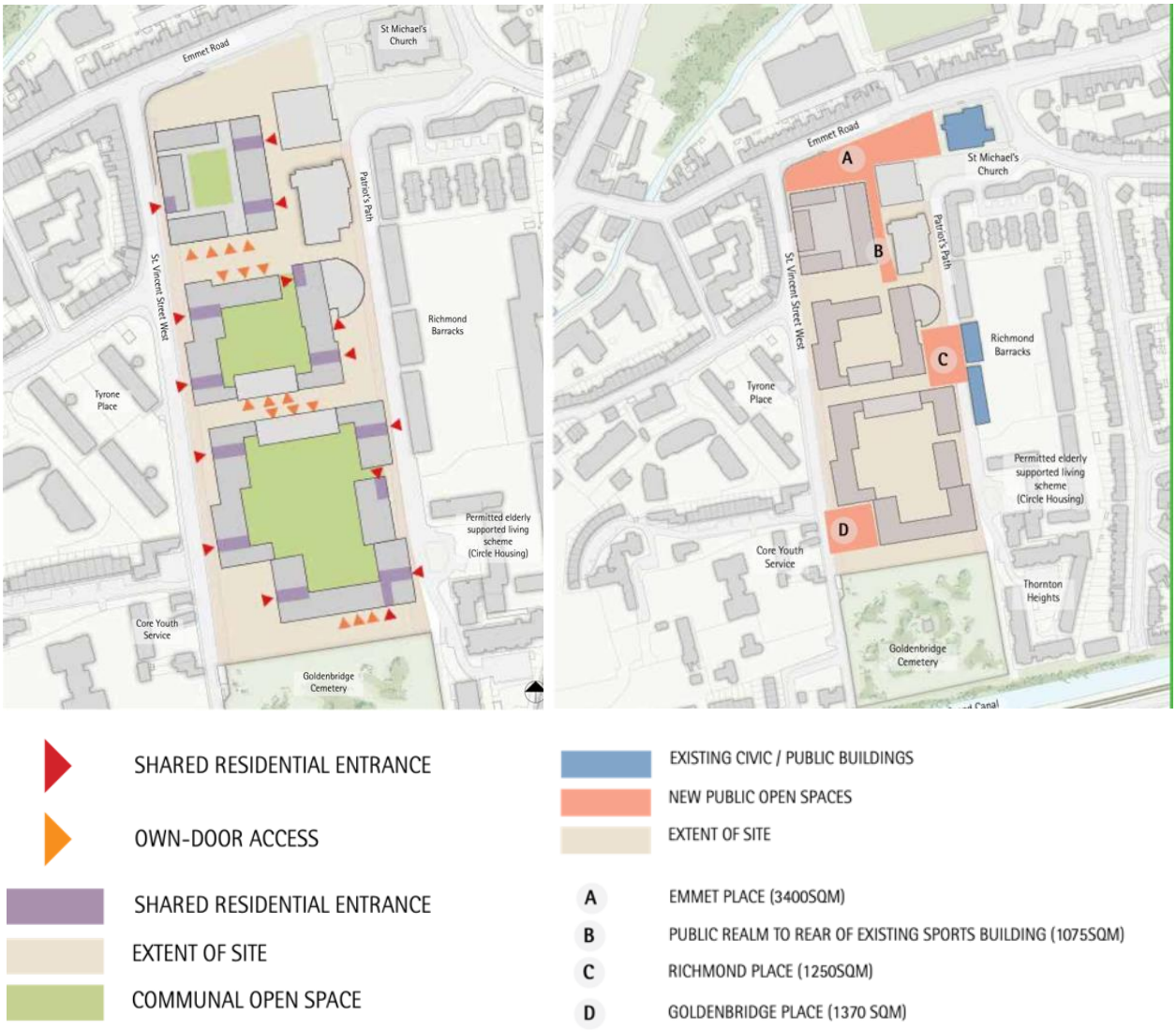
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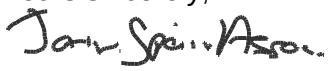
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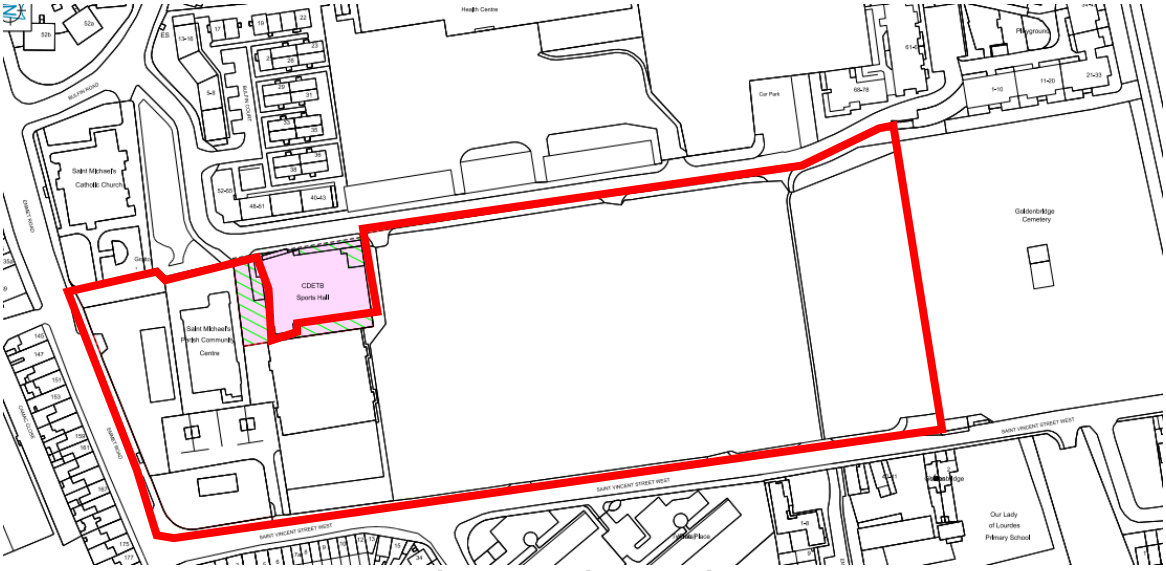


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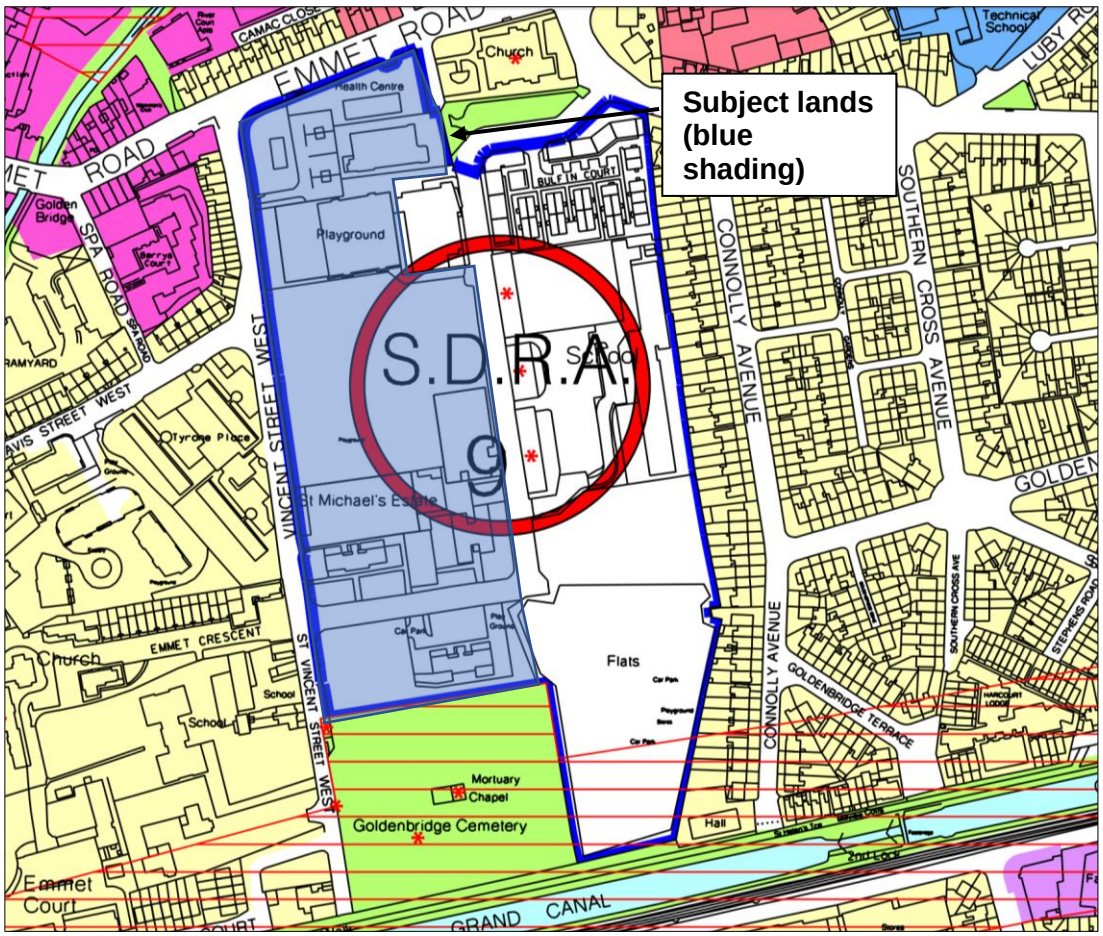


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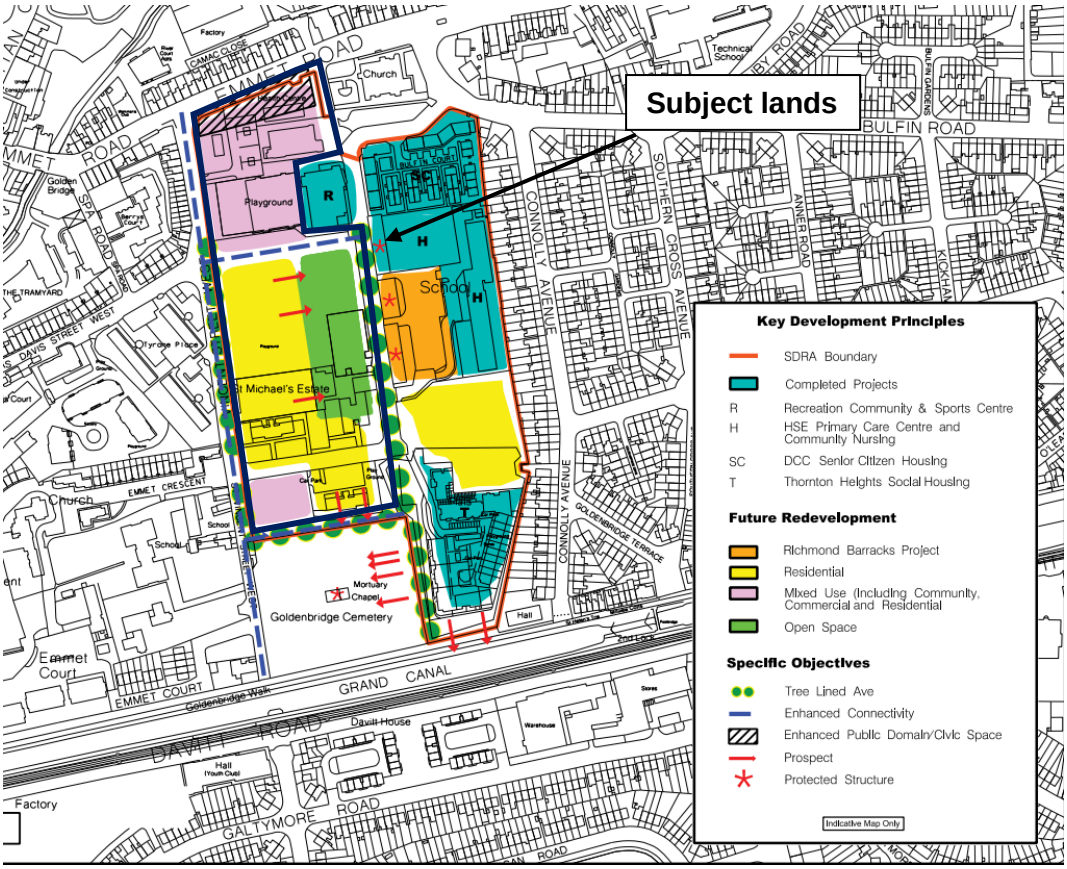


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Community and Commercial Elements of Proposed Development[1]

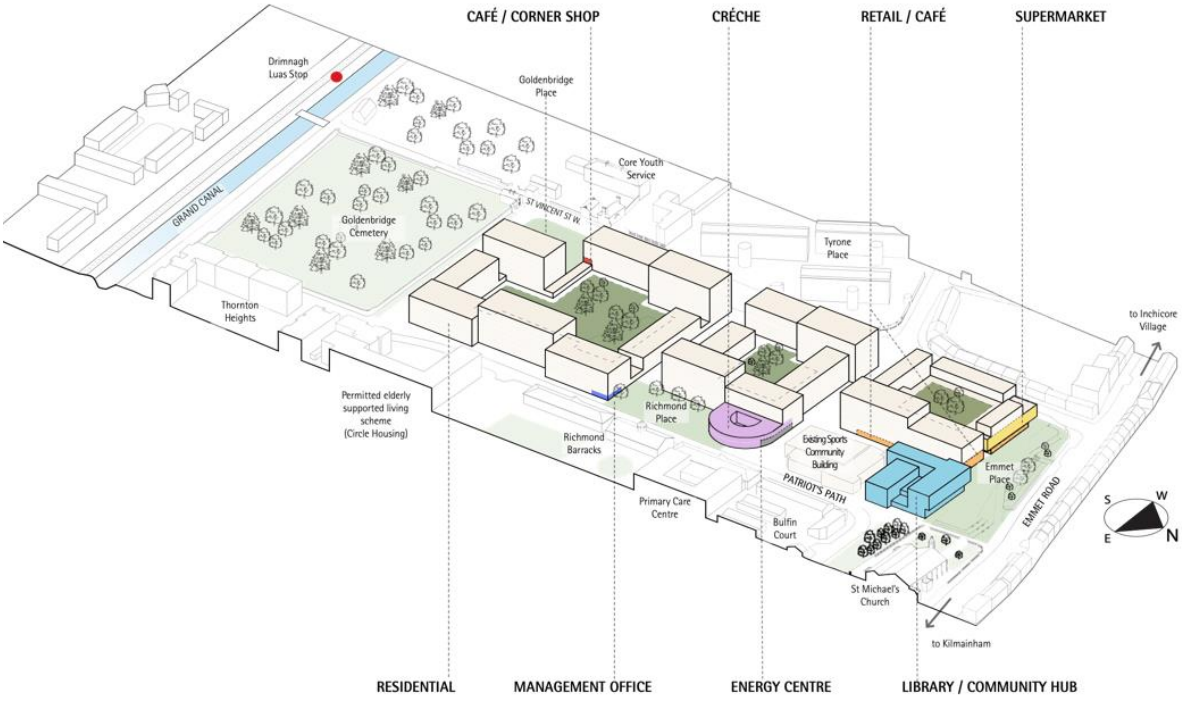
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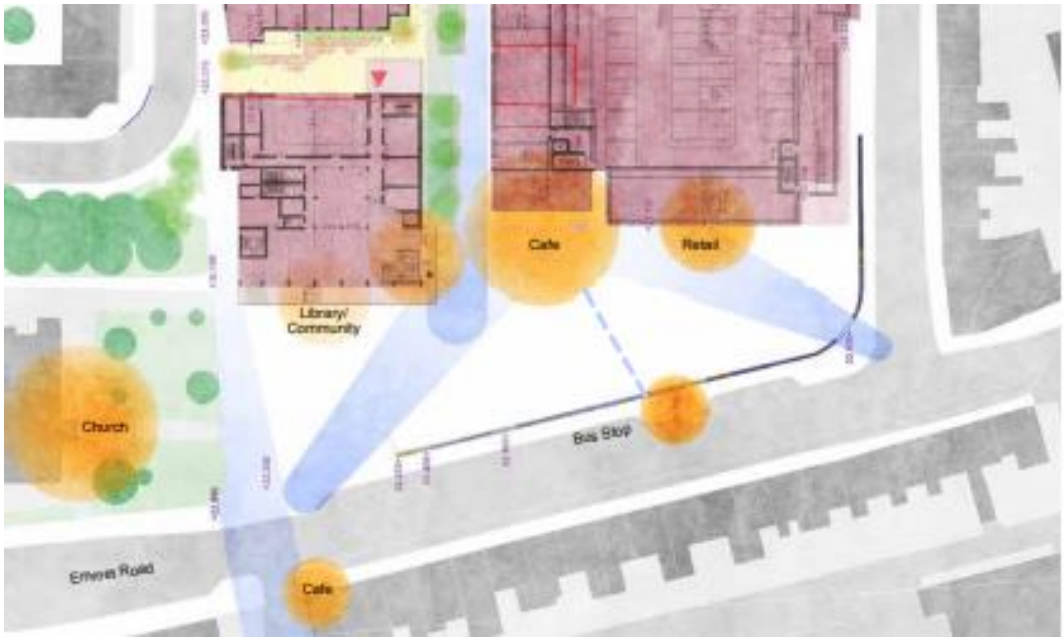
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OVERVIEW OF PROPOSED USES



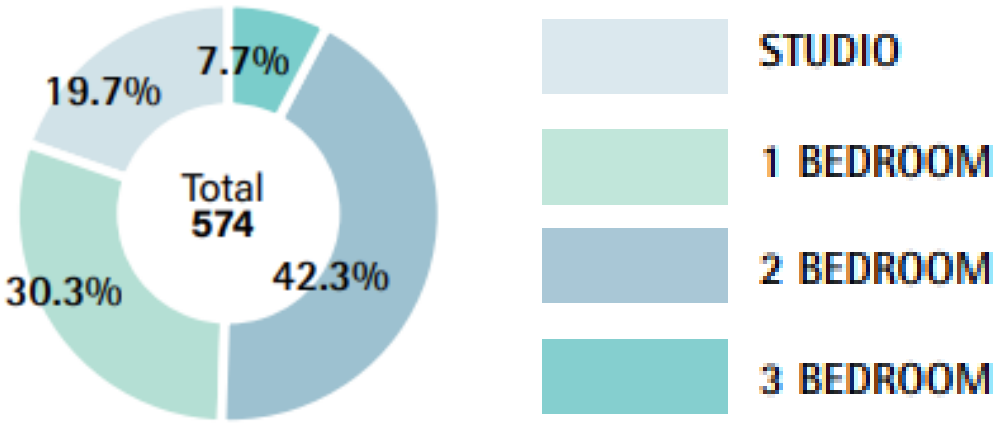


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	Studio	1 bedroom	2 bedroom	3 bedroom	Total
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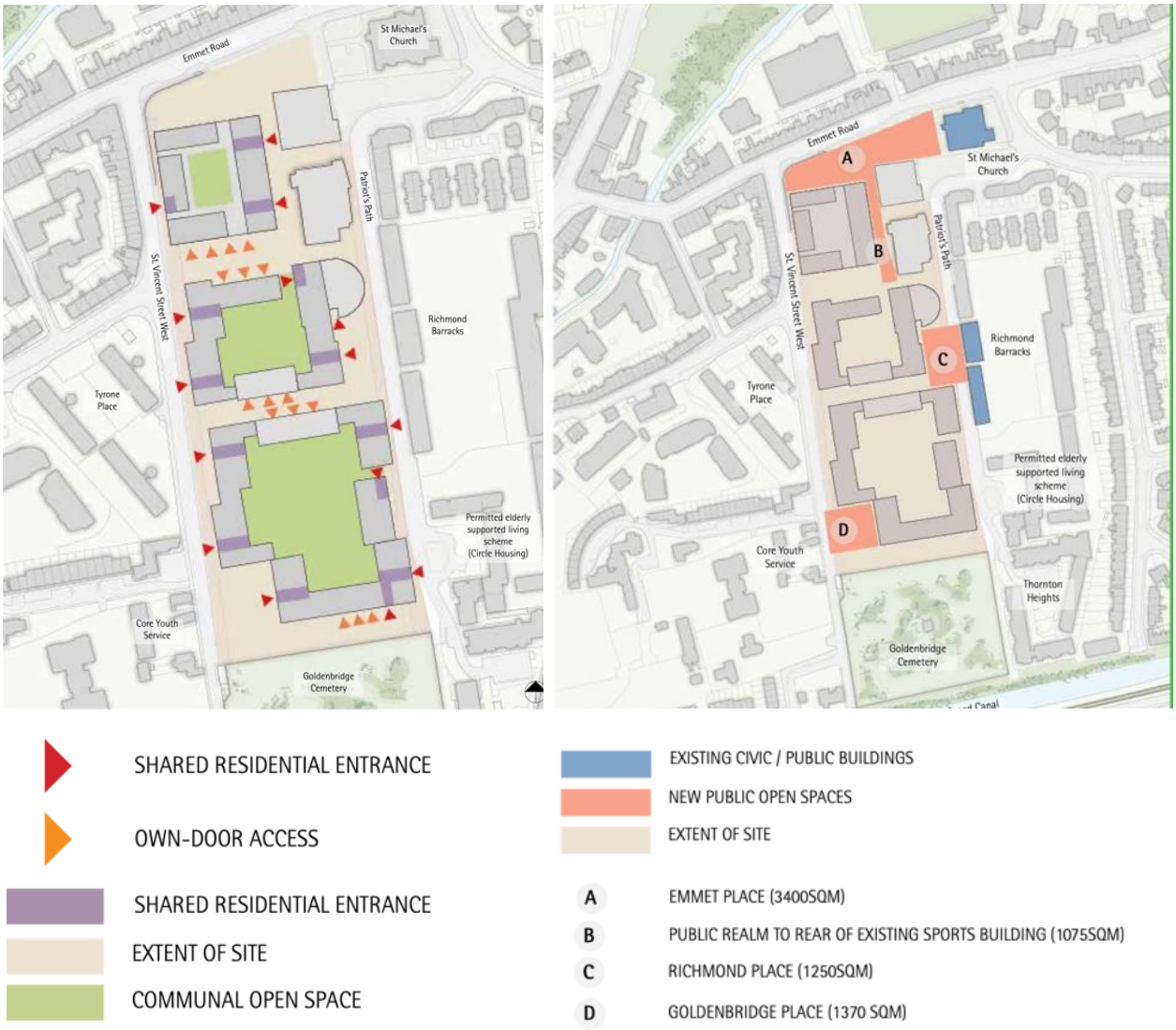
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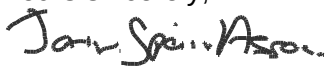
e-mail: RKunz@johnspainassociates.com

Rory Kunz, *Executive Director,*

John Spain Associates,
39 Fitzwilliam Place,
Dublin 2,
D02 ND61.

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M: 087 322 5858
e-mail: RKunz@johnspainassociates.com

Yours sincerely,



John Spain Associates

JSA John Spain Associates
Planning & Development Consultants
Chartered Town Planners & Chartered Surveyors

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D02 ND61

www.jsaplanning.ie

Tel 01 662 5803
info@johnspainassociates.com

National Transport Authority
Dún Scéine,
Harcourt Lane,
Dublin 2, D02 WT20.
info@nationaltransport.ie

FAO: Strategic Planning

29-4-2022
JSA Ref. 20104

Dear Sir/Madam,

RE: EIAR SCOPING RELATING TO PROPOSED PART 10 MIXED USE DEVELOPMENT OF 574 DWELLINGS AND COMMUNITY/RETAIL/COMMERCIAL FLOORSPACE AT EMMET ROAD, DUBLIN 8.

1.0 Introduction

1.1 John Spain Associates has been appointed by Dublin City Council to prepare an Environmental Impact Assessment Report (EIAR) to support a future planning application for a mixed-use development on lands at Emmet Road (formerly St. Michael's Estate), Inchicore, Dublin 8.

1.2 The planning application will be made directly to An Bord Pleanála under the provisions of Section 175(3) of the Planning and Development Acts 2000 (as amended).

1.3 As part of the EIA process, we wish to consult with those statutory and non-statutory bodies that may have an interest in the proposal. We would therefore be grateful if you could provide any information relevant to the proposed site that you may hold, and/or highlight any issues that you feel should be addressed within the scope of the EIAR.

1.4 We have set out hereunder the site characteristics and a brief description of the development proposal in order to provide a strategic overview of the development characteristics.

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John Spain Associates Ltd. trading as John Spain Associates. Directors: J. Spain, S. Spain.
Registered in Ireland No. 396306. Registered Office: 39, Fitzwilliam Place, Dublin 2. VAT No. IE 6416306U

2.0 Site Location

2.1 Emmet Road is located 4km west of the city centre in Inchicore. The site extends to c. 3.73 hectares is bound to the north by Emmet Road, to the south by the Grand Canal and Goldenbridge Cemetery, to the east by the rear of residential dwellings on Connolly Avenue and Bulfin Court and to the west by St Vincent Street West.



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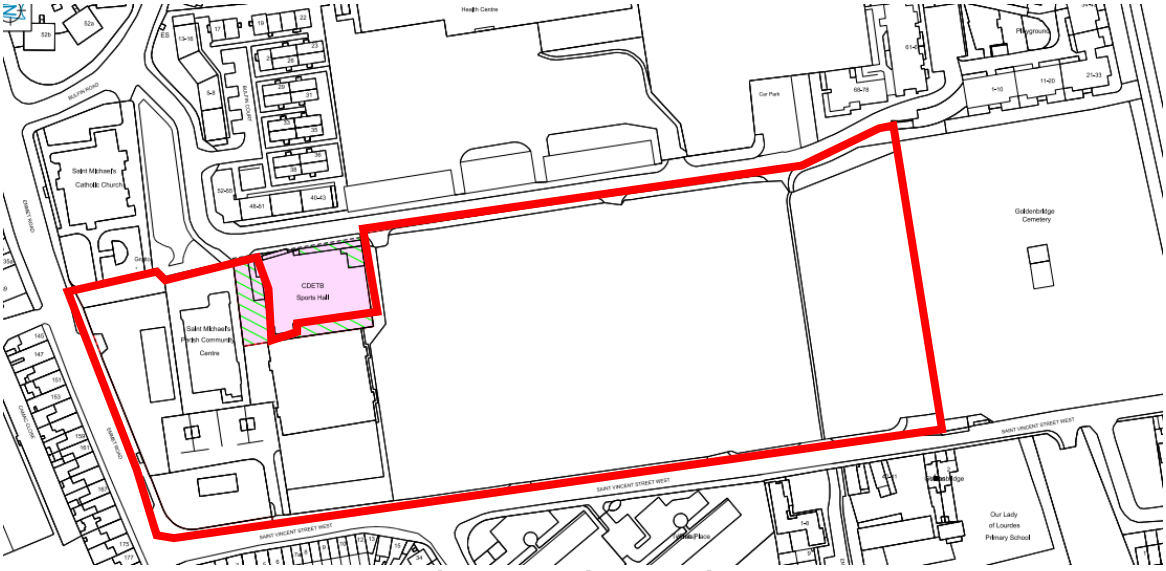


Figure 2 – Site Location

2.0 Background – Government Policy – Cost Rental

2.1 Housing for All - a New Housing Plan for Ireland', published in September 2021, is the government's housing plan to 2030. It is a multi-annual, multi-billion-euro plan which will improve Ireland's housing system and deliver more homes of all types for people with different housing needs.

2.2 Housing for All introduced 'Cost Rental', a new form of public housing in Ireland. The Cost Rental model must relate to affordability for low to middle income earners, for people who are above the social housing income limits, and who wish to rent or are unable to buy their own home.

2.3 The Government plans to provide an average of 2,000 Cost Rental homes per year for the next 10 years. This model of housing is a first in type initiative for Dublin City Council.

2.4 In this regard, the proposed Emmet Road Development will provide a tenure mix of 24% social and 76% cost rental homes

3.0 Planning Context Summary – Dublin City Development Plan 2016-2022

3.1 The site at Emmet Road is zoned 'Z14' – a Strategic Development and Regeneration Area (SDRA) – in the Dublin City Development Plan 2016-2022, with a stated objective *'to seek the social, economic and physical development and/or rejuvenation of an area with mixed use, of which residential and 'Z6' would be the predominant uses."*

3.2 According to the Dublin City Development Plan, the SDRA areas have the capacity for a substantial amount of development in developing areas in the inner and outer city.

3.3 The City Development Plan 2016-2022 contains a number of key guiding principles for this site under the heading SDRA 9 which are set out below.

SDRA9 – Guiding Principles

3.4 The guiding principles for the remaining SDRA lands include:

- *The development of a high-quality, vibrant, mixed-use urban quarter will be promoted; new facilities will be located in accessible locations and will maximise the opportunities to connect with the wider neighbourhood.*
- *The development will complement the regeneration of Inchicore by encouraging a natural extension of the village centre eastwards along Emmet Road; the development will provide strong connections between the site and the functions of the village centre, for which a local environmental improvements plan is proposed.*
- *The development of high-quality streetscape onto Emmet Road with accessible civic spaces, active frontages and an appropriate transition in scale, height and character between the village centre and the site will be promoted*
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- *Variety in housing tenures and unit types will be sought in order to achieve a balanced and sustainable community The important heritage features on, and adjoining, the site, shall be respected and highlighted by urban design with particular regard to the tourism, heritage, community and amenity value of assets such as St Michael's Church, Richmond Barracks, Goldenbridge Cemetery and the Grand Canal.*
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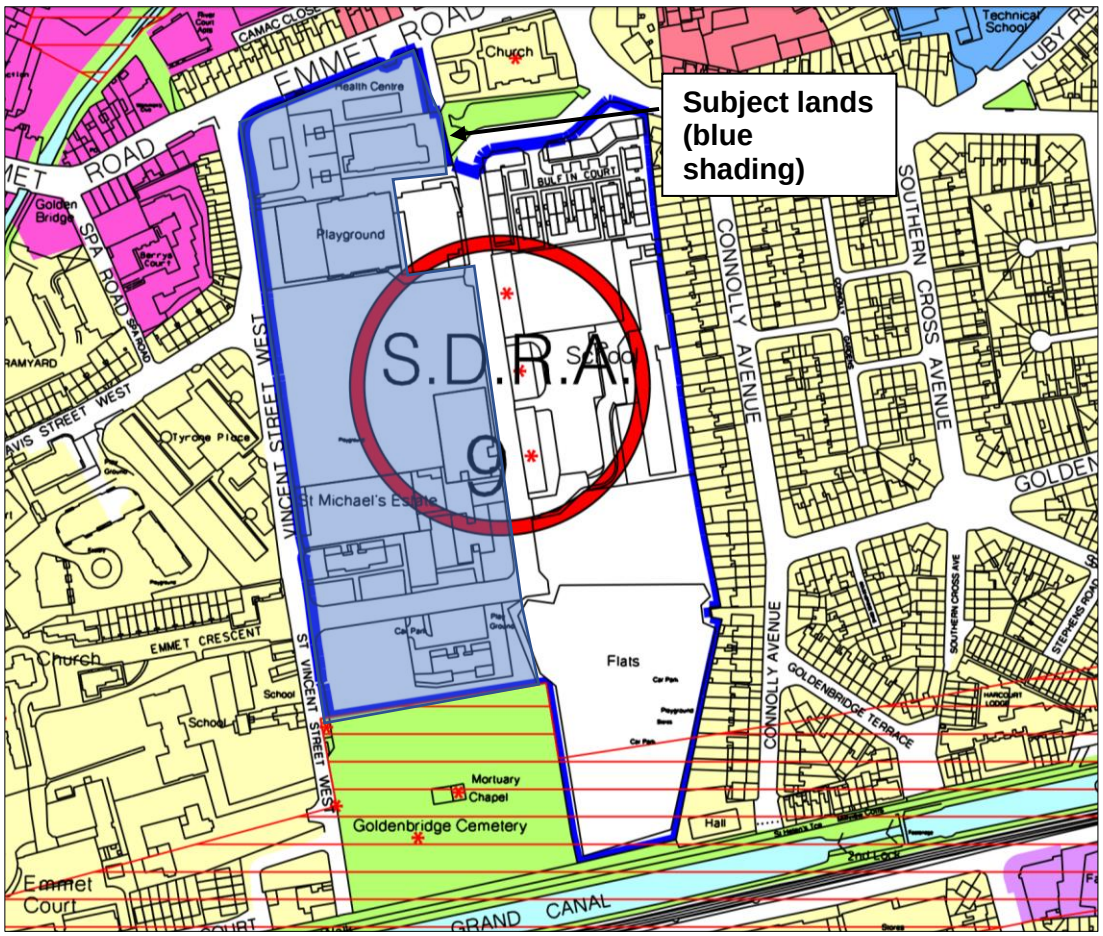


Figure 3 – SDRA 9. St Michael's Estate

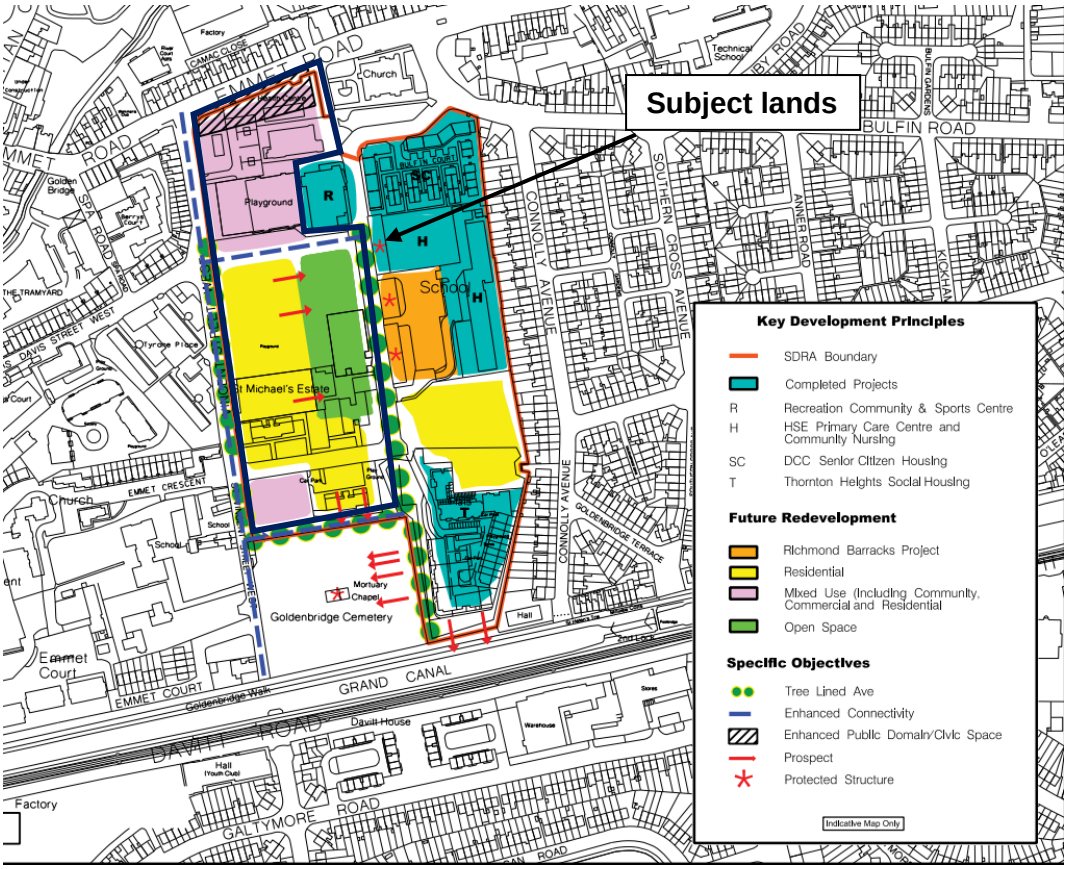


Figure 4 – Key Development Principles (Indicative Land Use Map)

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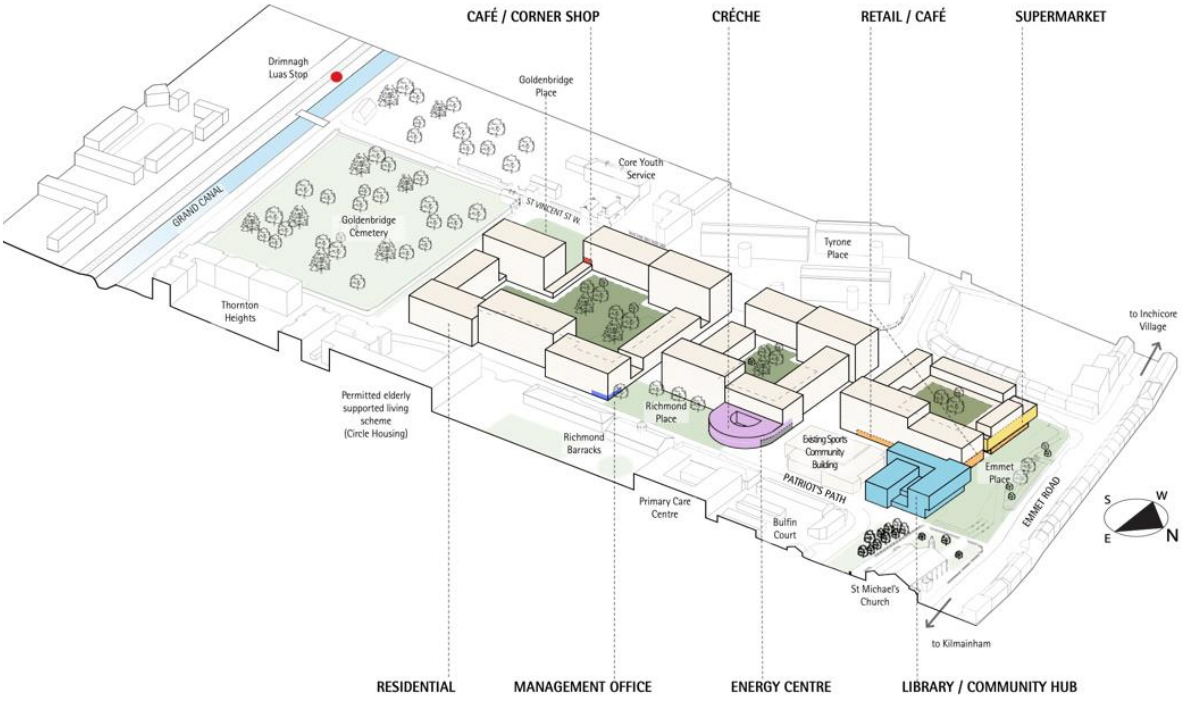
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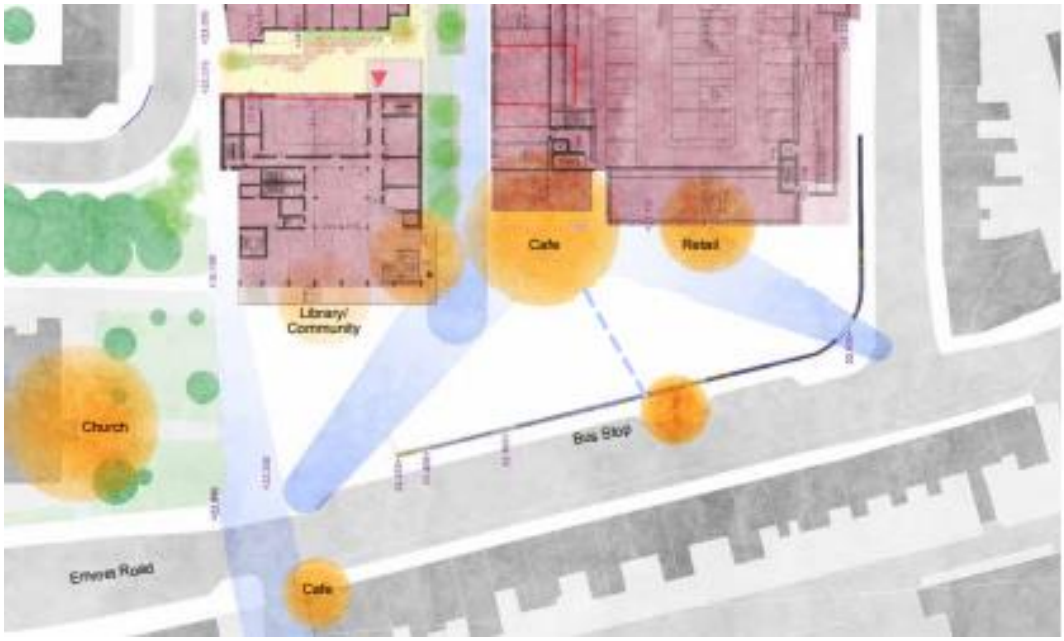
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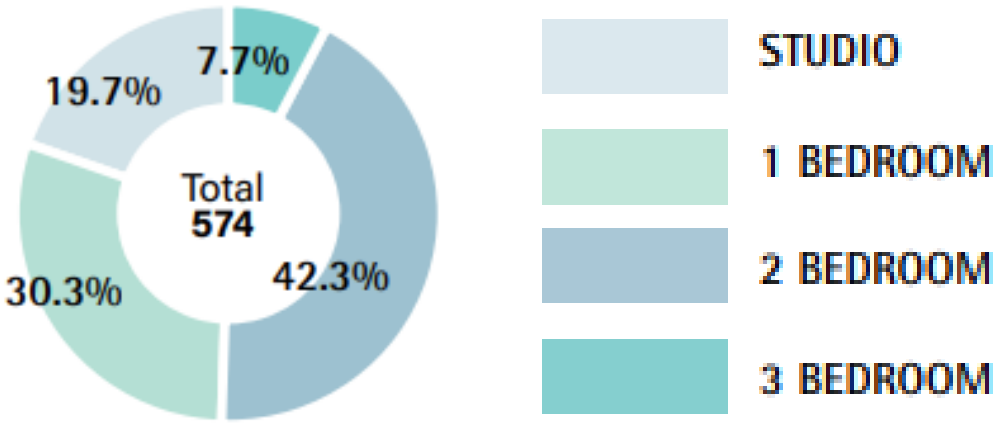


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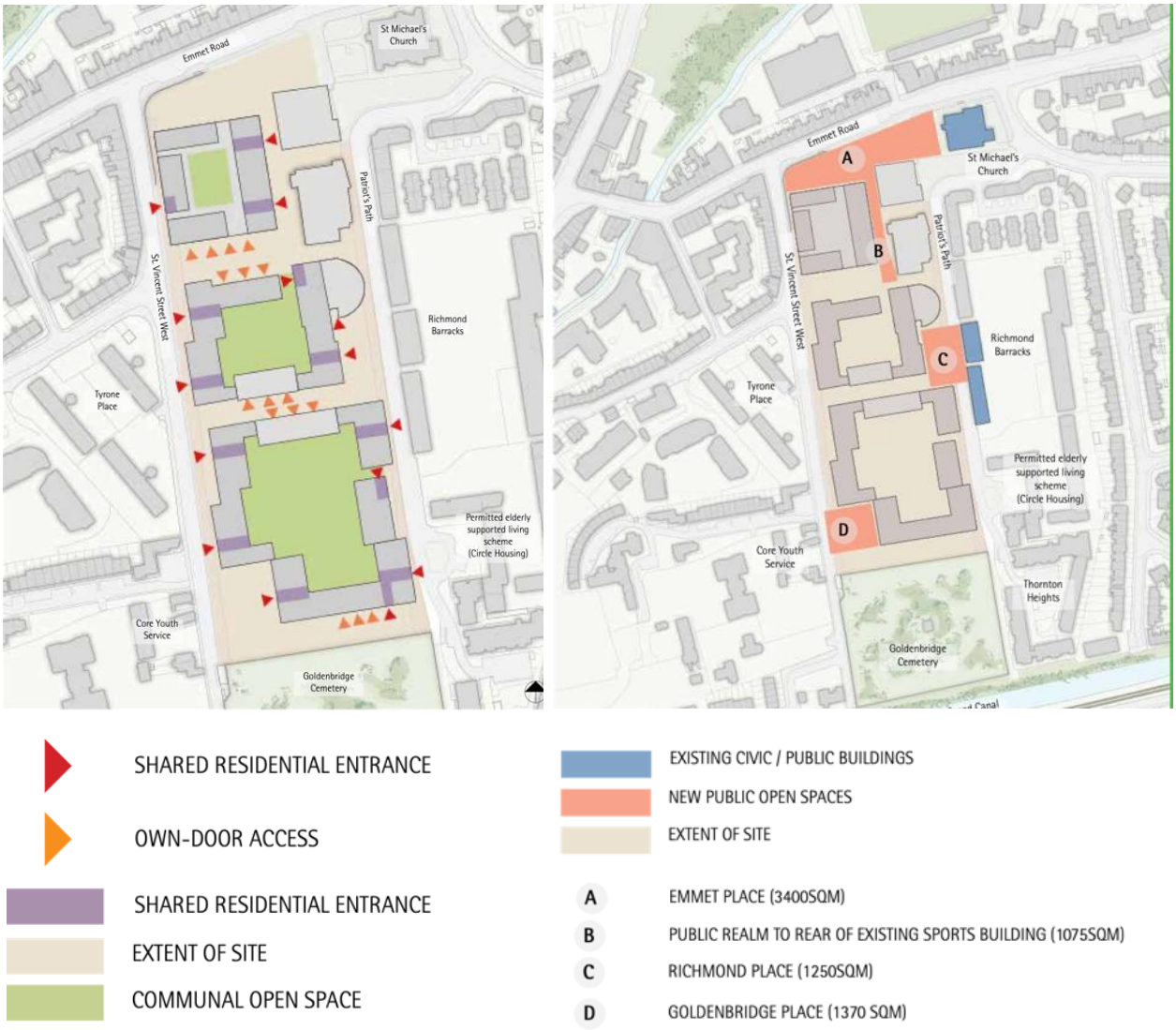
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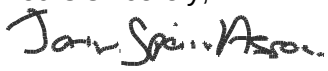
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Yours sincerely,



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Office of Public Works
Jonathan Swift Street ,
Trim ,
Co. Meath , C15 NX36
info@opw.ie

29-4-2022
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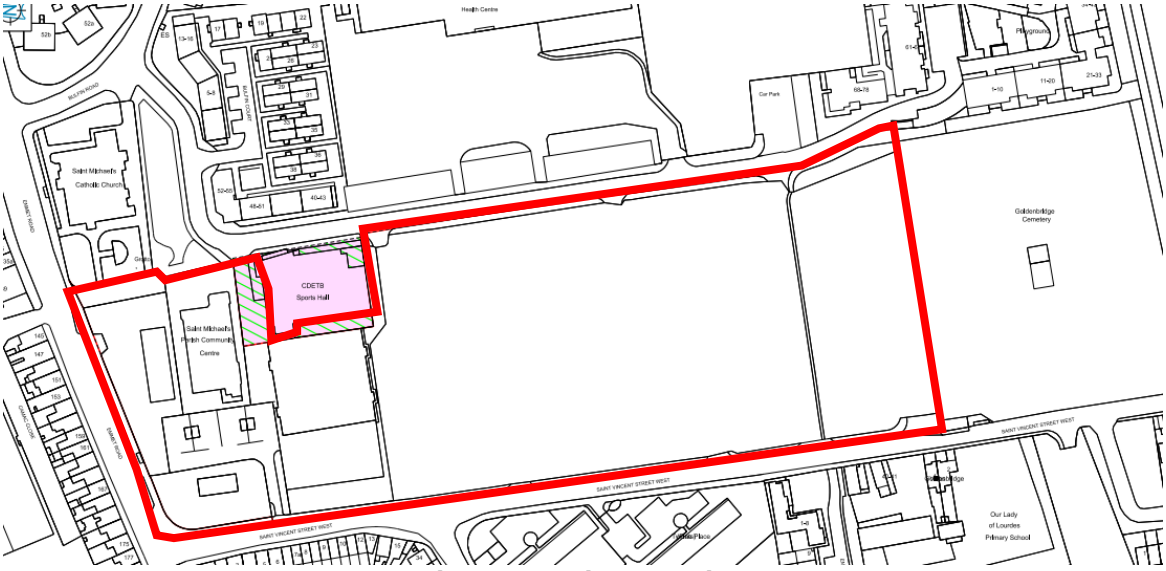


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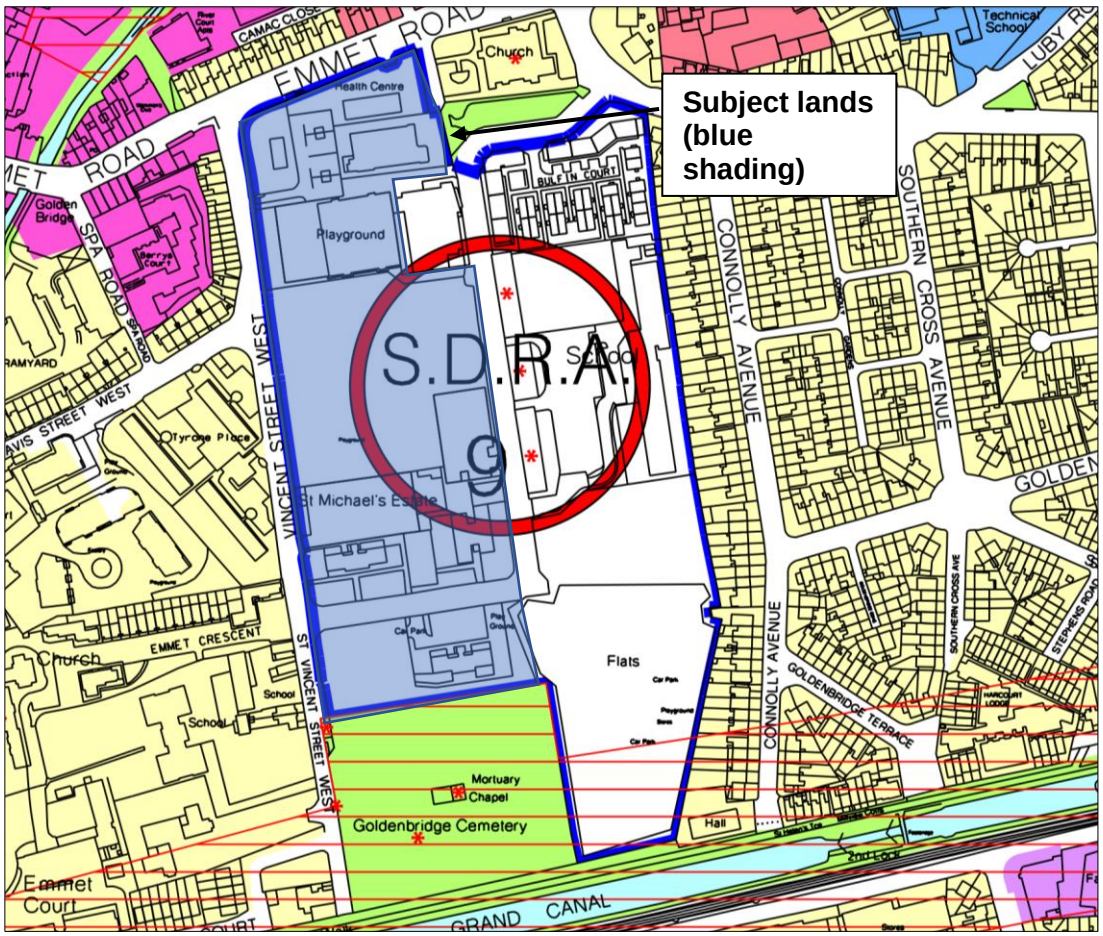


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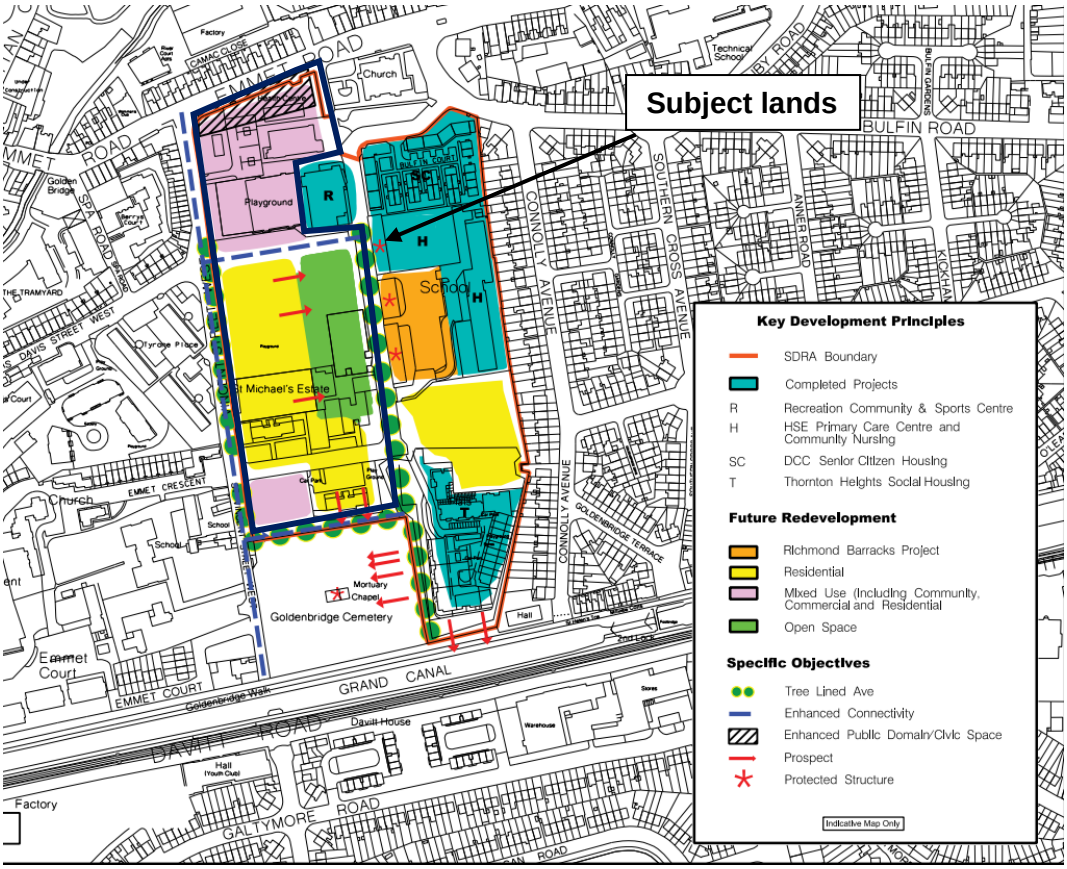


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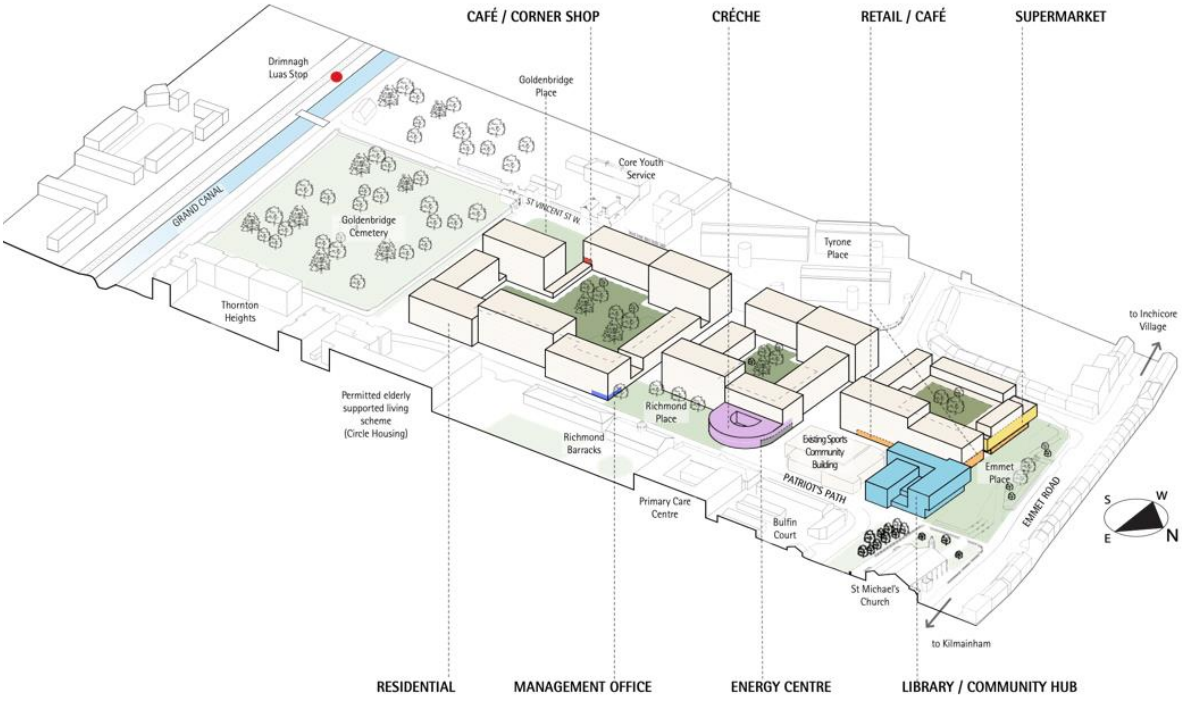
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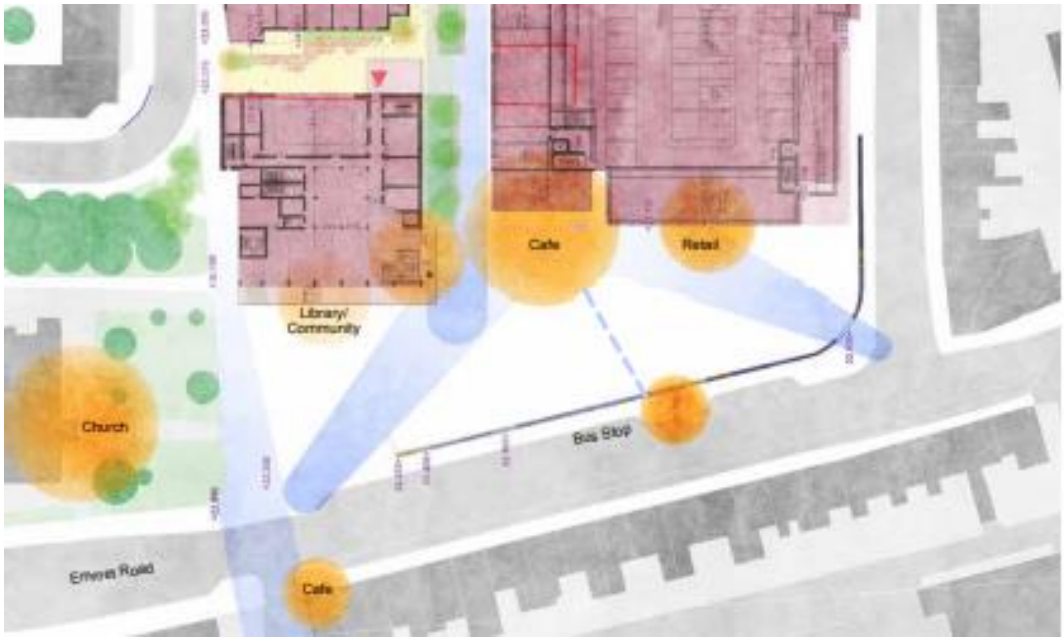
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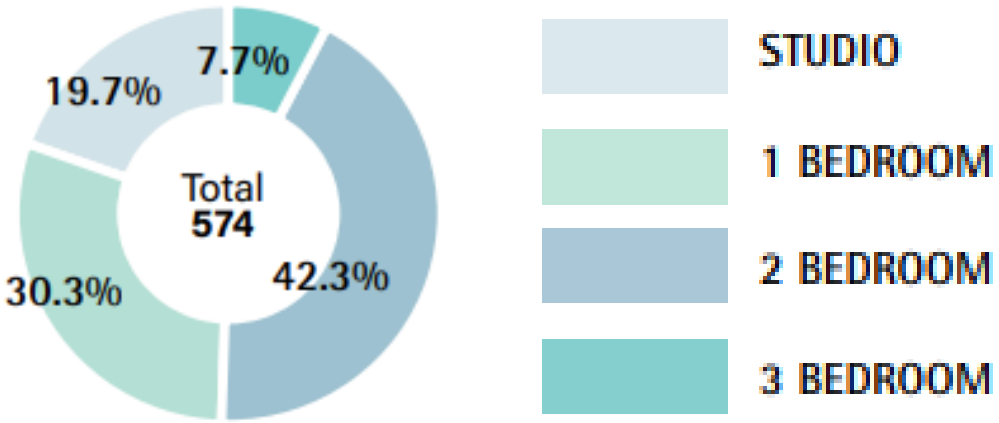


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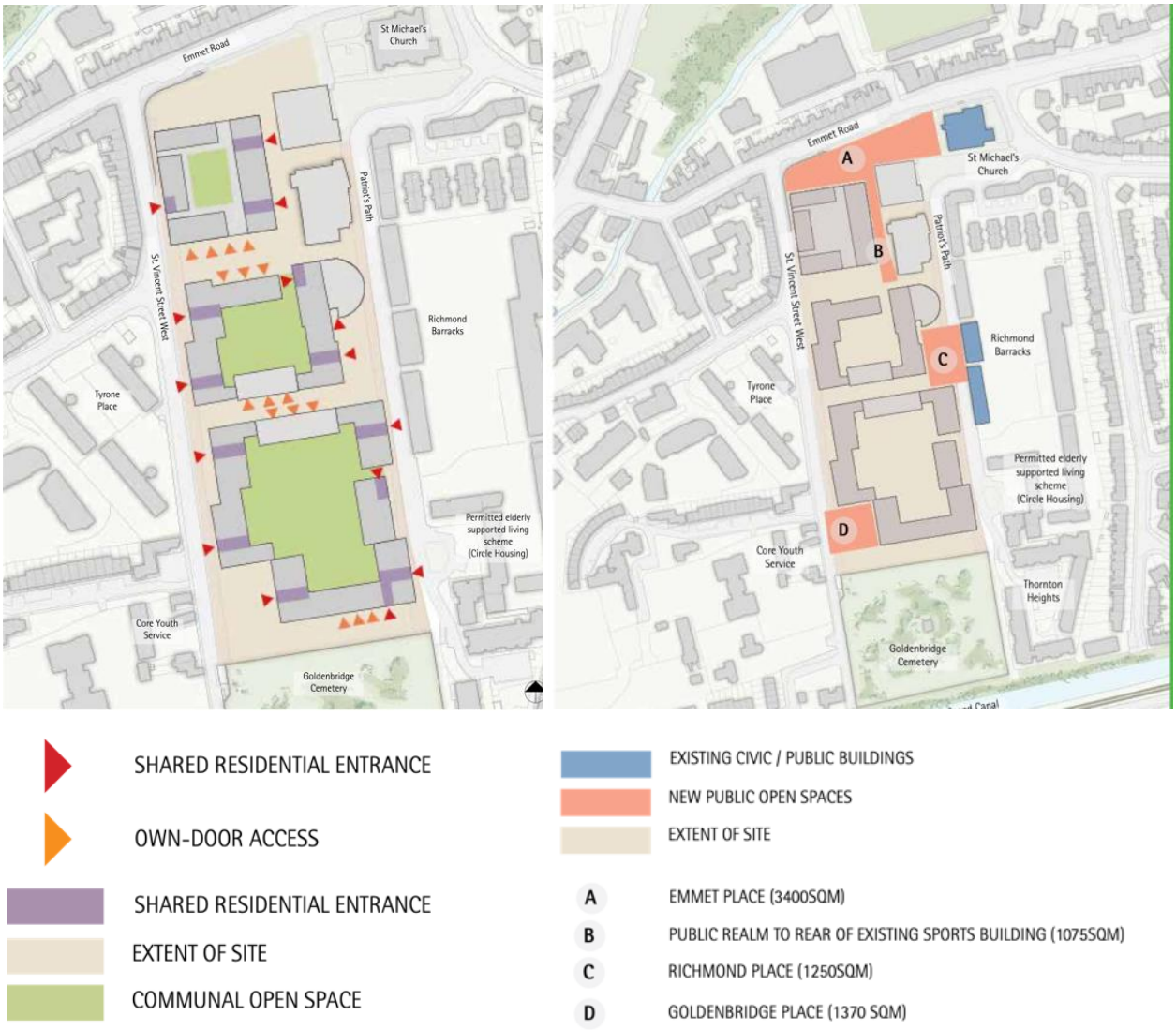
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M: 087 322 5858

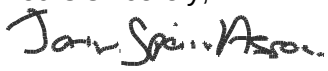
e-mail: RKunz@johnspainassociates.com

Rory Kunz, *Executive Director,*

John Spain Associates,
39 Fitzwilliam Place,
Dublin 2,
D02 ND61.

T: 01 662 5803
M: 087 322 5858
e-mail: RKunz@johnspainassociates.com

Yours sincerely,



John Spain Associates

JSA John Spain Associates
Planning & Development Consultants
Chartered Town Planners & Chartered Surveyors

39 Fitzwilliam Place,
Dublin 2
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www.jsaplanning.ie

Tel 01 662 5803
info@johnspainassociates.com

The Heritage Council
Church Lane,
Kilkenny R95 X298
Ireland.
Alison Harvey, Planning Officer
aharvey@heritagecouncil.ie

29-4-2022
JSA Ref. 20104

Dear Sir/Madam,

RE: EIAR SCOPING RELATING TO PROPOSED PART 10 MIXED USE DEVELOPMENT OF 574 DWELLINGS AND COMMUNITY/RETAIL/COMMERCIAL FLOORSPACE AT EMMET ROAD, DUBLIN 8.

1.0 Introduction

1.1 John Spain Associates has been appointed by Dublin City Council to prepare an Environmental Impact Assessment Report (EIAR) to support a future planning application for a mixed-use development on lands at Emmet Road (formerly St. Michael's Estate), Inchicore, Dublin 8.

1.2 The planning application will be made directly to An Bord Pleanála under the provisions of Section 175(3) of the Planning and Development Acts 2000 (as amended).

1.3 As part of the EIA process, we wish to consult with those statutory and non-statutory bodies that may have an interest in the proposal. We would therefore be grateful if you could provide any information relevant to the proposed site that you may hold, and/or highlight any issues that you feel should be addressed within the scope of the EIAR.

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Registered in Ireland No. 396306. Registered Office: 39, Fitzwilliam Place, Dublin 2. VAT No. IE 6416306U

2.0 Site Location

2.1 Emmet Road is located 4km west of the city centre in Inchicore. The site extends to c. 3.73 hectares is bound to the north by Emmet Road, to the south by the Grand Canal and Goldenbridge Cemetery, to the east by the rear of residential dwellings on Connolly Avenue and Bulfin Court and to the west by St Vincent Street West.



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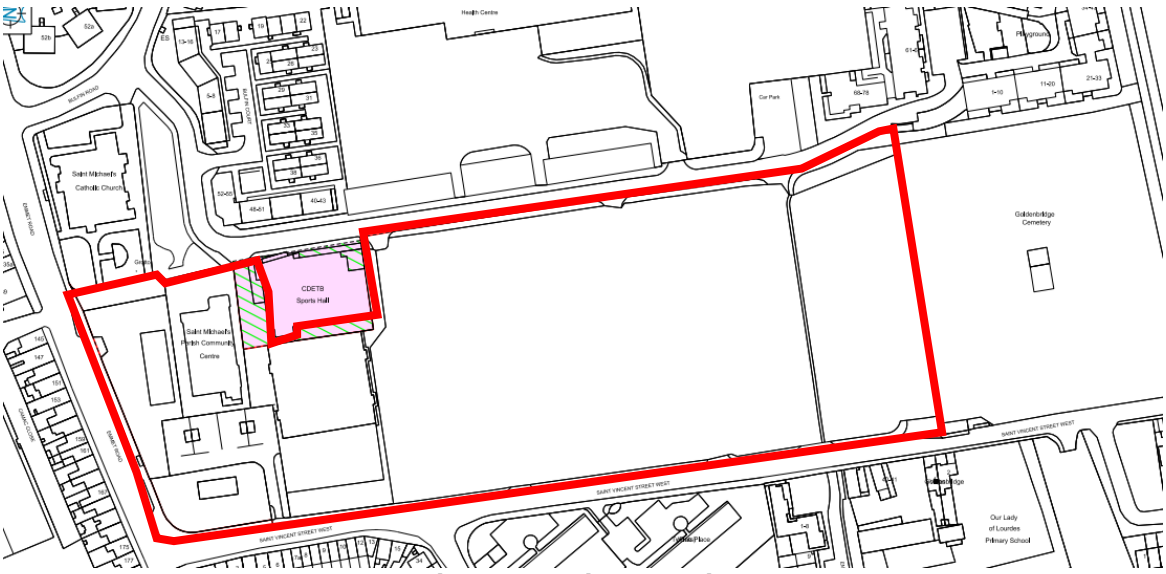


Figure 2 – Site Location

2.0 Background – Government Policy – Cost Rental

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2.4 In this regard, the proposed Emmet Road Development will provide a tenure mix of 24% social and 76% cost rental homes

3.0 Planning Context Summary – Dublin City Development Plan 2016-2022

3.1 The site at Emmet Road is zoned 'Z14' – a Strategic Development and Regeneration Area (SDRA) – in the Dublin City Development Plan 2016-2022, with a stated objective *'to seek the social, economic and physical development and/or rejuvenation of an area with mixed use, of which residential and 'Z6' would be the predominant uses."*

3.2 According to the Dublin City Development Plan, the SDRA areas have the capacity for a substantial amount of development in developing areas in the inner and outer city.

3.3 The City Development Plan 2016-2022 contains a number of key guiding principles for this site under the heading SDRA 9 which are set out below.

SDRA9 – Guiding Principles

3.4 The guiding principles for the remaining SDRA lands include:

- *The development of a high-quality, vibrant, mixed-use urban quarter will be promoted; new facilities will be located in accessible locations and will maximise the opportunities to connect with the wider neighbourhood.*
- *The development will complement the regeneration of Inchicore by encouraging a natural extension of the village centre eastwards along Emmet Road; the development will provide strong connections between the site and the functions of the village centre, for which a local environmental improvements plan is proposed.*
- *The development of high-quality streetscape onto Emmet Road with accessible civic spaces, active frontages and an appropriate transition in scale, height and character between the village centre and the site will be promoted*
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- *Variety in housing tenures and unit types will be sought in order to achieve a balanced and sustainable community The important heritage features on, and adjoining, the site, shall be respected and highlighted by urban design with particular regard to the tourism, heritage, community and amenity value of assets such as St Michael's Church, Richmond Barracks, Goldenbridge Cemetery and the Grand Canal.*
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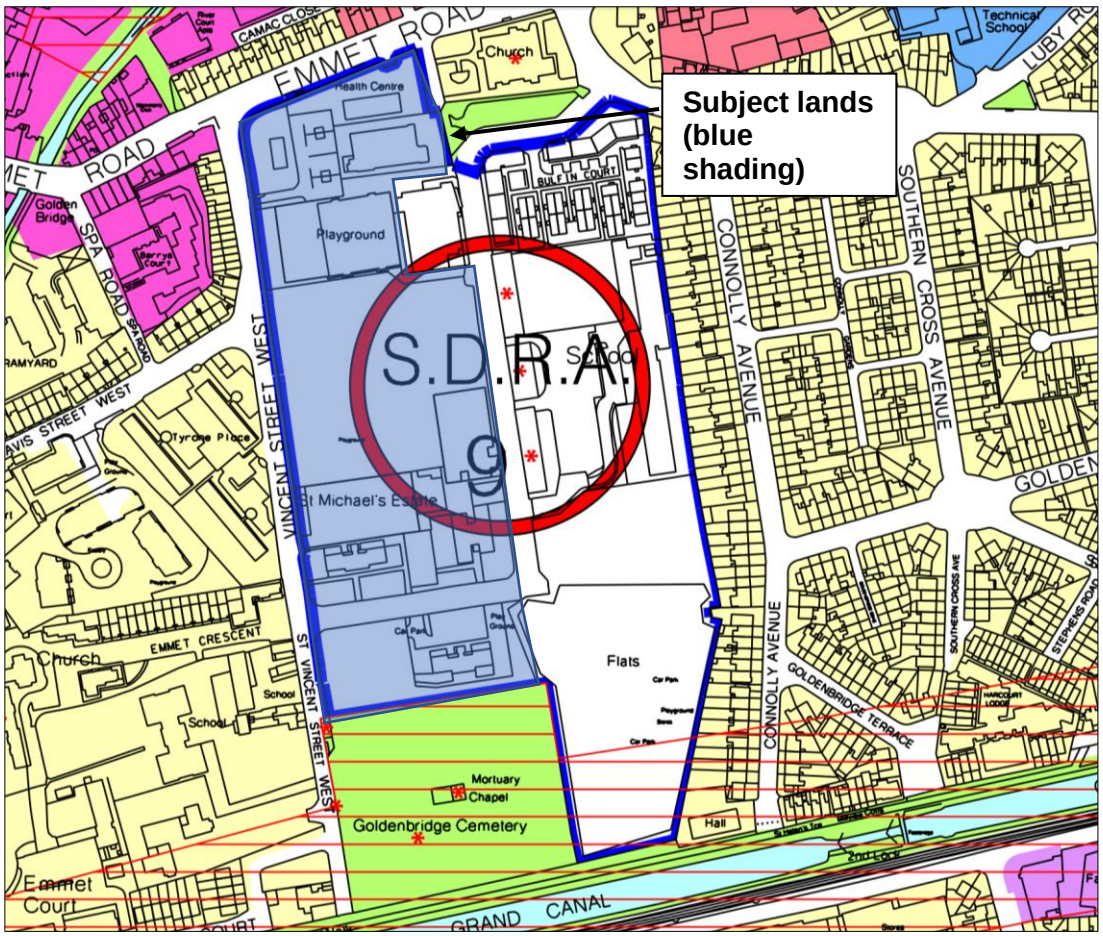


Figure 3 – SDRA 9. St Michael's Estate

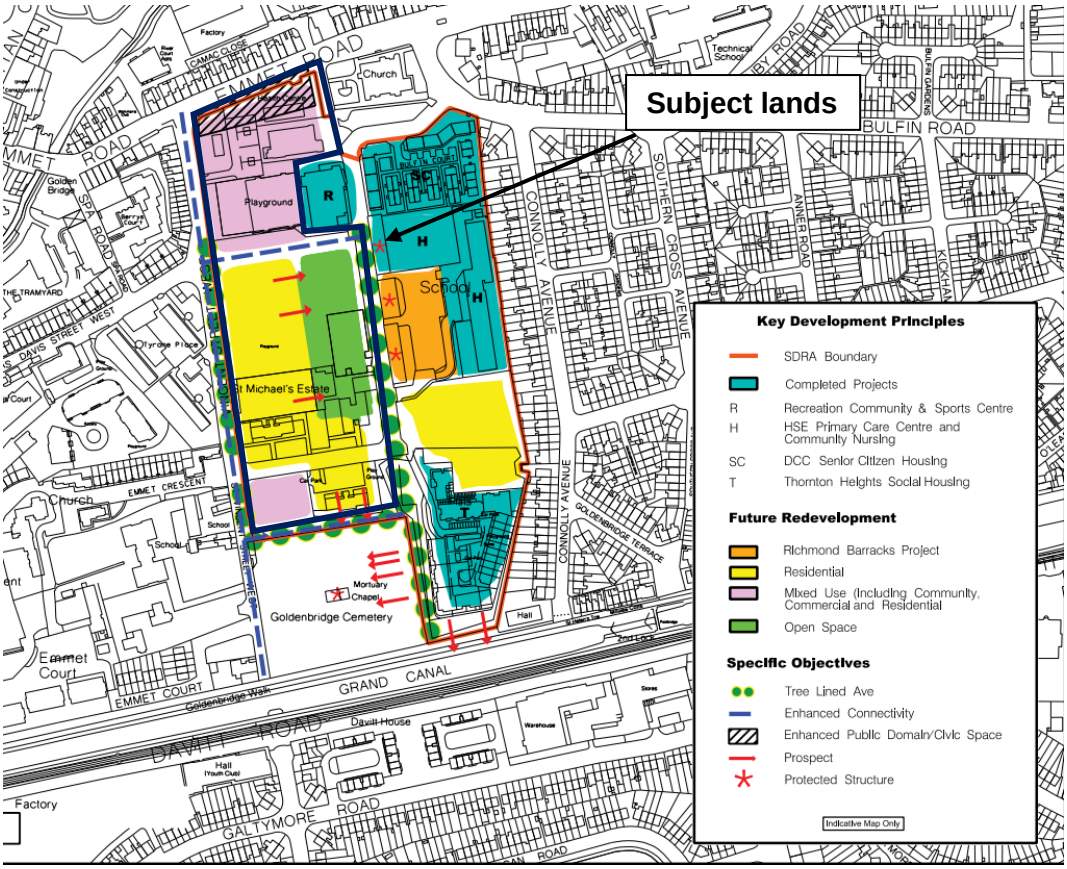


Figure 4 – Key Development Principles (Indicative Land Use Map)

4.0 Project Description Summary

4.1 The project is predominantly residential in nature, comprising c. 574 no. apartments supplemented and supported by community facilities (Library/Community Hub, Creche, Retail/Café units) in a neighbourhood centre which includes a supermarket fronting onto Emmet Road.

4.2 The proposal also includes 50 no. car parking spaces including 3 no. accessible spaces, 30 car share spaces and 10% Electric Vehicle charging points. In addition it is proposed to provide 939 no. bicycle spaces and 293 bicycle visitor spaces. The car parking spaces will be predominantly provided in a Village Mobility Hub located beneath the Supermarket. Car parking spaces will be located adjacent to Goldenbridge Cemetery.

Community and Commercial Elements of Proposed Development[1]

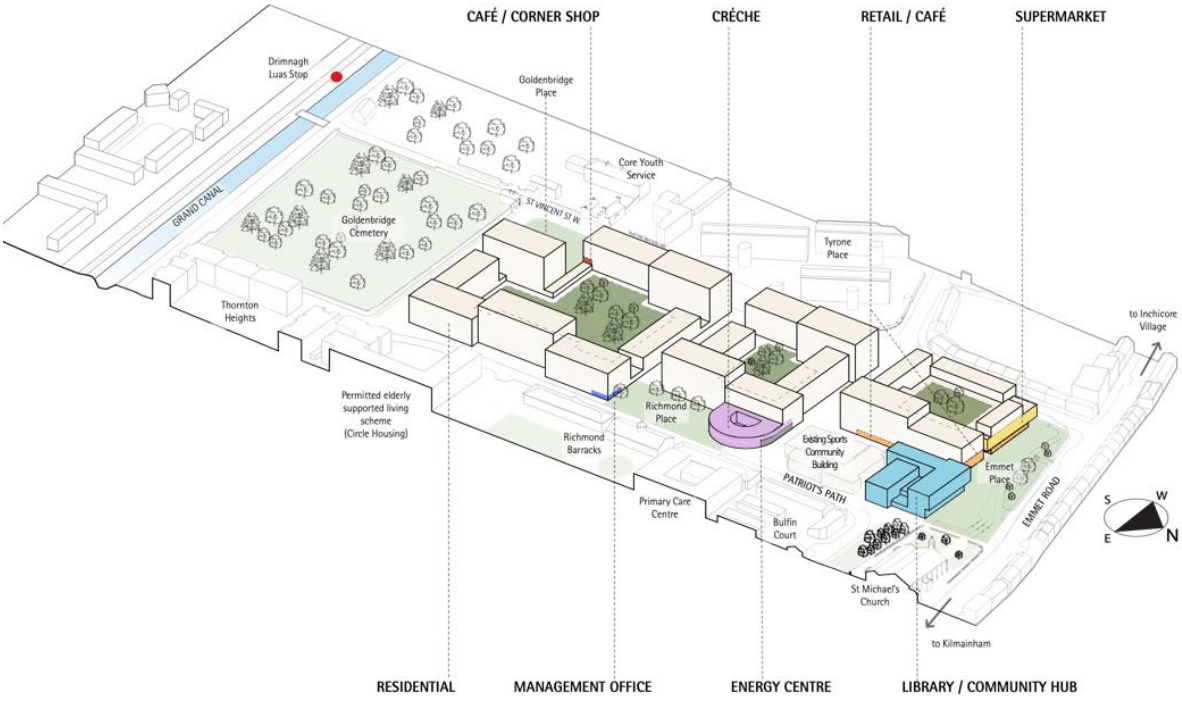
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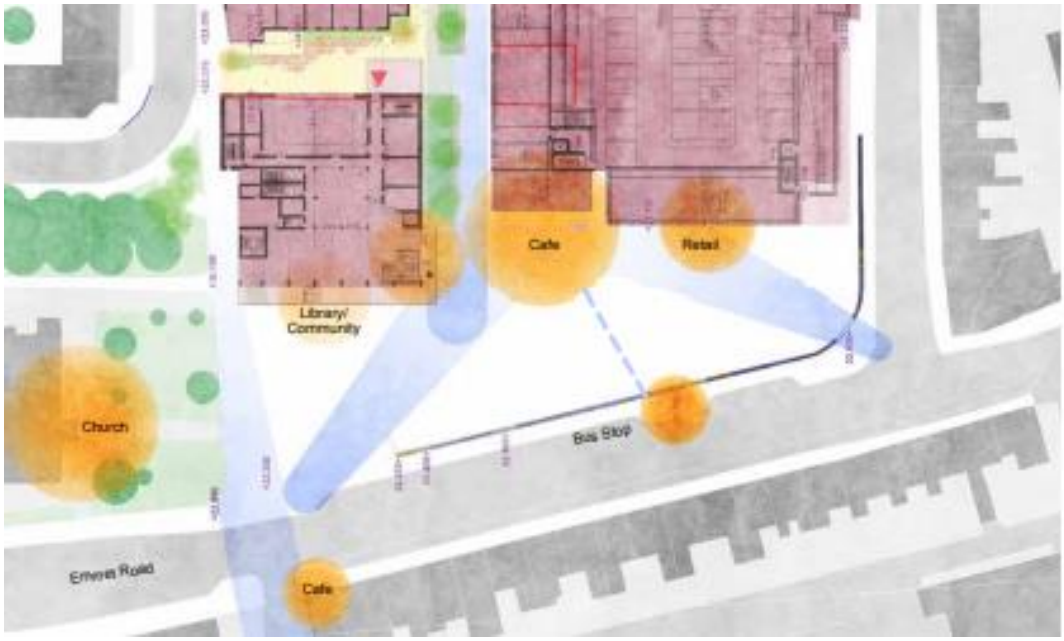
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OVERVIEW OF PROPOSED USES



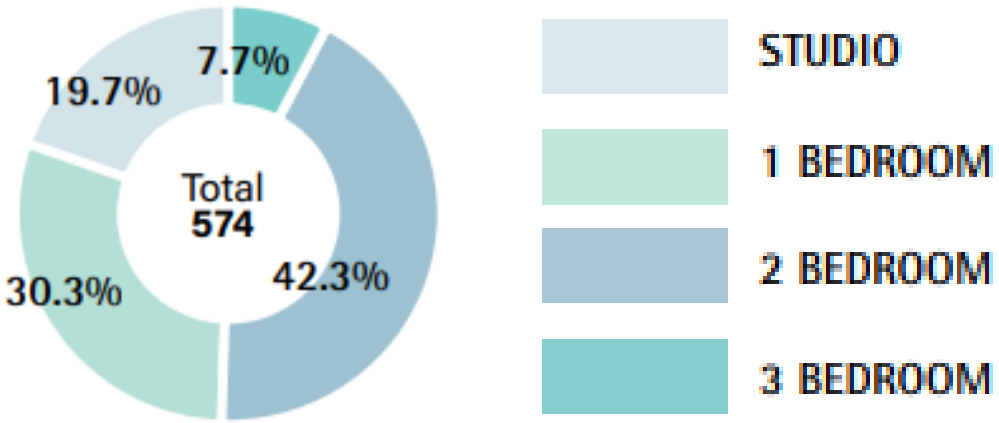


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	Studio	1 bedroom	2 bedroom	3 bedroom	Total
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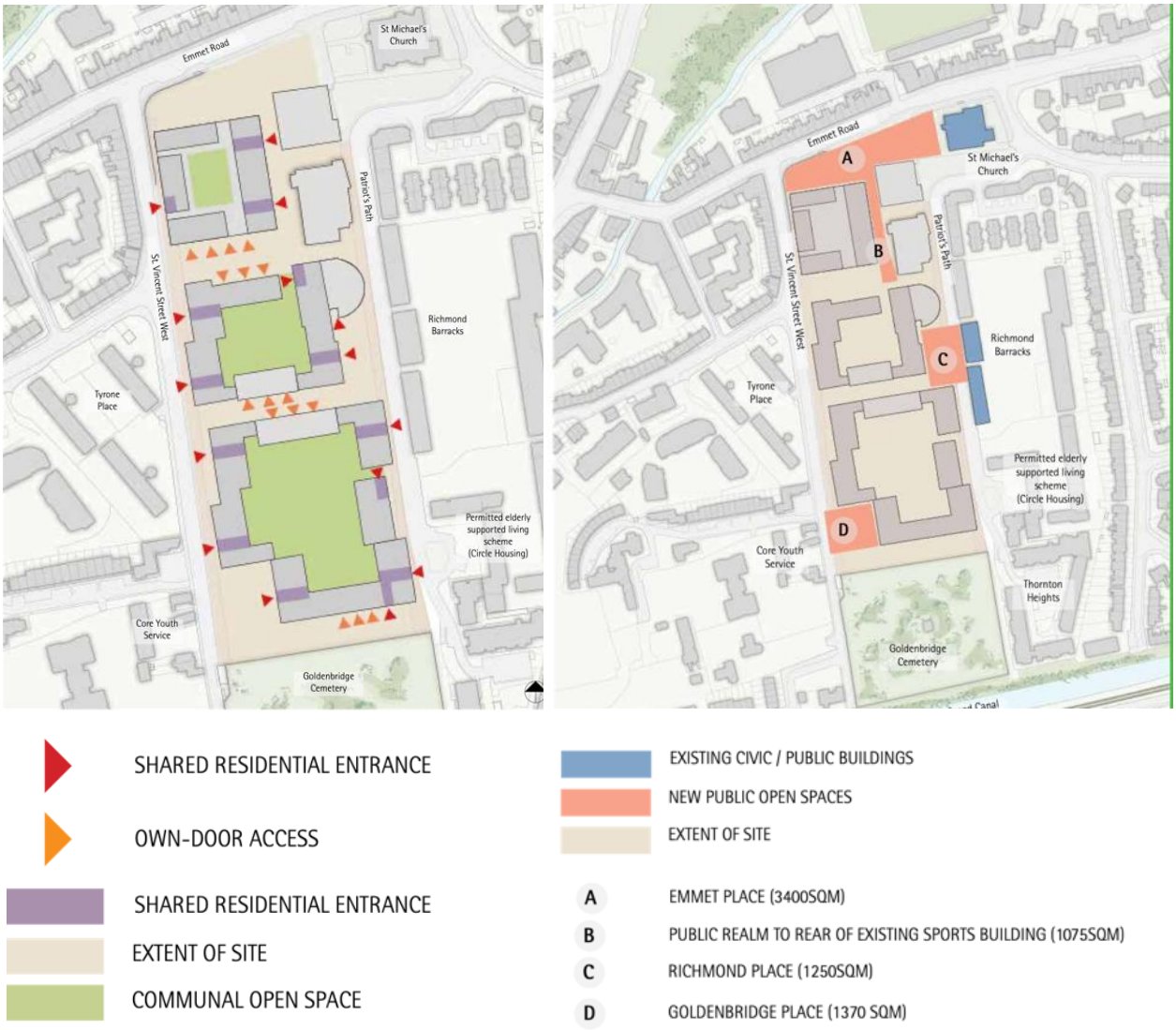
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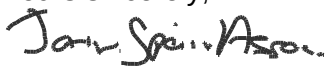
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TII
Parkgate Business centre,
Parkgate Street.
Dublin 8
landuseplanning@tii.ie

29-4-2022
JSA Ref. 20104

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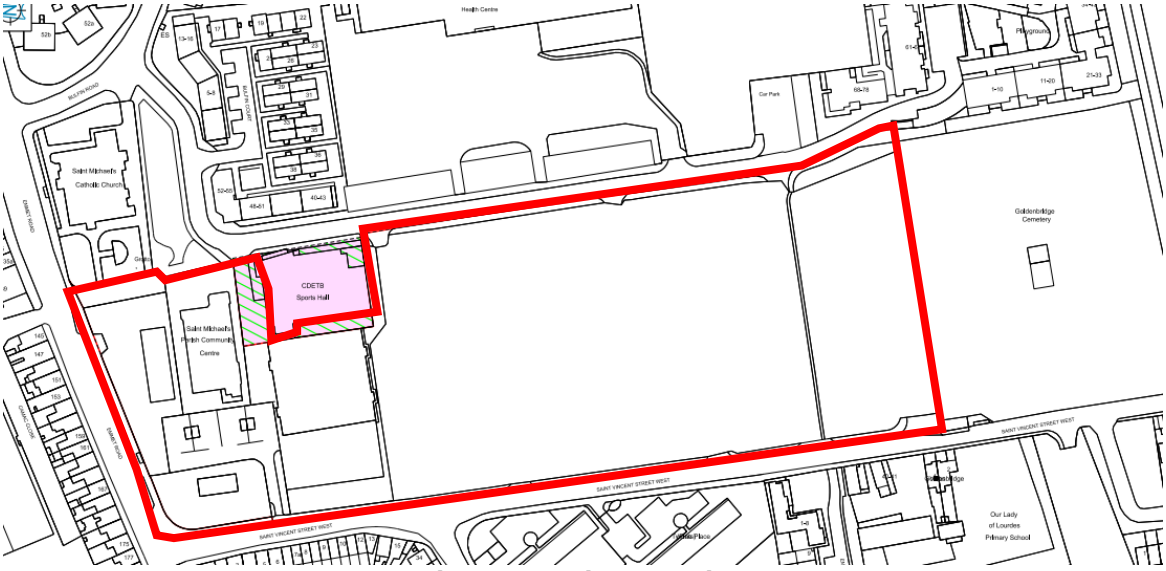


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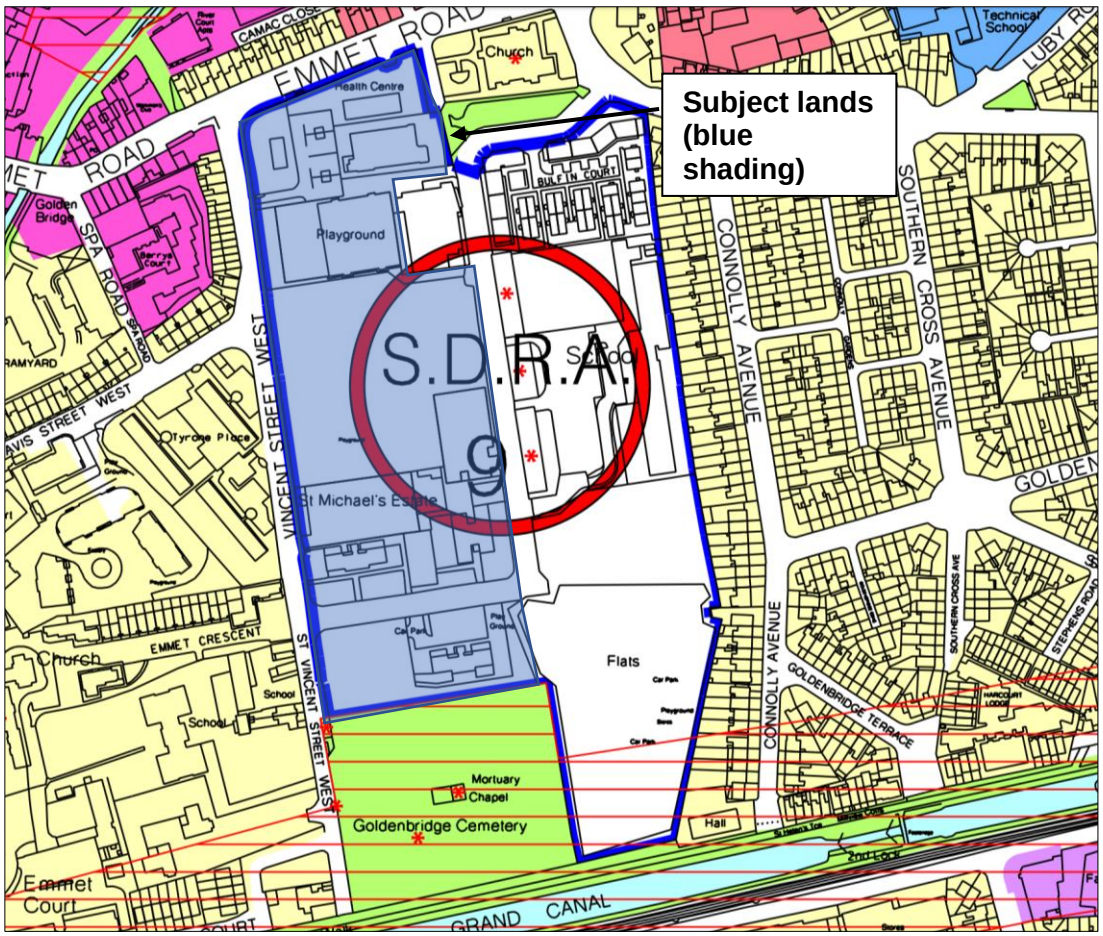


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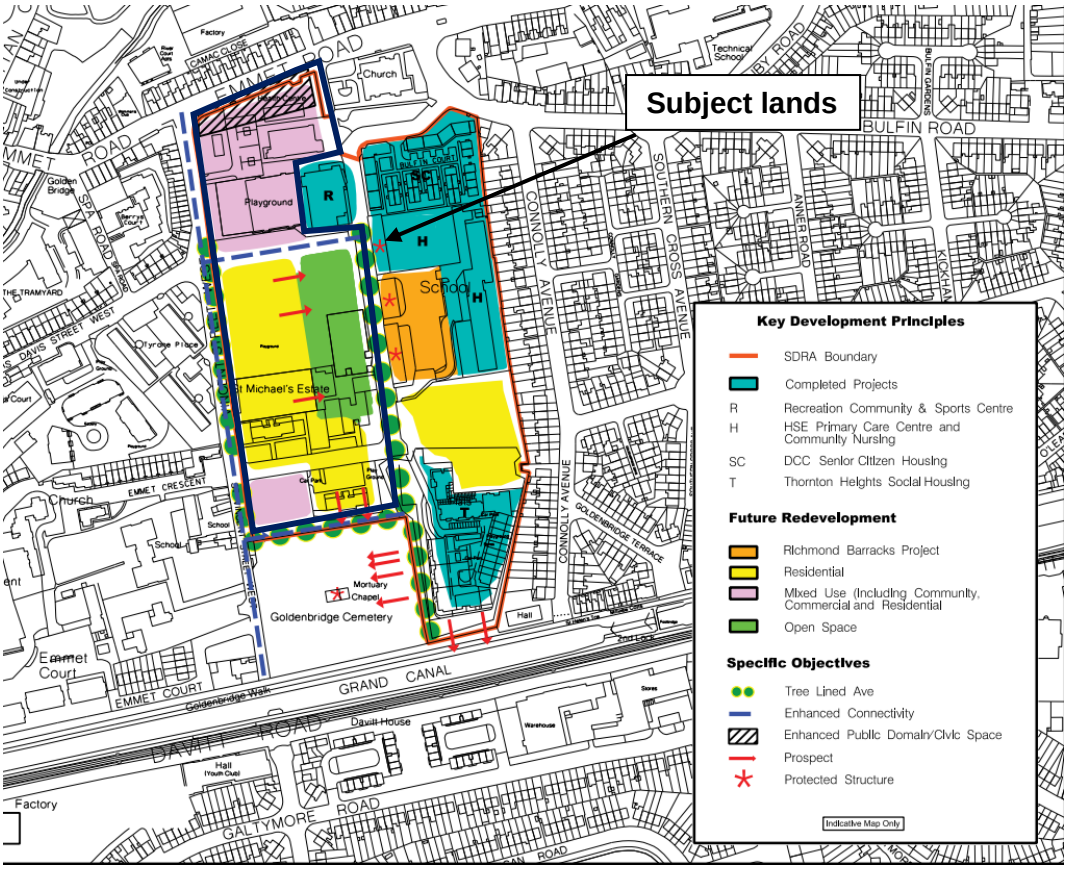


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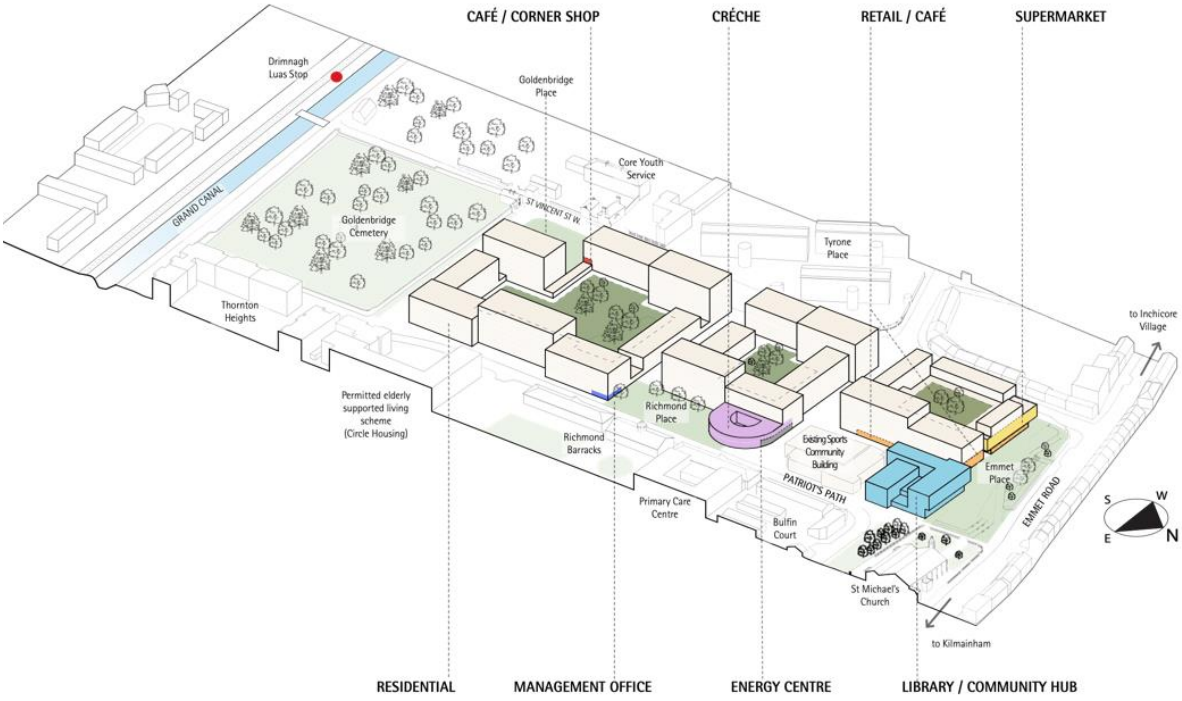
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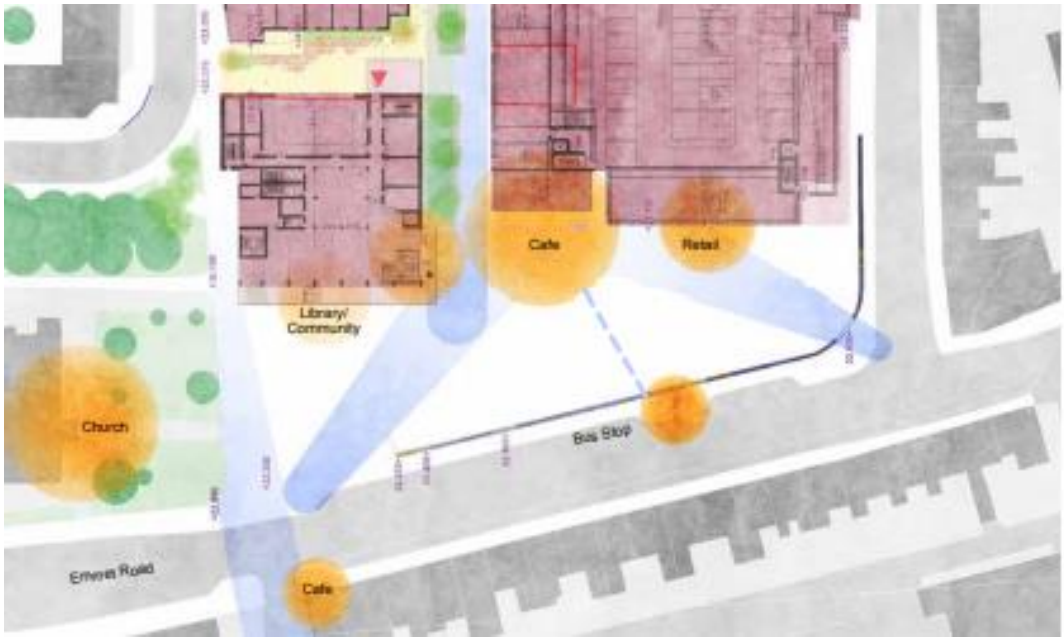
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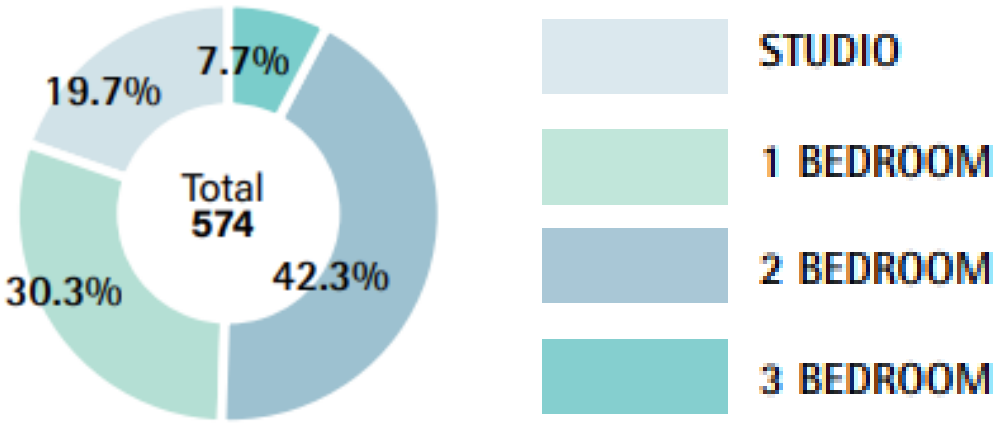


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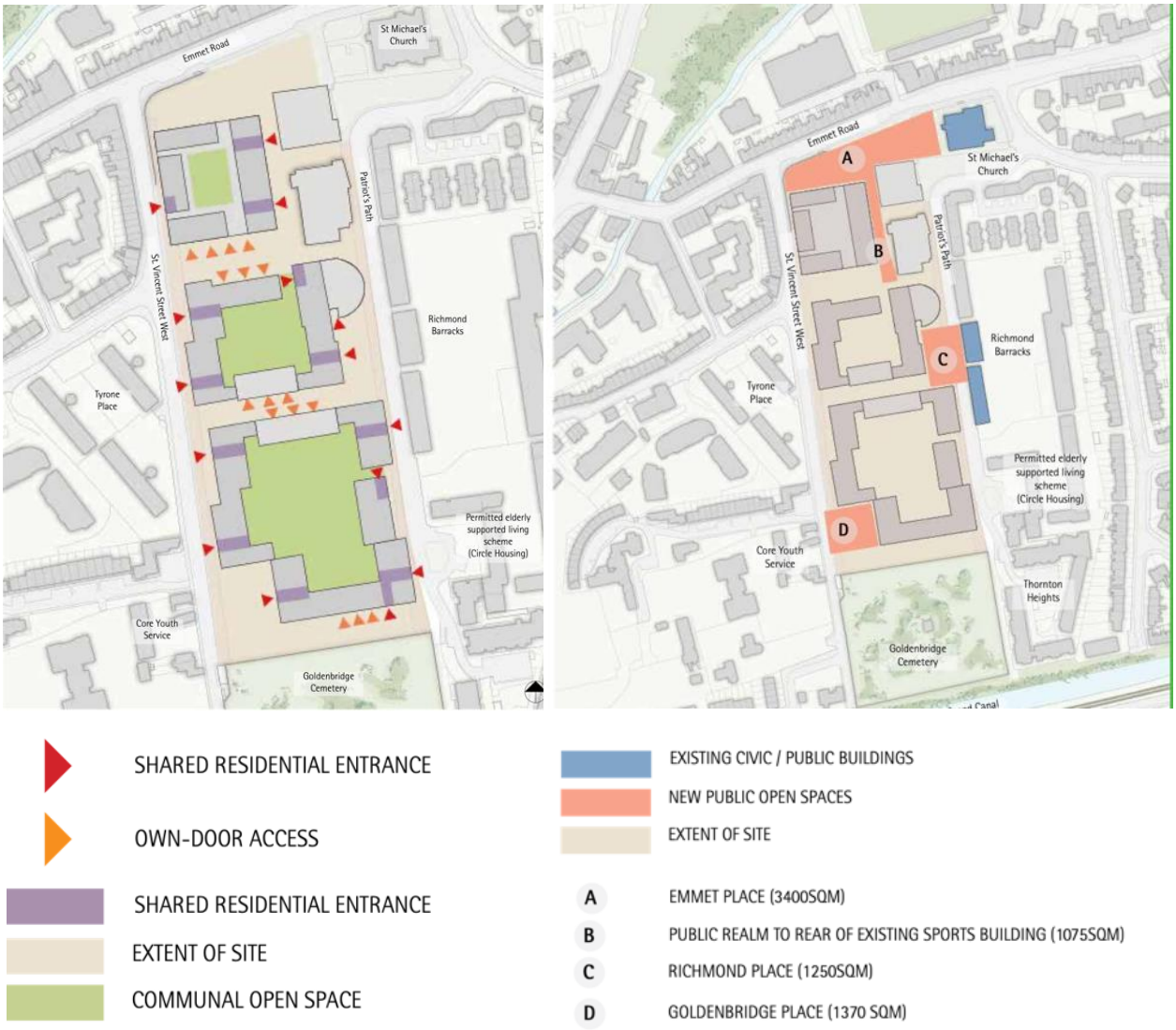
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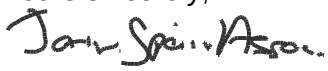
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Rory Kunz, *Executive Director,*

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e-mail: RKunz@johnspainassociates.com

Yours sincerely,



John Spain Associates

Rory Kunz

From: Matthew Carroll <Matthew.Carroll@fisheriesireland.ie>
Sent: Friday 6 May 2022 14:58
To: Rory Kunz
Subject: FW: DCC Part 10 Development, Emmet Road (formerly St. Michael's Estate), Inchicore, Dublin 8

Dear Rory,

In response to your request to "*provide any information relevant to the proposed site that you may have and highlight any likely significant impacts you consider should be addressed within the scope of the EIAR*", please not the following observations from IFI.

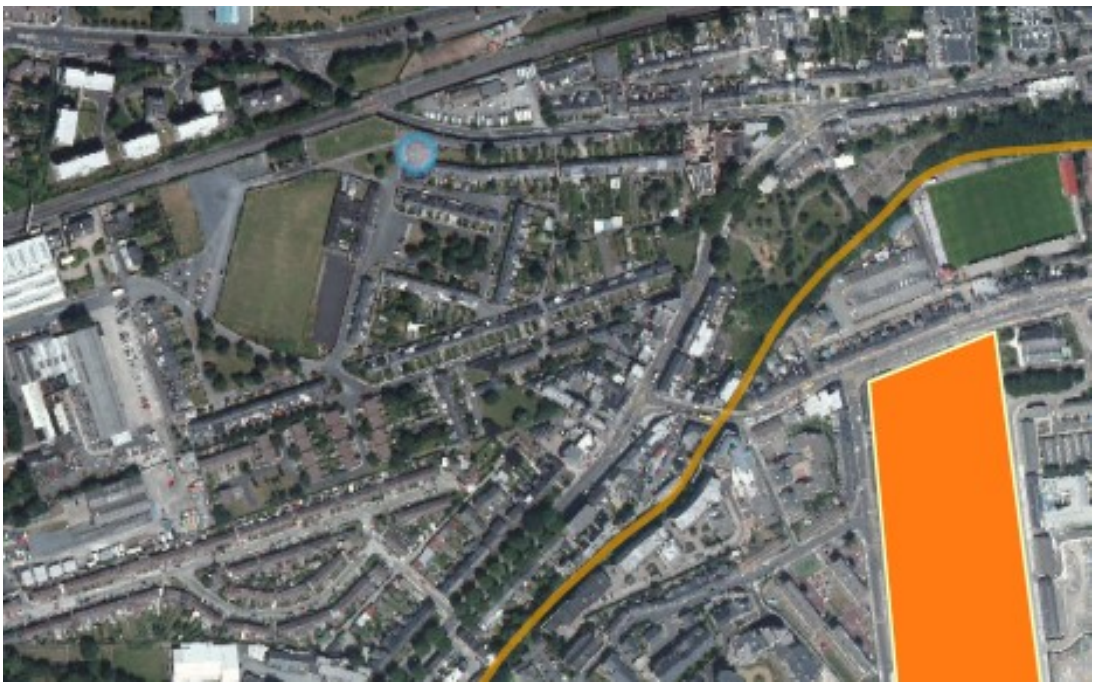
The proposed development is within the River Camac catchment which flows to the west of the site and the Grand canal to the south. The Camac is a recognised salmonid system, under significant ecological pressure predominately due to urbanisation. Although considerable sections of main channel are culverted, sections that remain on the surface invariably support self-sustaining populations of Brown trout (Salmo trutta). The river also supports populations of migratory Sea trout (Salmo trutta) in the lower reaches. Other species include the protected European eel , Freshwater Crayfish (Austropotamobius pallipes) and Lamprey (Lampetra sp.) species, listed under Annex II of the EU Habitats Directive.

The Camac River should not be considered a type of buffering mechanism, or part of any mitigation measures to protect the SAC or SPA which it discharges into via the R. Liffey . There should be nothing other than clean water entering the surface water sewer system which may discharge to the Camac or canal during the construction or operational phase. Mitigation measures to protect the aquatic environment should be solely designed and implemented within the proposed development to ensure there is no negative impact within any of the receiving environments.

If there is any potential for deleterious matter to enter the Camac River or Grand canal during the construction phase through the surface water system or by any other means this should be acknowledged and mitigated against in a site-specific Construction Environmental Management Plan (CEMP). The CEMP should detail and ensure Best Construction Practices including measures to prevent and control the introduction of pollutants and deleterious matter to surface water either directly or indirectly through the storm water drainage network and measures to minimise the generation of sediment and silt.

Ground preparation and associated construction works, including large-scale topographic alteration, the creation of roads, buildings and footpaths, have significant potential to cause the release of sediments and various pollutants into surrounding watercourses.
Construction Practices including measures to prevent and control the introduction of pollutants and deleterious matter to surface water either directly or indirectly through the storm water drainage network and measures to minimise the generation of sediment and silt.
Construction works must be planned in a manner which prevents extensive tracts of soils from being exposed at any time and arrangements must be made for the control and management of any contaminated water resulting from construction.

IFI would encourage that the use of nature based solutions to manage surface water attenuation post construction phase rather than using hard engineering solutions to manage surface water. The Department of Housing, local Government and Heritage have recently published the following interim guidance document on Nature-based Solutions to the Management of Rainwater and Surface Water Runoff in Urban Areas Water Sensitive Urban Design Best Practice Interim Guidance Document which should be considered when designing drainage systems.
https://www.gov.ie/en/publication/10d7c-nature-based-solutions-to-the-management-of-rainwater-and-surface-water-runoff-in-urban-areas-best-practice-interim-guidance-document/



I hope that some of the observations made assist in drafting your EIAR

Regards,

Matthew Carroll

Fisheries Environmental Officer

Inland Fisheries Ireland- Dublin

Iascach Intíre Éireann
Inland Fisheries Ireland

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Rory Kunz

From: INFO <Information@tii.ie>
Sent: Wednesday 11 May 2022 10:04
To: Rory Kunz
Subject: RE: DCC Part 10 Development, Emmet Road (formerly St. Michael's Estate), Inchicore, Dublin 8

Dear Mr. Kunz,

Thank you for your email of 29 April 2022 regarding the above.

Transport Infrastructure Ireland (TII) will endeavour to consider and respond to planning applications referred to it given its status and duties as a statutory consultee under the Planning Acts. The approach to be adopted by TII in making such submissions or comments will seek to uphold official policy and guidelines as outlined in the Section 28 Ministerial Guidelines 'Spatial Planning and National Roads Guidelines for Planning Authorities' (DoECLG, 2012). Regard should also be had to other relevant guidance available at www.TII.ie. TII advise that matters related to Metrolink, future Luas lines and public transport are a matter for the National Transport Authority.

The issuing of this correspondence is provided as best practice guidance only and does not prejudice TII's statutory right to make any observations, requests for further information, objections or appeals following the examination of any valid planning application referred.

With respect to EIAR scoping issues, the recommendations indicated below provide only general guidance for the preparation of an EIAR, which may affect the existing Luas and national road network.

The developer/scheme promoter should have regard, *inter alia*, to the following:

- It would be important that, where appropriate, subject to meeting the appropriate thresholds and criteria and having regard to best practice, a Traffic and Transport Assessment (TTA) be carried out in accordance with relevant guidelines, noting traffic volumes attending the site and traffic routes to/from the site with reference to impacts on the national road network and junctions of lower category roads with national roads.

TII's Traffic and Transport Assessment Guidelines (2014) should be referred to in relation to proposed development with potential impacts on the national road network. The scheme promoter is also advised to have regard to Section 2.2 of the NRA/TII TTA Guidelines which addresses requirements for sub-threshold TTA.

Transport analysis should also consider:

- All road users, not just private cars,
- Modal share targets should be outlined and how any PT/Walking/Cycling modal share is to be accommodated,
- Measures proposed to reduce car dependency should be outlined,
- Consider and address cumulative impacts of other development and impacts on national road capacity,
- A mobility management plan for the development to accompany the transport assessment.

Notwithstanding any of the above, the developer should be aware that this list is non-exhaustive, thus site and development specific issues should be addressed in accordance with best practice.

I trust that the above comments are of assistance in your EIAR preparation.

Yours sincerely,

Alban Mills

Senior Regulatory & Administration Executive
Ref No. TII22-118457



From: Rory Kunz <rkunz@johnspainassociates.com>
Sent: Friday 29 April 2022 13:13
To: Landuse Planning <LandUsePlanning@tii.ie>
Subject: RE: DCC Part 10 Development, Emmet Road (formerly St. Michael's Estate), Inchicore, Dublin 8

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Dear Sir/Madam,

John Spain Associates has been appointed by Dublin City Council to prepare an Environmental Impact Assessment Report (EIAR) to support a future planning application for a mixed-use development on lands at Emmet Road (formerly St. Michael's Estate), Inchicore, Dublin 8.

The planning application will be made directly to An Bord Pleanála under the provisions of Section 175(3) of the Planning and Development Acts 2000 (as amended).

As part of the EIA process, we wish to consult with those statutory and non-statutory bodies that may have an interest in the proposal. We would therefore be grateful if you could provide any information relevant to the proposed site that you may hold, and/or highlight any issues that you feel should be addressed within the scope of the EIAR.

We would appreciate if you could provide any information relevant to the proposed site that you may have and highlight any likely significant impacts you consider should be addressed within the scope of the EIAR.

We would be grateful if you could reply by the 27th of June 2022.

If you require any further information, or clarification please contact me.

Best regards,

Rory

Rory Kunz, *Executive Director,*

John Spain Associates,
39 Fitzwilliam Place,
Dublin 2,
D02 ND61.

T: 01 662 5803
M: 087 322 5858
e-mail: RKunz@johnspainassociates.com
web: www.jsaplanning.ie

JSA John Spain Associates
Planning & Development Consultants
Chartered Town Planners & Chartered Surveyors

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Appendix A2 - Other relevant assessments considered in the preparation of this EIAR

Relevant Legislation	Nature of Assessment	Relevant Assessment
Directive 92/43/EEC, the Habitats Directive	Appropriate assessment comes from the Habitats Directive (92/43/EEC), which seeks to safeguard the long-term survival of Europe's most valuable and threatened species and habitats. The geographical areas of particular importance to these species and habitats have been selected as Special Areas of Conservation (SAC) and Special Protection Areas (SPA) which are collectively referred to (in Ireland) as European sites. Together, these sites comprise the pan-European Natura 2000 network of protected areas. One of the measures which protects these areas is the requirement that every project must undergo an assessment of its implications for any European site before consent for the project is given. Consent for the project can only be given after determining that it will not adversely affect the integrity of the site(s) concerned in view of the conservation objectives of that site.1 In order to determine if an appropriate assessment is required, a screening process must be carried out for all applications for planning permission. The Habitats Directive (92/43/EEC) and the associated Birds Directive (2009/147/EC) are transposed into Irish legislation by Part XAB of the 2000 Act and the Birds and Natural Habitats Regulations 2011. The legislative provisions for appropriate assessment screening for planning applications are set out in Section 177U of the 2000 Act.	An Appropriate Assessment Screening Report prepared by Enviroguide is included with the Part 10 application. The AA Screening Report concludes that Stage 2 appropriate assessment is not required in relation to the proposed development, The Board, as competent authority, will carry out an Appropriate Assessment of the proposed development.
Directive 2000/60/EC, The Water Framework Directive	The Water Framework Directive (WFD) (Directive 2000/60/EC) and The Groundwater Directive (Directive 2006/118/EC) requires all Member States to protect and improve water quality in all waters. The WFD is one of the key overarching instruments in the protection of waters and includes	The EIAR includes a detailed chapter addressing Water, prepared by OCSC. Chapter 6 states the following:

	subordinate directives or water-related legislation that complement or have been developed in response to, or coherent with, the requirements of the Water Framework Directive. The WFD requires 'Good Water Status' for all European waters to be achieved through a system of river basin management planning and extensive monitoring by 2015 or, at the least, by 2027. 'Good status' means both 'Good Ecological Status' and 'Good Chemical Status'. The WFD does not require site specific assessments to be undertaken by a developer. It lays down standards for the quality of designated waters ("guide" values as well as "imperative" values) and requires Member States to monitor the quality of designated waters and to take measures to ensure that they comply with the minimum standards1.	The proposed development site lies within the Discussion within the Water Framework Directive (WFD) on the river Camac notes the river as being currently classified with a Moderate Status in the upper reaches and Poor Status in the lower reaches (i.e., in the vicinity of the subject site). It is further noted that significant interventions will be required in order to achieve Good Status and address the many pressures on the waterbody, which exist because of human activities. Subject to the mitigation set out within the EIAR, it was determined that the development would not give rise to any significant impact on water or affect the status of any watercourse under the Water Framework Directive.
Directive 2001/42/EC, The SEA Directive	The Strategic Environmental Assessment (SEA) Directive 2001/42/EC, on the assessment of the effects of certain plans and programmes on the environment requires that an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment. Public plans and programmes that are likely to have significant effects on the environment must have a Strategic Environmental Assessment (SEA). The SEA Directive (2001/42/EC) is implemented in Ireland by the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI 435/2004) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI 436/ 2004), as amended. There are no specific assessments required by the developer under the	The SEA for the relevant CityDevelopment Plan incorporates mitigation to minimise the impact of the plans on the environment. The policies of the plan were formulated with regard to the SEA processes undertaken. The subject site was designated for the nature and form of development proposed under the relevant plan, which has been subject to SEA. This is addressed in further detail in the context of the assessment of alternatives within Chapter 2 of this EIAR.

	SEA Directive in respect of the current SHD application on site. SEA has been undertaken by the relevant authority in respect of the South Dublin County Development Plan 2016-2022 and Draft South Dublin County Development Plan 2022-2028.	
Directive 2002/49/EC, regarding environmental noise	The Environmental Noise Directive 2002/49/EC relates to the assessment and management of environmental noise; this is the main EU instrument to identify noise pollution levels and to trigger the necessary action both at Member State and at EU level. The Directive requires Member States to prepare and publish, every 5 years, noise maps and noise management action plans for: agglomerations with more than 100,000 inhabitants major roads (more than 3 million vehicles a year) major railways (more than 30.000 trains a year) major airports (more than 50.000 movements a year, including small aircrafts and helicopters) When developing noise management action plans, Member States' authorities are required to consult the concerned public. Relevant bodies develop noise action plans that we consider as appropriate.	Chapter 8 of this EIAR for this Part 10 comprises an assessment of noise and vibration impacts associated with the development. The noise assessment undertaken as part of the EIAR, has regard to the relevant provisions of Directive 2002,49/EC.
Seveso Directive (Directive 82/501/EEC, Directive 96/82/EC, Directive 2012/18/EU)	The Seveso Directive (Directive 82/501/EEC, Directive 96/82/EC, Directive 2012/18/EU) was developed by the EU after a series of catastrophic accidents involving major industrial sites and dangerous substances. Such accidents can give rise to serious injury to people or serious damage to the environment, both on and off the site of the accident.	The subject lands are not proximate to any Seveso designated sites. The surrounding context consists of a mix of residential cultural, cemetery and commercial lands. It does not include any man-made industrial processes (including SEVESO II Directive sites (96/82/EC & 2003/105/EC) which might result in a risk to human health and safety. From a review of the Dublin City County Council Development Plan Map E there are no SEVESO Site as defined by the Health and Safety Authority, on the subject site of the proposed development, in the immediate vicinity, or in the surrounding Inchicore Village.

	The Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2015 (S.I. No. 209 of 2015) (the "COMAH Regulations"), implements the latest Seveso III Directive (2012/18/EU). The purpose of the COMAH Regulations is to transpose the Seveso Directive into Irish law and lay down rules for the prevention of major accidents involving dangerous substances, and to seek to limit as far as possible the consequences for human health and the environment of such accidents, with the overall objective of providing a high level of protection in a consistent and effective manner.	Furthermore, there are no substances to be stored as part of the proposed development that would be controlled under Seveso Directive of COMAH Regulations. Due to the separation distance from the proposed development site to the nearest site controlled under the Seveso Directive, and the fact that it lies outside the consultation zone, there are no specific assessments required by the Applicant under the Seveso Directive or COMAH Regulations.
Directive 2008/50/EC, the clean air for Europe directive	The Clean Air for Europe (CAFE) Directive 2008/50/EC is the prevailing legislation to improve the quality of air in Europe and limit exposure to air pollution. The CAFE Directive set rules including how to monitor, assess, and manage ambient air quality. Overall, the main objective of the CAFE Directive is to reduce human and environmental exposure to air pollutants and ensure that the limits of values and thresholds are not exceeded. The CAFE Directive was transposed into Irish legislation by S.I. No. 180/2011 - Air Quality Standards Regulations 2011. The CAFÉ Directive mandates the location and quantity of air monitoring stations that Environmental Protection Agency (EPA) should undertake ambient air monitoring. If there is an exceedance of the ambient limit value an Air Quality Action Plan must be developed by Local Authorities in conjunction with the EPA. Chapter 9 of this EIAR includes an assessment of air quality and	Due to the nature of the proposed development, there are no specific assessments required by the applicant under the CAFE Directive for the Proposed Development. The air quality and climate assessment undertaken as part of the EIAR, which had regard to the relevant provisions of Directive 2008/50/EC, concluded that no significant impacts would arise subject to mitigation

	climate impacts associated with the development. The analysis and findings within that chapter of the EIAR were made with regard to the provisions of Directive 2008/50/EC.	
Directive 2007/60/EC, regarding the assessment and management of flood risks	The Floods Directive (Directive 2007/60/EC) establishes a framework for the assessment and management of flood risks, with the aim to reduce the adverse consequences on human health, the environment and material assets. The Floods Directive requires Member States to assess if all water courses and coast lines are at risk from flooding, to map the flood extent and assets and humans at risk in these areas and to take adequate and coordinated measures to reduce this flood risk. The Floods Directive also reinforces the rights of the public to access this information and to have a say in the planning process. The Floods Directive must be implemented in tandem with the WFD. In Ireland, the OPW is the national authority assigned with the implementation of the Floods Directive, which was transposed into Irish law by the EU (Assessment and Management of Flood Risks) Regulations SI 122 of 2010.	Dublin City Council undertook a Strategic Flood Risk Assessment as part of the Development Plan preparation process, which zoned the subject site for the nature of development proposed. The application is accompanied by a detailed Site Specific Flood Risk Assessment Report prepared by OCSC Consulting Engineers. All proposed residential and commercial development within the subject site is located within Flood Zone C, and there is low to very low residual risk of flooding of any sort on site.

Appendix A3 – Public Consultation Summary

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Summary Report of Phase 2

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9th March 2022 Webinar on Concept Design Prestation

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Public Consultation 2020

Initial Research - 22nd December 2020

The initial; research shown that Inchicore has been surveyed extensively in the past. The Nolan Report 2019 was referenced as well as the St. Michaels Estate Land Initiative 2017 the audit of community facilities and services by the Dublin city Council. The research was then primarily gathered by the DCC by foot, walking around the area. All the relevant information was gathered and then layered together on to a map. This map shows all community facilities, schools, residential buildings, and all open spaces. The information gathered then goes on to show the sense of place in Inchicore and explains the historic importance of the Richmond barracks.

Public Consultation 2021

22nd February 2021 - Summary of Survey Results December 2020

A summary was undertaken in December 2020. The title of this survey was 'What is Next for Emmet Road?'. This public consultation survey objective was for the community of Inchicore/Kilmainham to share their insights and ideas with the Integrated Design Team on the proposed development at Emmet Road. The second objective was to support DCC, and the design team address any gaps related to the studies (e.g., community resource mapping) that have been undertaken for the design process so far.

The purpose of this survey was to provide the opportunity to the residents, visitors, and local stakeholders of Inchicore/Kilmainham an opportunity to share their insights and ideas with us on the proposed Dublin City Council Mixed Use Urban Quarter including Cost Rental and Social Accommodation on the site.

The methodology of the survey had to be altered to fit with the COVID-19 pandemic. To achieve the best results the survey was rolled out three-fold via online survey, a hard copy survey and telephone survey. Each method had to capture the publics insights and potential areas for concern. To gather further information a simplified and shorter version of the survey was prepared for the local schools.

The structure of the survey was created using five keys 'design layers', these layers then correspond to various aspects the design of the project will need to address.

Attractive Vibrant Neighbourhood

Connected Lining Community

Healthy Homes

Affordability over time

Resilient

The results of this survey were then given in a report that was made public via the Emmet Road website. The public survey received a total of 870 responses (this includes 208 responses received of the young person-friendly survey). 380 surveys were also collected in hard copy format.

The survey concluded that the information gathered will feed into the design development process.

24th March 2021 - Online Worksheet Report, January 2021

The report summarises the findings from the second survey carried out of the Inchicore community. It was conducted in January 2021, as a final element of the first phase in the consultation process. The upcoming second, third and fourth phases will look at the preliminary design layouts and continue through to the detailed designs. Throughout this process, the insights gathered at each phase are shared with the Design Team who incorporate what they can and present their design progress at the next phase.

The responses to each of the surveyed questions gave insights of what people enjoy about the area and what they believe to be missing and what improvement could be made. The summary of the results of the survey are presented using both bar charts and anonymised direct quotation for each the questions asked.

The survey identifies the need for improved amenities, community, and retail facilities along with upgrades to cycle and pedestrian infrastructure. The responses from this survey were equally as beneficial as the previously conducted survey, the community consultation will continue as the design develops into the next set of phases as well as online meetings and outdoor exhibitions.

20th April 2021 - Online Consultation Event

The online consultation took place with the design team chairing the meeting, consisting of, architects, landscape architects, conservation architects, civil, structural, and mechanical, electrical engineers, town planners, quantity surveyors all working with Dublin City Council to create the new development at Emmet Road. They followed the design layers in their design process to allow a better understanding of the project.

The design research was used to create a master plan that includes all the Inchicore area. This includes all the relevant residential buildings, civic buildings, open spaces, sports facilities, gardens, and childcare. The BMCEA presentation then goes on to explain what will be included in the development and the new facilities available for the neighbourhood, that includes a civic hub of a library and community centre, a supermarket, small retail units, and a café.

The development will use open green spaces to improve connectivity, between Emmet Road and Goldenbridge Cemetery a series of connected communal green spaces for the public and residential community will create orienting points, anchored by the historic fabric around the site and forming a pedestrian green north-south spine.

The design layout hopes to achieve a level of permeability as well as neighbourhood mobility. These mobility hubs are created to be pedestrian friendly to move away from car dependency. The design layers of resiliency, quality and value are important, but the presentation then asks, how are we going to build this development? This refers to the resources required for the building materials of the site. And how to build this in the most environmental way possible. Each building must also be energy efficient, so the development values the importance of sunlight.

21st April 2021 - Outdoor Exhibition at Richmond Barracks

There was an outdoor exhibition installed at Richmond Barracks this was intended to be a temporary instillation but has developed into a permanent one. It will evolve over time with extra panels added, detailing designs amended based on public recommendations. The outdoor exhibition is an information display of the design of the proposed site and gives the community the change to summit feedback. The intention of this public information display is to add panels for every consultation phase. Each panel is spread out to provide the opportunity to social distance as well as a public seating bench.

26th April 2021 - 'Your Favourite Place to Play' - Pupil Drawings

Connect the Dots on behalf of Dublin City Council (DCC) aided in putting together the public information website and involved the local primary schools with the public consultation. They contacted three local schools: Our Lady of Lourdes NS, Inchicore NS and Gaelscoil Inchicore. They gave the students the job of drawing out, ‘your favourite place to play.’ Each student drew out places previously mentioned on the Community Audit of Emmet Road with such areas coming up as St. Patricks Athletic FC, Phoenix Park, Inchicore Park, and the war memorial gardens. The connect the dots group then complied with the drawings and created a video displaying all the children’s artwork.

26th April 2021 - 'The Dream Hangout Spot' - Core Youth

TikTok is a social media platform for creating, sharing, and discovering short videos, a TikTok was made for the Emmet Road development. This short video made by the Core Youth centre goes through and explains what will be included in the new development

27th September 2021 - Outdoor Exhibition Now Available to View

The outdoor exhibition was made available.

21st October 2021 - Feedback Survey Deadline Announcement

The deadline to fill in the feedback online survey for the next outdoor exhibition was announced to be November 10th, 2021. QR codes were put up around Inchicore and linked the user to the online survey.

29th November 2021 - Emmet Road Drone Video

Dublin City Council commissioned a drone video to be taken of the Emmet Road Development Site. This video shows the site relevant to the red line LUAS as well as Inchicore village.

29th November 2021 - Outdoor Exhibition Feedback Phase Two Consultation Report

This report summarises the community survey with the close of submission date 10th of July. The survey was used to collect feedback on the outdoor exhibition which displayed Buchholz McEvoy's preliminary design proposal for Emmet Road. The survey results, combined with feedback from the community received during the stakeholder engagement process, will be used to inform the future design of the development. The survey questions were based on information provided by Buchholz McEvoy displayed on information panels outside Richmond Barracks. The timeline of the project is as follows.

Social Media Campaign- January

IRFC Meetings- Monthly throughout

Flyer Distribution- February

Window Display- March

Youth Workshop- April

Outdoor Exhibition- May

Surveys – October

Phase Two Report- November

The survey itself received 28 responses and provided an opportunity for respondents to have their say on the design proposals for Emmet Road. Brief questions were also included to identify the various cohorts that participated e.g., age, nationality & their relationship with Inchicore. Concerns were expressed on certain topics that were addressed by the outdoor exhibition. The following topics were raised: community facilities, site permeability and use of open space, housing models management and maintenance, safety in the community and traffic and parking.

Public Consultation 2022

9th March 2022 Webinar | Concept Design Presentation

The online seminar was held to allow members of the public attend that could not make it to the previous in person meetings. This online seminar was then recorded and made available on the Emmet Road Development website.

It began by introducing the development of 548 build-to-rent apartments and its partnership with the Inchicore re-generation group. That states that they do not want this development to compromise the existing open space. The speaker then explained that a mixed-use development that will include a supermarket, café and many more amenities are not just for the new residents but for the pre-existing residents of Inchicore. The presentation then moved on to the topic of statutory planning context before talking about the scale and massing of the buildings. The presentation stressed the importance of open space and how this development will not compromise the community's pre-existing open space.

The permeability of the site was mentioned as well as the community hub and library. It then went on to explain that the idea behind this site was not to make it accessible by car but accessible via public transport as well as emphasising pedestrian access.

The online seminar then moved on to the apartment layout scheme and the sustainability of the buildings themselves by making them affordable as well as including a biodiversity section in each apartment courtyard. The presentation finished by discussing the planning timeline before opening the floor to questions.

The first question asked was concerning antisocial behaviour. The answer that given explained that the mixed income of the apartment's residents will create a balanced population. The high-quality public lighting and the permeability of the site will make it more inviting and less likely to create antisocial behaviour. The separation of public and private spaces within the development will also stop public issues such as loitering.

The next question was concerning the influx of people that will create issues for locals concerning the lack of public amenities. The response to this was that the development is mixed-use. The development itself will be providing more amities then are currently on offer in the area. Not only this but the development is focuses on pedestrian access and promoted the use of public transport rather than private car usage so therefore is not impacted the road infrastructure. This led to the issue of not enough public transport within the area. The solution is a new policy the government that has come out. The policy aims to move towards more sustainable public transport access as well as improving cycle paths.

The following question raised was concerning a 5-a-side football pitch located on the development site that will be removed to make space for public open space in the apartment blocks. There were talks to keep it however there was not enough land to fill pre-existing requirements of open space due to the size of the development, however, DCC has been tasked with finding a replacement pitch near by.

The final question of the online seminar was concerning the rationale of the housing mix. The panel responded to this by explaining that the policy for greater provision of apartment mix development follows the DCC guidelines and caters for demand. These apartments have not been built for typical nuclear families. The apartment schemes are more transient in nature as this is a form of a new housing model.

Phase 3 Public Consultation March 2022 Design Layout

Buchholz McEvoy Architects prepared a presentation for the development at Emmet Road.

The design proposals took on board comments made from the surveys taken in phase two of the development in their design concept. It shows the overview of the proposed units followed by the statuary planning context of the Dublin City Development Plan 2016-2022. With the goal of creating an attractive vibrant neighbourhood the design lays out the scale and massing of the proposed building heights. Then moves on to show the public open space with the goal to create new public open spaces that spatially frame a dialogue between the new architecture and the existing architecture of Richmond barracks, Goldenbridge cemetery and St. Michael's church, paired with the designed permeability of the site will aid in achieving an attractive vibrant neighbourhood.

The next layout of the design proposal theme is creating a connected living community. The development hopes to achieve this through active street edges with a mix of own-door access to homes and shared entrances to apartments at ground floor level provide passive surveillance. To support the multi-modal, sustainable mobility strategy the development will have limited car park spaces with a focus on bicycle spaces and a strong connection to public transport modes. A strong focus will be put on pedestrian access.

Communal open space will be provided for the residents in the form of internal courtyards as well as rooftop gardens. The development is a mixed-use urban quarter that will front onto Emmet Road such as a mix of accessible community, civic, retail and a café. The facilities will include a community venue, opening onto shared public realm space to the south. an atrium / living room adjacent to shared entrance with flexible uses and space for exhibition, a multipurpose room for meetings and activities, a community kitchen, an adult lending area as well an area for studying and reading.

The next layout of the design proposal is healthy homes, the document then depicts each apartment layout and how each will achieve this goal.

the last layout of the design proposal is resilient sustainable design, to achieve sustainability buildings there is four subheadings: sustainable water management, site energy strategy, sustainable homes, and climate responsive designs.

Appendix A4 – Phase 3 Consultation Summary September 2022

Emmet Road Inchicore

Phase Three | Consultation Report



Comhairle Cathrach Bhaile Átha Cliath
Dublin City Council

Connect the Dots

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EXECUTIVE SUMMARY

Phase 3 Public Consultation for the Emmet Road Mixed Use Development was launched by Dublin City Council on 8th March and concluded on 31st March, 2022. Connect the Dots embarked on a stakeholder engagement process to ensure that they worked closely with the local community.

The relaxation of Covid19 restrictions allowed in person events to take place for this third phase, unlike the previous two phases which were restricted to online sessions rather than face-to-face meetings. Phase 3 Consultation events included a combination of public information sessions and youth workshops in Richmond Barracks and a webinar.

The third phase presented the concept design proposals to the community, giving them an opportunity to review the information and provide feedback in various formats. The concept design proposals were made available on the project website www.emmetroad.ie in advance of the consultation events commencing. This allowed the public to view the designs, complete an online survey and submit feedback with comments and ideas they wished to share with the project team.

Paper copies of the feedback forms were available at all the in-person sessions and on request distributed by hand in the locality. Considering the risks of Covid-19 and in the interest of public safety and managing the number of attendees, interested persons were asked to register online. Although not a requirement it was beneficial for managing the events.

Those who registered online were invited to complete a short survey of three questions (below) related to the project.

1. How do you feel about the project?
2. What is your relationship to the area?
3. What are your biggest concerns about the project?

The information submitted in advance of the events gave the project team a sense of stakeholders' attitude to the project.
The results from the survey above can be found in the section on ***Feedback Analysis & Reporting***

EXECUTIVE SUMMARY *(continued)*

PHASE THREE CONSULTATION EVENTS

There were a number of events organised for this phase of the public consultation offering both in person and online options catering for all age groups.

These included:

- *Public Information Sessions in Richmond Barracks:*
  - *March 12th 2022*
  - *March 15th 2022*
  - *March 29th 2022*

- *Webinar:*
  - *23rd March 2022*

- *Youth workshops in Richmond Barracks with members of Core Youth Services:*
  - *30th March 2022*

Public Information Sessions

Three in-person sessions were organised during the Phase 3 period. They were scheduled over three different dates at different time slots to cater for attendees at weekends, weekday lunchtime and late evening.

- *Saturday March 12th @ 12 noon- 2pm*
- *Tuesday 15th March @11am – 1pm*
- *Tuesday 29th March @ 7pm – 9pm*

Webinar

An informational webinar took place on 23rd March at 7pm with 38 attendees. This included a presentation from the project architects, Bucholz McEvoy of the concept design for the Emmet Road Development. This was followed by a moderated live questions and answers session, chaired by Connect The Dots.

A recording of the webinar in full, was published on the project website within days of the live event occurring on 23rd March.

EXECUTIVE SUMMARY *(continued)*

Youth Workshops

Throughout all the consultation phases of the project it has been very important to connect with young people who live in this area. Early in the consultation we developed a relationship with Core Youth service, an independent community-based youth service who provide informal education and a range of activities for youths in the area and are based in Inchicore, adjacent to the site.

Together we arranged youth-focused workshops to engage with young members of the community who helped us gain a better understanding of what facilities and amenities they expected the new development to deliver to meet their needs. The events took place in Richmond Barracks on March 29th catering for both secondary and primary school age groups separately:

- *Secondary Age Group @ 1pm-2pm*
- *Primary Age Group @ 2:30pm-3:30pm*

The feedback from the Youth Workshops highlighted the demand for sports facilities, a bicycle workshop and hang- out spaces with shelter and free Wi-fi along with the provision of appropriate new community facilities and amenities suitable for all age groups.

The youth workshops concluded the events of Phase 3 Consultation, however the deadline for the submission of online and written feedback ran until 31st March.

EXECUTIVE SUMMARY *(continued)*

KEY FINDINGS

The main issues raised at both the open information sessions and submitted via written feedback are listed below in order of priority:

Height, Density & Tenure Mix (22.7%)
Some stakeholders expressed concerns in relation to the proposed height of the apartment blocks and overall site density while other members of the public had a preference for taller blocks and increased density to address a lack of high-quality housing in the area.

The issue on tenure mix related to the percentage split between the social and cost rental accommodation. Some stakeholders felt the percentage of social units should be increased while others looked to reduce the quantity and increase the number of cost rental units in order to meet the growing demand for affordable accommodation.

The justification for the unit mix and social housing mix was also questioned. Some supported the large quantity of one- bedroom units in the scheme while others looked for less with an increase in the number of three -bedroom units to facilitate families.

Safety & Security (16%)
The issue of safety and security has been an ongoing concern raised in the community feedback throughout the three phases of consultation to date. Stakeholders questioned whether or not the project would address the existing problems with crime and anti-social behaviour in the area or whether the design of the new scheme would create safety and security issues that would add to the current problems.

Impact on Traffic, Transport & Parking (14.7%)
Many of the comments related to traffic, transport and parking were focused on the existing issues of serious traffic delays in the area, the capacity of the Dublin bus and LUAS service and the current lack of provision of car-parking around Inchicore.

While respondents seemed generally positive about the proposed mobility strategy; moving away from a model of one car per household to address environmental and sustainability concerns, they also expressed the need to consider members of the community who were vehicle dependent whether for employment purposes or mobility related issues.

In relation to the proposed number of residential car parking spaces for the scheme (c.55), it was felt that this may add to the transport problems that already exist and therefore the need to improve public transport in the area is very important.

Management & Maintenance (9.3%)
The future management and maintenance of the development was an issue of concern raised by many stakeholders. Dublin City Council's level of expertise in the management of social housing developments was questioned.

The feedback emphasised the importance of implementing a robust management strategy for the success of the Emmet Road Development - in particular learning

from mistakes of the past and looking to examples of well-established management models used in other similar developments.

In addition to the above there were other general issues in relation to the project provided in the feedback:

Request for Additional Information & Updates (18.7%)
Some of the comments related to the request for design information not currently available at this early stage of the design development.

Project Timeline (12%)
These comments related to the start and finish dates and the overall duration of the project.

The remaining 6.7 % of the feedback related to a mixture of issues, some of which are outlined below.

- Suggestions for the type of new community facilities and services the community would like the scheme to provide.
- Biodiversity & Sustainability
- Quality of Construction & Materials

To read the feedback in more detail please refer to ***Appendix D: Feedback Records.***

Similarly to issues outlined above, there were a number of related discussions at the webinar Q&A. These included:

- Anti-Social Behaviour
- Facilities & Amenities currently in the area
- Rationale for Parking & Potential increase in the demand for Public Transport
- The removal of the existing football pitches at the rear of St Michael's Community Sports Centre
- Rationale for unit mix and housing type
- Tenure Mix
- The potential use for roof space in the development

The actual questions asked on the evening of the event in relation to the above topics along with the answers provided at the webinar are available to read in ***Appendix C: Webinar Q&A.***

The remainder of this report details the events of Phase 3 Consultation for Emmet Road and summarises the findings from all the public engagement that took place along with all the submissions received. The information gathered provides the design team with an insight into the opinions, concerns and expectations of the key community stakeholders.

This, along with the information gathered during the consultation in Phase 1 and 2, also summarised in separate reports, both available online at the project website www.emmetroad.ie help to inform the design and creation of a quality new neighbourhood that aims to benefit both the new and existing community.








Photography from public consultation workshop held on Saturday March 12th

INTRODUCTION

Emmet Road, Inchicore, (formerly St. Michael's Estate), is a Dublin City Council owned site proposed to be developed as a mixed tenure development.

In 2020, Dublin City Council appointed Connect the Dots, a neutral third party with a demonstrated track record of facilitating successful community participation and engagement. Connect the Dots goal is to assist and guide stakeholder participation on the Emmet Road project.

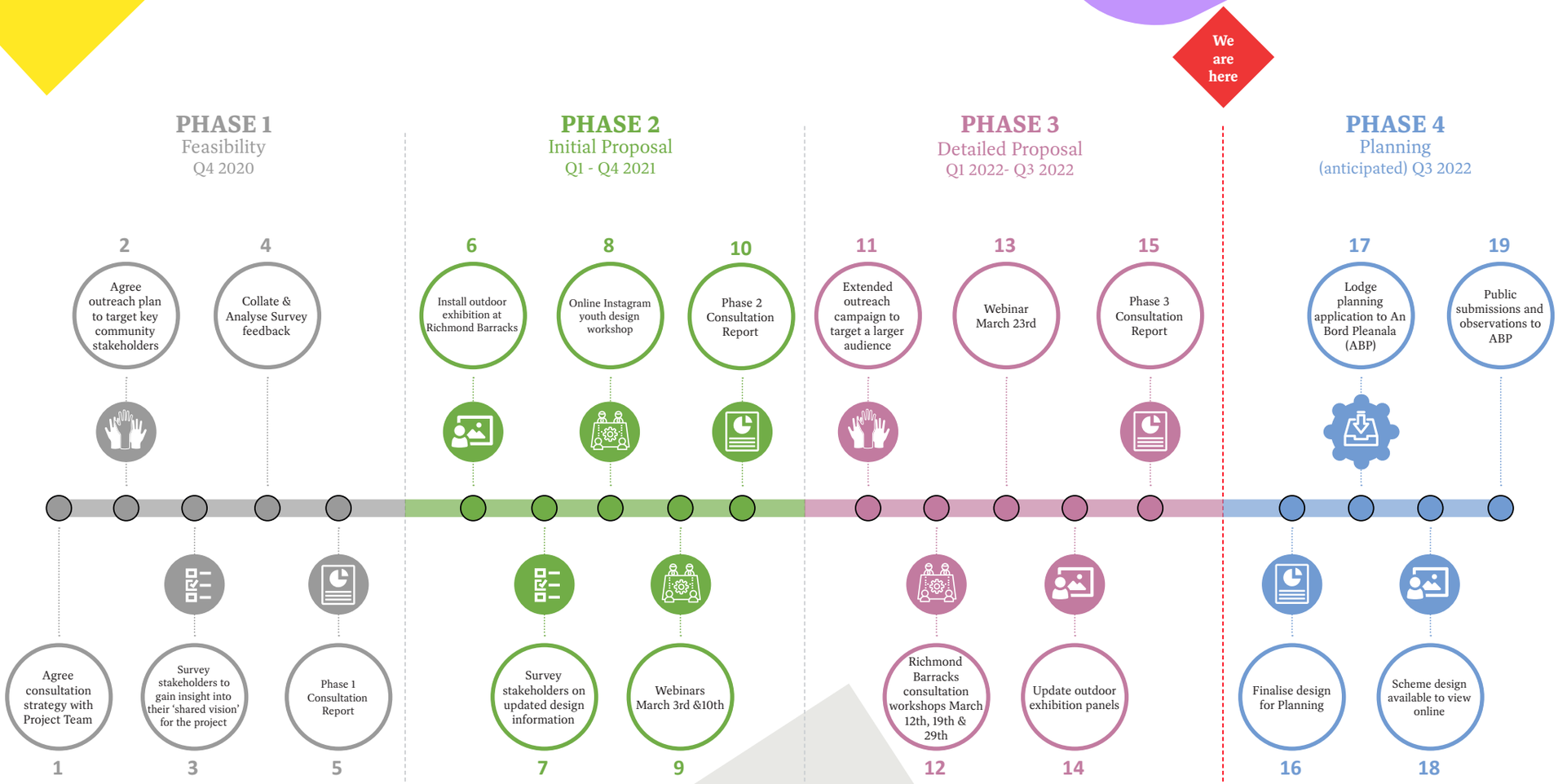
The new development aims to deliver affordable, sustainable, and energy-efficient residential accommodation, with a tenure mix of 70% cost rental and 30% social housing units. The development will be supported by community facilities with appropriate retail including a supermarket, public green open spaces, play areas, a creche and community hub/library building.

The proposed public realm will be characterised by well landscaped tree lined streets and shared surfaces that prioritise pedestrian and cycle movements, with integrated cycle parking and discrete car parking. The design is driven by a place-making agenda including promoting shared spaces that enhance the lives of both the residents and the surrounding community, and encourage social activity.

Working closely with the key stakeholders, including the Inchicore Regeneration Consultative Forum (IRCF) and the local community, Dublin City Council aims to create a new neighbourhood of the highest quality, optimising the development potential of the site in a sustainable manner.

Community involvement has been integral to the design development from the very start of the Emmet Road project. The engagement with the local community has been critical, helping to ensure the design is driven by consideration for the building of a development that will enhance the lives of existing and future residents of Inchicore and the surrounding community.

CONSULTATION PROCESS & TIMELINE TO DATE



PUBLIC CONSULTATION OBJECTIVES AND METHODOLOGY

OBJECTIVES:

Transparency and Integrity

During the consultation process, we tried to ensure that the community were updated and informed on the project progress by providing information on key issues and activities taking place. This allowed us to evaluate the impact of different engagement activities (in-person workshops, webinar, youth workshop etc.) on the community, key stakeholders and other affected groups in order for the outcome to feel inclusive to all.

Accessibility and Visibility

Getting meaningful feedback means providing access to all the members of the community. Throughout the engagement process we have endeavoured to reach out to as many stakeholders as possible and use inclusive language and visual representation to facilitate comprehensive community consultation. All members of the public were invited to participate and share their feedback. The workshop space in Richmond Barracks was designed with the 3D model of the concept design situated at the centre of the room for ease of access for participants with mobility needs. Visualisations and information boards were strategically placed to ensure they were reader friendly.

PUBLIC CONSULTATION OBJECTIVES AND METHODOLOGY *(continued)*

METHODOLOGY

Outreach Strategy

The consultation process has aimed to involve as many people as possible through a variety of ways to engage with Dublin City Council on the Concept Design Proposals for the Emmet Road Development.

Please refer to ***Appendix A and Appendix B*** to view copies of the promotional information used during the outreach period.

The following are the various forms of promotion tools used for Phase 3:

Flyers

Flyers were distributed in the Inchicore area in the first week of March to introduce Phase Three, share updates on the project, and invite people to get involved in the consultation process.

Over 11,000 copies of the flyers were distributed to neighbouring residents, businesses and local organisations.

Poster Campaign

Prior to the open information sessions, workshops and webinar, posters were placed at bus shelters and on belly bins throughout Inchicore and Kilmainham, notifying residents of the upcoming consultation events.

Twitter

Dublin City Council's Twitter account was also updated with key information on the consultation.

Email Updates

The Elected Members of the South-Central Area along with previous consultation attendees were notified of the upcoming events in Phase Three.

Website - www.emmetroad.ie

The project website was regularly updated throughout March to keep people informed of the project and on ways to get involved. It continues to provide access to all presentation materials for this phase along with access to previous survey results and reports for the project.

Between the 8th and 31st March 2022, the website also incorporated an opportunity for the community to submit online feedback in response to the concept design proposals that were uploaded to review in advance of the events commencing.

The results of all the feedback received was collated, analysed and the findings outlined later in this report.

Written Feedback Submissions

Dublin City Council invited interested parties both online at the Emmet Road project website and in writing to make submissions during the Phase 3 period to outline any concerns, queries and ideas they wished to share with the project team.

Online Survey

Our online survey running for the period of Phase 3 invited stakeholders to respond to a set of questions to get an indication of the demographics of the interested parties and how they felt about the project.

The three questions asked were:

How do you feel about the project design?

What is your relationship to the area?

What is your main concern about the project?

Additional Communications

Along with the flyers there were other promotional forums utilised to include social media posts, website updates and the use of LED screens at project office at 6 Tyrconnell Road, Inchicore. Emails were also used to contact key stakeholders in local businesses, organisations & community groups.

We are also very grateful to the IRCF (Inchicore Regeneration Consultative Forum) and Kilmainham Inchicore Network (KIN) for utilising their various platforms to support and assist the engagement not only during this phase but during the previous two.

Post Event Feedback Survey

Following the conclusion of the Phase 3 event attendees were invited to provide feedback on their experience of the process and rate their satisfaction.

The respondents were asked to complete two questions:

How satisfied were you with the information presented at today's in-person event?

How do you feel about the project?

To find out the results of this survey along with all the other feedback received during Phase 3 please refer to the section on ***Feedback Analysis & Reporting***.



Photography from public consultation workshop held on Saturday March 12th

PHASE 3 SCHEDULE OF EVENTS

PUBLIC INFORMATION SESSION 1:
- Saturday, 12th March 2022 @ (12pm - 2pm)

PUBLIC INFORMATION SESSION 2:
- Tuesday, 15th March 2022 @ (11am - 1pm)

PUBLIC INFORMATION SESSION 3:
- Tuesday, 29th March 2022 @ (7pm - 9pm)

WEBINAR:
- Tuesday, 23rd March 2022 @ (7pm - 8.15pm)

SECONDARY SCHOOL WORKSHOP:
- Wednesday, 30th March 2022 @ (1pm - 2pm)

PRIMARY SCHOOL WORKSHOP:
- Wednesday, 30th March 2022 @ (2.30pm - 3.30pm)

LOCATION :
RICHMOND BARRACKS,
ST. MICHAEL'S ESTATE,
INCHICORE,
D08 YY05





Photography from public consultation workshop held on Saturday March 12th

EVENT DETAILS

PUBLIC INFORMATION SESSIONS AT RICHMOND BARRACKS

Three of these events were held on :

Date: *March 12th @ 12pm - 2pm*
March 15th @ 11am - 1pm
March 29th @ 7pm - 9pm

Purpose: To present the concept design proposals to the general public and key stakeholders. It offered the opportunity for those in attendance to speak one on one with some of the design team members which included the Design Architects (Bucholz McEvoy), Engineers (O'Connor Sutton Cronin Consultant Engineers), Landscape Architects (Bernard Seymour Landscape Architects) and Planners (John Spain & Associates) along with representatives of Dublin City Council.

The project team recorded the feedback received during discussions with the attendees and this was collated with the written submissions received at the events. The information sessions provided an opportunity to explore key areas where feedback could influence the design evolution in order to arrive at a design that would contribute the most to the community.

The information gathered is provided to the design team to consider as they progress to the next stage of the design development.

3D Model and Visualisations: A 3D timber model of the scheme was on display giving the community an opportunity to better visualise the concept design of Emmet Road rather than relying on design drawings which can be difficult to interpret. A selection of A1 size boards with renders of the proposed scheme were positioned throughout the room. The displayed designs included examples of public open space, residential accommodation, community facilities and local amenities. The images provided information to prompt questions, provide answers, encourage participation and knowledge sharing with the design team.

The information displayed on the boards was also available in a handout format distributed to the attendees as they arrived. In addition, a presentation of the scheme was projected onto a wall and running on a continuous loop.

There were a mix of stakeholders who attended the events; those living adjacent to or near the site, those living and working in the wider Inchicore area and also those with an interest in the project or cost-rental housing in general. The age profile varied with young children attending on the Saturday with their parents and participating in the event through artwork. Blank sheets and colours were provided on tables along with bowls of sweets being handed out. Tea/ coffee and biscuits were also provided and welcomed by many attendees.

Members of the IRCF (Inchicore Regeneration Consultative Forum) were also in attendance at all of the events, representing the hopes and concerns of the community while giving a view of the project in the broader context of the regeneration of Inchicore.

A professional photographer was present on Saturday 12th March to record the event. Samples of some photos are provided in this report.

WEBINAR AND QUESTION & ANSWER SESSION

Date: March 23rd 2022 @ 7pm

Purpose: To present the concept design proposals to the general public and key stakeholders. It offered the opportunity for those in attendance to take part in a Questions and Answers (Q&A) session with the design team Architect, Engineers, Landscape Architects, Planners and members of Dublin City Council project team.

The webinar was held on 23rd March at 7pm. When registering for the event people were given the opportunity to provide feedback or ask questions in advance of the event.

The webinar was attended by 38 members of the public. Design Team Architect Merritt Bucholz gave a 30-minute presentation on the concept design which was followed by a Q&A session chaired by Connect The Dots. The questions were a combination of those received in advance of the event along with any posted in the live chat during the presentation.

The full webinar and Q+A session was made available on the project website on March 24th and has received 89 views to date.

The questions raised during the webinar related to:

- *Anti-social behaviour*
- *Facilities & Amenities currently in the area*
- *Rationale for Parking & Potential increase in the demand for Public Transport*
- *The removal of the existing football pitches at the rear of St Michael's Community Sports Centre*
- *Rationale for unit mix and housing type*
- *Tenure Mix*
- *The potential use for roof space in the development*

The relevant experts gave detailed answers to each question. For the full text of the Q &A, please refer to ***Appendix C: Webinar Q&A*** of this report.

YOUTH WORKSHOPS

Date: March 30th 2022 held in Richmond Barracks:

- *Secondary School @ 1pm - 2pm*
- *Primary School @ 2:30pm - 3:30pm*

Purpose: To engage with Core Youth services, who represent younger people in the area in order to get feedback from the younger members of the community in a series of workshops. 20 primary school age children and 10 secondary school aged teenagers were invited to attend two targeted workshops.

The workshops offered the participants the opportunity to contribute to the design of the project's green open space and play areas. Through the use of the 3D model of the development and engaging with the design team, the youth groups confidently identified the main concerns and hopes they had for the project.

The workshop was hosted by Connect the Dots and delivered by project Architect Merritt Bucholz (BMCEA) and Landscape Architect Derek Naughton, Bernard Seymour Landscape Architects (BSLA).

Secondary School Workshop

Secondary school aged members of Core Youth were invited to participate with activity sheets, describing or illustrating their ideal design of a public open space or recreational area. Using presentation boards with 3D visualisations of the potential amenity uses and stickers, they were then invited to vote on their preferred use for the spaces. They engaged with design team members who noted their designs and preferences.

Feedback and insights gathered from the teen workshop provided a wide range of ideas, with some also suggesting that the housing be bright in colour with balconies facing the green spaces.

Other suggestions included:

- *Open glazed windows facing the green spaces.*
- *Hangout spaces with covered benches and free Wi-Fi.*
- *Scrambler Track.*
- *Supermarket.*
- *Green Space for Bikes.*
- *An Astro Park.*

Primary School Workshop

"We don't like places that are full of railings and security – makes it feel like a prison"

Children were invited to imagine their ideal play space and to help visualise that space through drawing and model-building using Lego or spaghetti and marshmallows, while engaging with members of the design team.

Using picture boards with various amenities and play equipment, children were invited to choose their favourite and vote in order of preference. A Basketball court was the most popular suggestion with 'Hangout Spaces' noted as the second most popular preference. Parkour/active/balance play was also voted for within the group.

YOUTH WORKSHOPS *(continued)*

Other suggestions related to the preferred location and measures that would make the play area feel safer:

- *Play zone near Our Lady of Lourdes Primary School (on the space shown as Goldenbridge Place on the design proposals) as the preferred location for the most active place.*

- *Welcoming parents to a safe space as they watch the kids.*









Photography from YouthCore workshops

FEEDBACK FROM YOUTH LEADERS

The YouthCore leaders who accompanied the children also contributed to the workshop. They indicated that the most popular activities with young people in the area are:

- *Football*
- *Biking*
- *Hanging Out*

They commented that the provision of local amenities can help support the children's interests in the area. The youth leaders also suggested providing an activity space near Core Youth, which the children could easily access and use. They also referred to some existing facilities in the area, such as the football pitches behind the Community Sports Centre that are in poor condition and in need of repair.

They also highlighted that the Astro surface area currently situated beside the crèche in Goldenbridge is a popular play space for children. The development of further Astro play areas would be welcomed.

Further suggestions from the youth leaders included:

- *Table Volley-Football.*
- *Bike repair stations.*
- *Hangout spaces with shelter from the Rain and free Wi-Fi*





Photography from public consultation workshop with Youth

FEEDBACK ANALYSIS & REPORTING

The purpose of the events held during the Phase 3 consultation was to share the concept design information with the key stakeholders and to facilitate discussion and ideas-sharing. The schedule of events aimed to involve as many people as possible through a variety of ways that are accessible and inclusive. The information sessions provided an opportunity to explore focus areas where feedback could assist the project team as the design evolves going forward to the planning stage and beyond.

This section of the report presents in graphical format the data analysed from the feedback gathered from the various events and surveys undertaken in Phase 3: Public open sessions, online survey, youth workshops and the post event survey completed by the attendees.

Community Key Issues
As mentioned previously in this report, the feedback gained throughout all three consultation phases has been consistent in terms of key issues identified by the community.

The following list identifies the issues in order of priority most relevant to the stakeholders who participated in Phase 3:

KEY ISSUES	PERCENTAGE OF COMMUNITY INTEREST
Height, Density & Tenure Mix	22.7%
Request for Additional Information & Updates	18.7%
Safety & Security	16%
Impact on Traffic, Transport & Parking	14.7%
Project Timeline	12%
Management & Maintenance	9.3%
* Other	6.7%

* *Other relates to a mixture of issues on: Community Facilities, Biodiversity, Sustainability, Quality of Construction & Materials*

The remainder of this section of the report provides the statistics from the findings of the online surveys and youth workshops. This information is presented in graphical format for ease of reading.

FINDINGS AND KEY THEMES

ONLINE SURVEY

Our online survey asked a mix of questions to find out some details on the demographics of the respondents and how they felt about the project.

The three questions asked were:

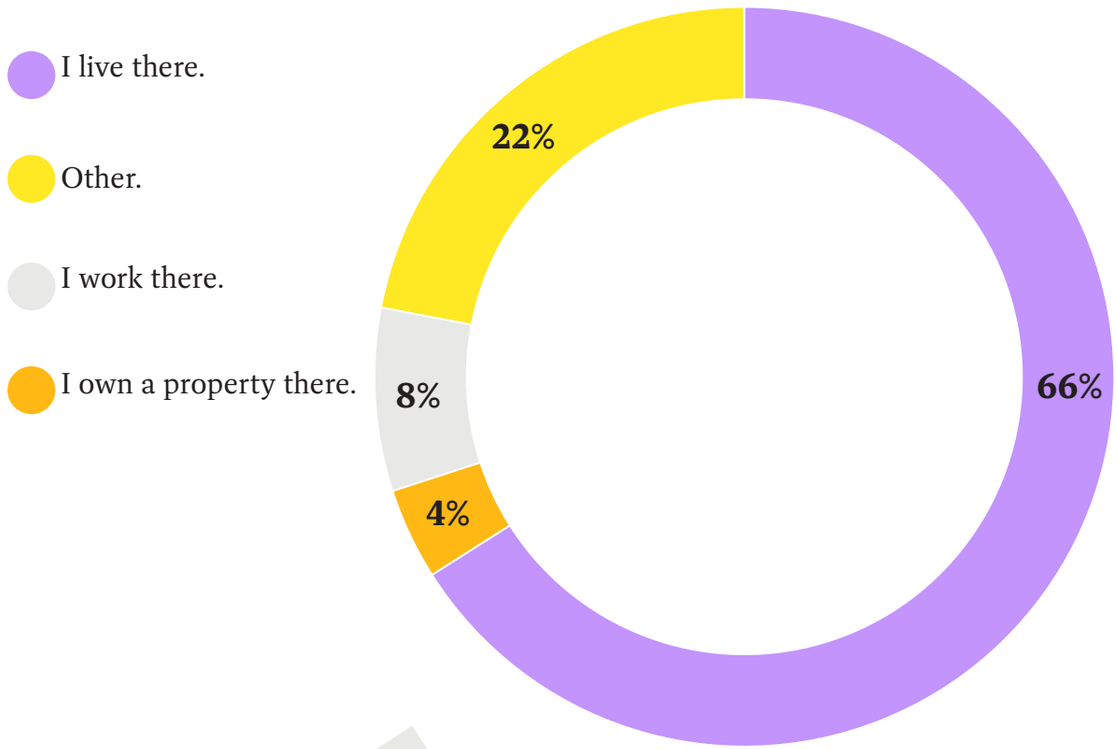
1. What is your relationship to the area?

2. How do you feel about the project design?

3. What is your main concern about the project?

The results of the survey are provided in chart format over the next few pages.

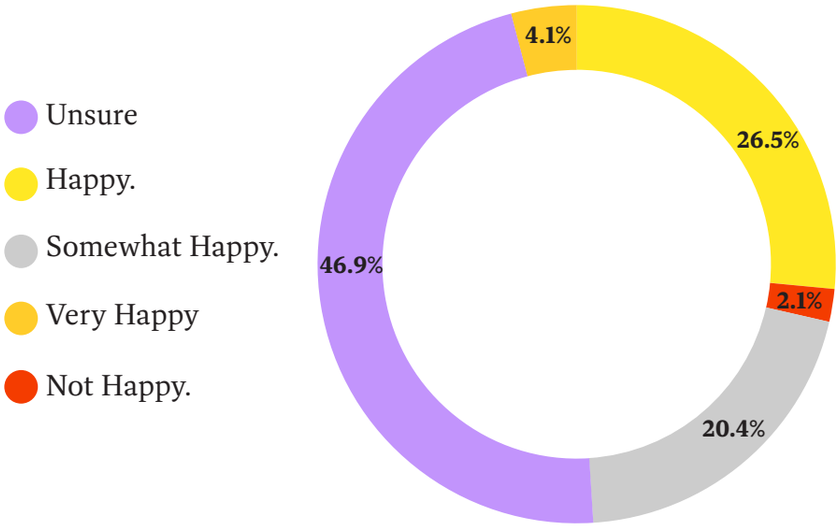
What is your relationship to the area?



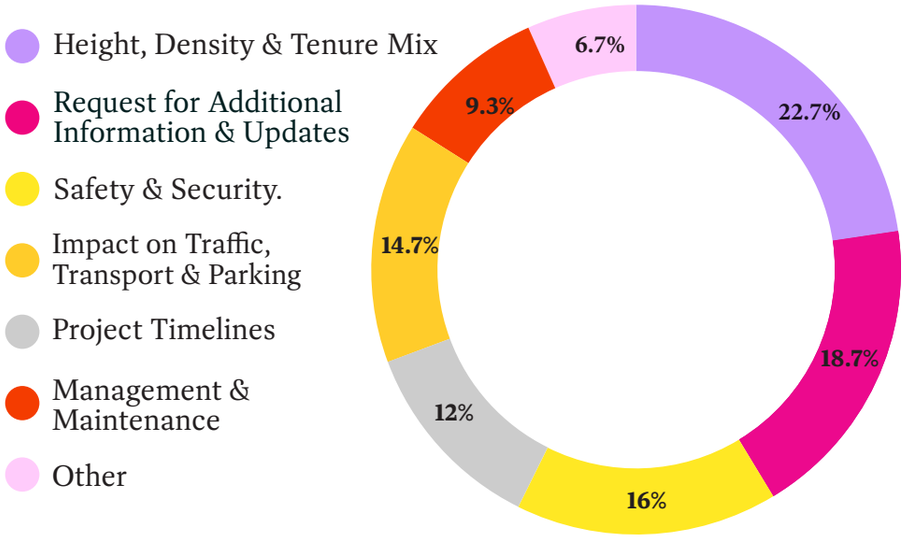
FINDINGS AND KEY THEMES

ONLINE SURVEY

How do you feel about the project?



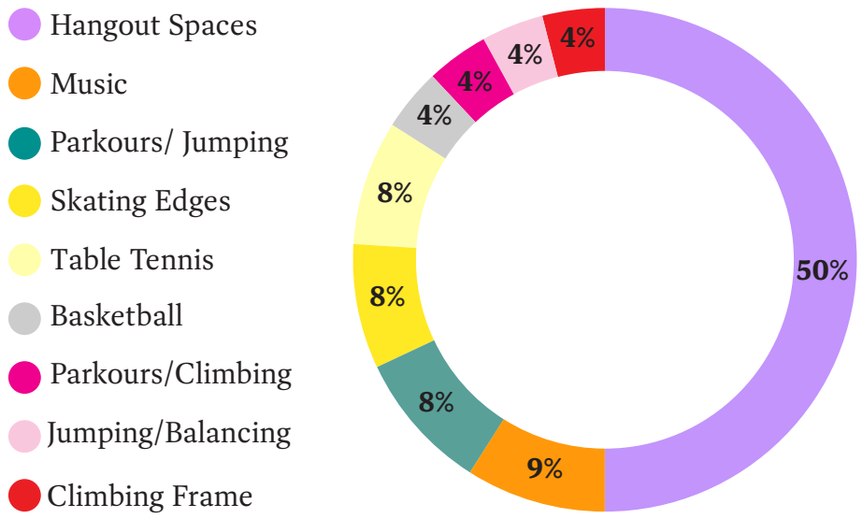
What is your main concern about the project?



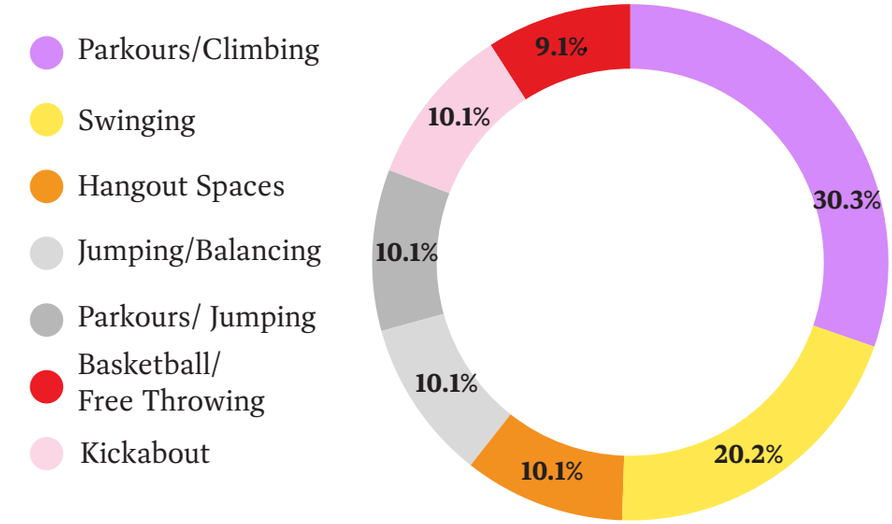
FINDINGS AND KEY THEMES

YOUTH WORKSHOP RESPONSES

Results from Secondary School Voting: Preferred use of space.



Results from Primary School Voting: Preferred use of space.



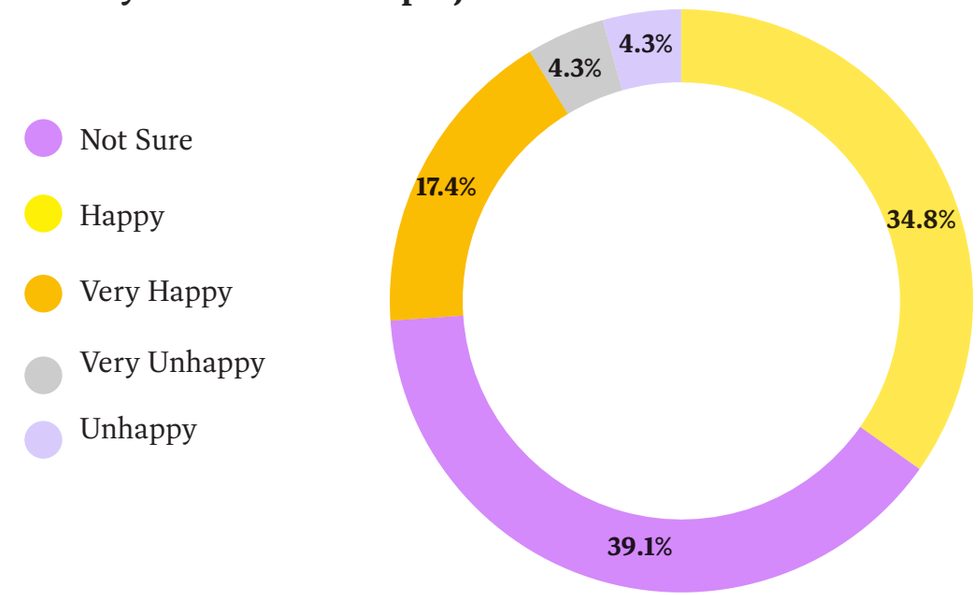
FINDINGS AND KEY THEMES

POST EVENT FEEDBACK SURVEY FOLLOWING THE EVENTS

Response to Updated Proposals.

52.2% of respondents indicated a positive response to the designs presented at the events. The breakdown of responses are available on the graph to the right.

How do you feel about the project?



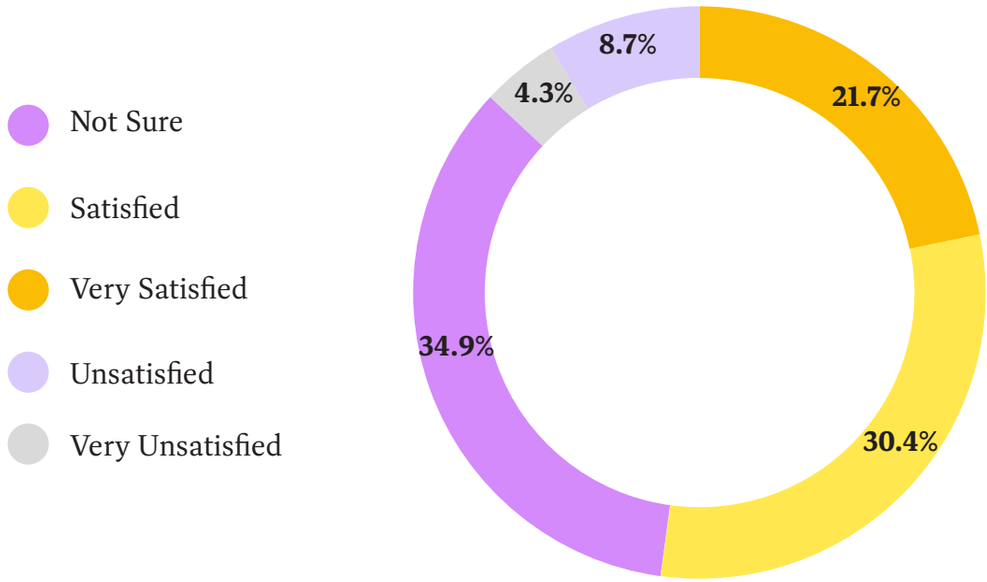
FINDINGS AND KEY THEMES

POST EVENT FEEDBACK SURVEY FOLLOWING THE EVENTS

Response to Information Presented at In-person Events.

52.1% of respondents gave a positive response to this question. Over half the respondents indicated that they were either "Satisfied" or "Very Satisfied" to the information presented at the events. The breakdown of responses are available on the graph to the right.

How satisfied were you with the information presented at today's in-person event?



CONCLUSION

Phase 3 Public Consultation provided the project team with the opportunity to engage with the key community stakeholders and gather the different viewpoints, thoughts and ideas in relation to the concept design proposals presented for the Emmet Road development.

While the majority of participants felt positive about the scheme, the feedback gathered highlighted a number of concerns and areas of priority for the community. These issues were consistent with what the stakeholders had voiced throughout the three phases of public consultation. The project team welcome the feedback and ideas from the stakeholders although in some cases there were opposing viewpoints on many subjects like parking, density, height, tenure and unit mix

While the community engagement allowed the participants to comment on the concept design proposals it also raised issues somewhat outside the scope of the design of Emmet Road.

Stakeholders discussed the current lack of sufficient community facilities and infrastructure in the area and the demand for more quality green space. In relation to the concerns on traffic and transportation stakeholders highlighted the need to campaign for increased capacity and frequency on public transport both bus and LUAS.

In terms of the future operation of the development the provision of high-quality retail units and services and a guarantee of long-term residential tenancies is desired.

However, the main priorities identified were safety and security and the management of the scheme.

Many of the safety concerns stem from the community's previous experiences with anti-social behaviour and ongoing crime within the area. Regarding the safety and security and in particular what is happening in close proximity to the site, there is a desire for increased police presence and the introduction of deterrent measures in the area.

The relocation of the Kilmainham Garda Station closer to the village centre was suggested along with improved public lighting and CCTV along pedestrian routes to and from the canal. Some people were of the opinion that the current lack of quality amenities and community facilities contributes somewhat to the anti-social behaviour in the area. Many community members were concerned that the new development may add to the existing social problems while others were hopeful the scheme would be a positive contribution to the neighbourhood and resolve many issues .

The future management of the development was a key issue for many members of the community. Mistakes of the past associated with the former St. Michaels' Estate and other similar Dublin City Council residential developments were highlighted. Maintaining high-quality management standards is crucial in order to create a sustainable and desirable place to live, work and

use. The stakeholders emphasised the need to research examples of successful management models and to consider these when deciding the future management strategy for Emmet Road.

General comments with regard to the project's timeline and whether the risks of costs and delays would jeopardise the delivery of the development were also made. Similar to the previous concerns on future management, stakeholders questioned whether or not the development would live up to its ambitions to deliver and maintain a quality neighbourhood.

The combination of one-to-one discussions, online and written submissions along with the questions from the webinar highlighted the valuable local knowledge and experience that exists among the community. This alone greatly assists the design team going forward in the design development.

The feedback from the Youth Workshops highlighted the demand for sports facilities, a bicycle workshop and hang-out spaces with shelter and free Wi-Fi along with the provision of appropriate new community facilities and amenities suitable for all age groups. The creation of new public realm and green open spaces that facilitates permeability through the site for all users and integration with the wider community is also key.

Overall, the stakeholders emphasised the importance of designing an exemplar development that will deliver a high-quality sustainable neighbourhood for both the existing and new community and long term this will act as a catalyst for the regeneration of Inchicore and the wider area.

The consultation provided an opportunity for the public to voice their opinion and have their say. The project team wishes to acknowledge the support and engagement of the hundreds of individuals who constructively engaged and contributed to this process.

NEXT STEPS

This has been the third in a four-stage consultation process for the Emmet Road Development. The findings from the consultation process will be considered by the design team and will inform the next stage of design development.

Phase 4 will commence when Dublin City Council lodge the planning application to An Bord Pleanála. During this phase the stakeholders will be updated on the progress with the planning application submission and any post-planning decision project milestones.

Following lodgement of a planning application, submissions or observations can be made by interested parties to the decision-making authority directly. Application details will be publicly notified, available online for viewing and at specified locations to support accessibility for all.

Thank you from Dublin City Council and all the Emmet Road Project Team.
We appreciate all the community support to date, and we look forward to engaging with you again in the future.

Appendix A: Outreach Materials

Appendix B: Social Media Posts

Appendix C: Webinar Q&A

Appendix D: Feedback Records

Emmet Road Inchicore

Phase Three Consultation Appendix

Appendix A: Outreach Materials

Emmet Road Inchicore

Phase Three Consultation Appendix

Appendix A: Outreach Materials

FRONT OF OUTREACH FLYER



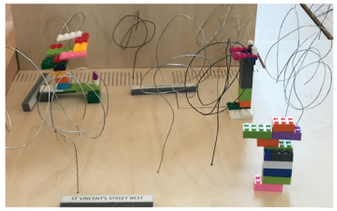
BACK OF OUTREACH FLYER

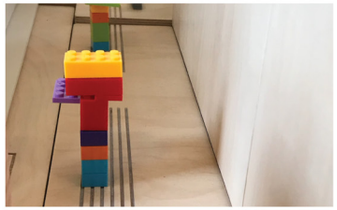


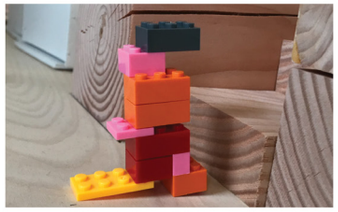
Appendix A: Outreach Materials

6 TYRCONNELL PROJECT OFFICE - LED SCREENS

The images to the right show Lego models made by children from the primary school workshop. These Lego models were placed within the Phase 3 proposal model to demonstrate the equipment that they wanted in the playgrounds and open spaces.







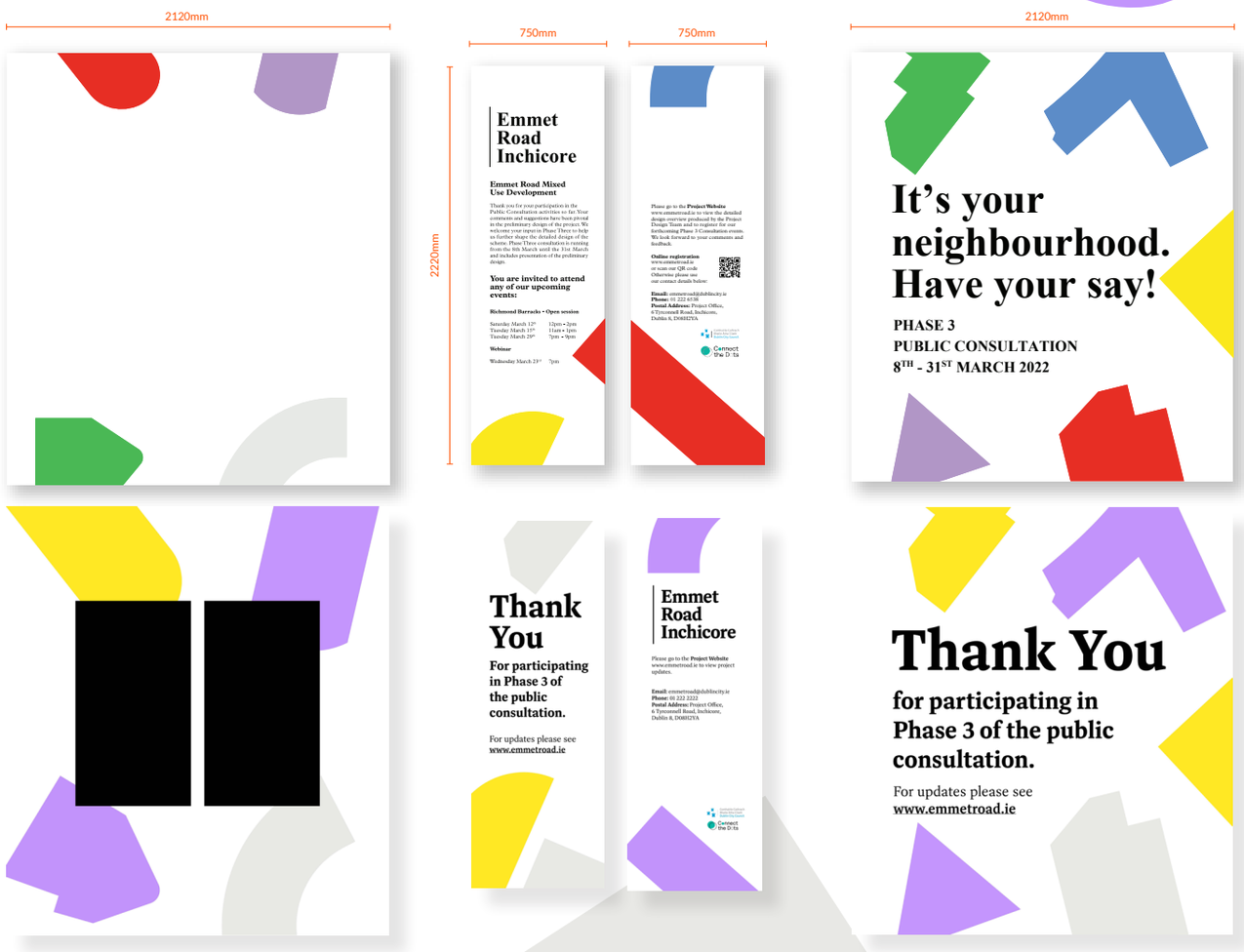






Appendix A: Outreach Materials

6 TYRCONNELL PROJECT OFFICE - WINDOW VINYLS



Appendix A: Outreach Materials

BELLY BIN POSTERS



BUS SHELTER POSTERS



Appendix A: Outreach Materials

BUS SHELTER POSTERS



BELLY BIN POSTERS



Appendix B: Social Media Posts

Emmet Road Inchicore

Phase Three Consultation Appendix

Appendix B: Social Media Posts



Appendix C: Webinar Q&A

Emmet Road Inchicore

Phase Three Consultation Appendix

Appendix C: Webinar Q&A

QUESTION ONE:

I will start with some questions on the issue of anti-social behaviour, how does this address the issue, and how does it differ from other high density schemes in Ireland?

Answer from Bucholz McEvoy Architects:

I think what's really important about the project is that it's a mixed tenure development. So that means that it will be really different from mono tenure developments, and I mean mono tenure in any sense. I think that's really, really positive. I think the mixed tenure will also support the wrap around facilities, the grocery store, the retail, but also the library, the community hub, the existing sports community building, the cafés, the outdoor spaces. Mixed tenure means you've people of all ages, people of all abilities, people coming from all over the place. I think it's really exciting, it's hard to think in places that embrace that as -- in the same way that this is and at the same time to try to use that as a springboard to develop new public spaces with really useful activities, new public buildings with really useful activities. I think it's going to be -- I think that when it comes to anti-social behaviour, I think this question of diversity and of use is really, really important. I talked a little bit about how the buildings are addressing the streets and building these new streets. This is really important. High-quality public lighting, all of the things that people in a way know or feel like they need to be there, but how do we actually make that work so that when you are walking down the street, you recognise your neighbours? You can -- you don't feel like you are going to be chased off the street by a car or a bus, or that you as a pedestrian are in command of the street. And you can use the spaces that the streets create, the street creates for you, to sit, to rest, to meet people.

I think these things also make anti-social behaviour really difficult. I think the permeability of the site, I just want to say that the streets also will attract people, it's not just about the people who are going to be living here, it's mostly actually about the people who already live in Inchicore and around the site and making it welcoming for everyone. The way that the scheme is designed with these three courtyards that have East, West, new east/west streets connecting, Vincent street West and Patriot's Path I think is really important. I think supporting this kind of connectivity and permeabilities through the site is crucial to making anti-social behaviour really difficult. The clear and -- connected to that is the clear delineation of public and

Appendix C: Webinar Q&A

private spaces. So public spaces are public spaces. And they're generous, they're welcoming, but they're also clearly public, private spaces are not accessible to the public unless you live there and you have a key or a fob and you can go in or you are let in by a resident. So people know who is living there, people recognise each other, and the community supports itself. So I think this kind of clarity about public spaces and private spaces, which the scheme really addresses is quite strong. So I hope I have kind of touched on the main points there.

QUESTION TWO :

The second question then is around the facilities and the amenities in the area and the concern I suppose of the influx of people will affect this in some way. What do you think the scheme is doing to address those things?

Answer from Bucholz McEvoy Architects:

I think it's pretty amazing that there is a supermarket going into the scheme. It's not -- it's just not every scheme that is this size that also has a supermarket. Inchicore needs a supermarket, everybody knows that. I think this is going to provide a place where people can buy their healthy food at a price that they can afford, a proper supermarket like Aldi, Lidl, Tesco, Dunnes Stores, something like that. So I think that's really important. I think that the smaller retail units that will be underneath that on the ground floor will allow different kinds of tenants to come in and really provide a diverse offering to people. It's geared towards pedestrians. You can see that in how the scheme is designed and laid out.

It's geared towards pedestrians, it means people who live in Inchicore, who maybe came to Inchicore by bus or Luas. But creating a life of the street that's really active is really important. Creche, library, the community hub, yeah, these are all I think -- they're like toolkits that are given to the community. They're things that you can use to build all sorts of new things. I don't mean new things in terms of buildings, I mean new things in terms of projects that the community already wants to achieve and do. I believe that the diverse offering that the project is bringing is going to be fabulous.

Appendix C: Webinar Q&A

QUESTION THREE :

Our next set of questions are around the rationale for the parking provided within the scheme currently, and I will ask I will attach to that as well was a question around the potential increase in traffic or demand for public transport.

Answer from O'Connor Sutton Cronin Consultant Engineers:
Indeed, thank you very much. Thanks to all those listening. To set out from the start, the rationale behind the mobility management aspects of the project, you seek to find a right balance between the car parking provision, and the encouraging other uses of other modes of transport. So government policy is to move towards more sustainable modes of transport, and within that, we see the site being a very good candidate for that in terms of proximity to existing public transport, and also proximity to the -- both the Luas, to local buses, the proximity to the city that can give you the wider transport options in terms of Heuston Station or Connolly station.

Also the future planned increase -- or improvements to cycle routes within the area. So we tried to encourage -- actively encourage the moving away from the cars as the primary source of transport, and that's what we have done within this scheme. We don't want to encourage the use of cars so, we don't want to provide too much car parking, and that's why we have struck the balance with the numbers we have.

We will demonstrate that within -- at planning stage, we will be preparing mobility management plans for the site and undertaking traffic impact assessments, so both those documents will be prepared for the planning application and will accompany it.

QUESTION FOUR:

The next question that came in was about a pitch. Sandra, would you might answer the question about the five aside pitch and if it will be included as part of this scheme.

Answer from Dublin City Council:
Thanks Naomi. As DCC, this has been risen a number of times and I know it's come through the Councillors questions. There is an existing pitch behind the existing sports centre. We looked at it previously in 2019, it was considered that it could be a possibility included in the design. However, since the design team came on board and we began the design of the scheme, we have given consideration to including a pitch on the site. However, we deemed it not feasible due to a number of design constraints. Trying to achieve a balance there between the

Appendix C: Webinar Q&A

residential on the site, you have got a library community centre, you have got a supermarket, a quantity of public open space to provide. Having a five aside pitch in the middle of this development, there is so many other things to consider in terms of the likes of acoustics, and lighting and security.

So however, DCC are fully committed to providing a pitch, providing a pitch in as close proximity to the site as we can. We have been working with the area office of the DCC and some members of the IRCF to find a location that would be suitable. We have been working with Mercy Secondary, they're off Thomas Davis Street, and a potential site we thought we could use, however at the end of last year, it was decided that it was not suitable. So we are pursuing other locations, we are looking at Turvey Park, where there is a facility there. We are working with our Parks Department to try and come up with a solution and it is our -- we endeavour to provide a pitch and hopefully deliver that in advance of the main development.

QUESTION FIVE :

Our next question is around the rationale behind the unit or the type of housing mix for the scheme. I will ask Rory Kunz to jump in here and respond to that if that's okay.

Answer from John Spain Planning Consultants:

Okay, thanks. The overall mix is among the aspirations of the development plan and it's also very much fixed in the wider -- the National Planning Framework and encouraging apartments in suitable locations such as the site at Emmet Road in terms of the question referenced. In terms of the mix of the development, DCC has done their analysis; one and two bedroom units will account for most of the housing provision with approximately 8 per cent of the total provision being three bedroom units. This mix is in line with DCC's preferred demand in the area. So it's very much catering for what DCC see as the demand.

And in terms of the families, I suppose the make up of families has changed over time and are not restricted to the traditional nuclear families. Society has changed and the mix reflects this via the department guidelines; they say that two bedroom units are to be encouraged, with two-thirds of households in Ireland, since 1996, being two bedrooms allowing for one or two person occupancy. In relation to the cost rental model and putting down roots, I suppose the objective, or the rationale, is to encourage people to put down roots on a long-term basis compared to apartment schemes which are seen as transient in nature. This is a new model which will encourage people to put down roots in the area.

Appendix C: Webinar Q&A

QUESTION SIX :

The next question then while we have a few more minutes left is in relation to the mix of social housing and cost rental. Sandra, would you mind coming back up and maybe just elaborating on the affordability on the cost rental model.

Answer from Dublin City Council:

The tenure mix on the site is 30% social and 7% cost rental. People who may not know the background, where it originated from, this was one of the three sites under the housing land initiative. The three sites, O' Devaney gardens, Oscar Traynor Road and St Michael's was part of the three sites DCC were to develop under a development agreement. However back under Minister Eoghan Murphy, it was decided and he identified this site as a pilot cost rental scheme that it would be a good location. So under the HLI, it was 30% social, 20% affordable purchase and 50% private. We retained a 30% social and the remainder was to become the 70% cost rental. That was the agreement between DCC and the department. Then the social as Rory said is based on our housing -- a housing needs assessment and it's based on our housing waiting lists that we will look at in the area and looking in terms of the numbers and the type of units, and as Rory said there is more demand for actually one and two beds, would you believe. And less so on the three beds.

But we are constantly assessing looking at the statistics we have in front of us and looking at the what we receive from our own internal departments. In terms of the cost rental, we will have mixed studios, one, two and three bed apartments, but there will be no studios in the social, only in the cost rental. So I suppose the idea of having the mixed tenure of the cost rental and the social is really about us optimising the site and it's a publicly owned site. So we are retaining our units and providing cost rental, so it's to cater for that other cohort that can't afford a mortgage, don't qualify for social, can't afford to pay private rents and have that difficulty. So we would be providing accommodation that has below market rents for those people to make it affordable. Also it's responding to the local need in the area, and giving that alternative form of accommodation in terms of stable rents and building a sustainable community and integrating with the wider community in the neighbourhood.

Appendix C: Webinar Q&A

QUESTION SEVEN :

I don't want to keep us on too much longer, we might just ask Merritt to address two final points about the use, potential usage of the roofs on the scheme and whether there would be any other single aspect dwellings?

Answer from Merritt Bucholz, Bucholz McEvoy Architects:
Yeah, so the roof, I think the roofs are a great opportunity. Perhaps everybody knows, but Dublin City Council has a policy of developing green and blue roofs and that's certainly going to be part of the plan. All of this is obviously cost dependent, but managing our environment is all about using our roof scapes better. I think in the comment that I was reading, there are other uses that could develop over time for those roofs because -- and I think that the massing, the stepping of the project allows access to the roofs which is important. That you can get to them. Because that -- there is all kinds of possibilities, so this will definitely be something that we examine as the design is detailed. The other question that arises which is touching on it which is around the aspect of the units and the density. I think the courtyard -- come and see the model. Because it's quite a generous scheme. These are units that will have really wonderful access to daylight. I think this is a simple fact of the design. I think it's something you really appreciate when you see it in three dimensions.

Half of the units will have dual aspect, which means that the other half will have single aspect. And I think, and in any case, not north facing. So you will either be facing East or West, predominantly. The dual aspect is south plus East, and there is some dual aspect which is north plus south. So it's -- I think this for a residential scheme in Dublin that this density, I think that's pretty fabulous and I think that's also important. It's a kind of a really important bar that the Development Plan sets that the design is taking advantage of.

Appendix D: Feedback Records

Emmet Road Inchicore

Phase Three Consultation Appendix

Appendix D: Feedback Records

Height, Density & Tenure Mix.

The following general comments related to Height, Density and Tenure Mix were recorded as feedback at the open information sessions:

- Do the cost rental units only comply with minimum standards ?
- I would like to see a floor plan of an individual residential block.
- I would like information on the cost rental scheme. How is the percentage of cost rental units determined?
- There should be more transparency on how the 548 unit figure was arrived at.
- The number of 3 bed units has halved since the first proposal, this is very disappointing, building a sustainable community is key for the success of the development.
- Number of dwellings is too high.
- Seven storeys may be too high for the area, in particular the area near the cemetery.
- This scheme has not been designed with families in mind. Low number of three bedroom units will encourage transient occupancy. This area needs to encourage residents who will put down roots, raise a family in the area and become part of the community through schools, supporting businesses in the area and making a contribution on a long-term basis.
- There should be a higher number of units put aside for social housing.
- I would like to see more apartments provided in the scheme as more housing is badly need in the area. Why not go higher in at least one block?
- It is crucial that the cost-rental element of the development is maintained at least at the current level of 70%. Cost rental offers many advantages over a private housing model

Appendix D: Feedback Records

Request for Additional Information & Updates

The following general comments related to Request for Additional Information & Updates were recorded as feedback at the open information sessions:

- It would be nice to see developed floor plans and circulation.
- There is not much information on how sustainable the project will be in terms of construction and life-cycle. Has to be presented in the context of sustainabilty.
- I would like to know more about the occupancy and demographics.
- I would like to see sections showing the scale of the scheme in relation to the surrounding context.
- Will we have Green roof, will the community have access to any roof garden or opportunities for roof top farming ?
- What spaces will be available in the community hub and library? How much space in sq metres will be allocated for the community.

Appendix D: Feedback Records

Safety & Security

The following general comments related to Safety and Security were recorded as feedback at the open information sessions:

- As the site it currently an open green site which is overlooked, the anti-social behaviour is curbed, however dense building on the site would introduce hidden “internal streets” where ant-social behaviour could thrive.
- Open drug use is taking place near the site, a Garda station should be re-opened in the area to help manage this in order to prevent the new scheme form becoming a “no-go” area?
- The lack of parking will encourage more people to use the LUAS, however there have been numerous incidents of anti-social behaviour along the nearby path. The scheme needs to include better lighting along the canal path.
- There is a safety issue with the public path at the back of the proposed blocks at Goldenbridge.
- Project will need full-time security on site during construction and full time management thereaftet to manage anti-social behaviour.
- The visitor bike-parking shown in the scheme is a security risk.
- Women have safety concerns with cycling along the canal path and will use Emmet Road instead, this should be considered when designing any cycling infrastructure.
- Design team should liaise with An Garda Siochana to plan the policing of the area.
- Scheme should avoid the inclusion of covered archways as they are a security concern, this element of the design feels unsafe to pass through. DCC should refer to other schemes and avoid these types of unsafe pinch points.

Appendix D: Feedback Records

Impact on Traffic, Transport & Parking

The following general comments related to Impact on Traffic,Transport and Parking were recorded as feedback at the open information sessions:

- There are very few parking spaces provided as part of the development. If there is a push towards public transport steps need to be taken to help existing and new residents feel safe in doing so.
- There is limited provision of car parking, this may not attract people to want to come to live and work here. St. Vincent Street will have to deal with the parking overflow.
- Existing public transport does not have the capacity to accommodate more users travelling into the city from this area.
- The public infrastructure does not have the capacity for another new development in this area. This development should be contingent on provision of more public transport services and increased frequency of the existing services.
- The construction will negatively impact traffic in the area, particularly near access points to the site. Will there be a plan to address this, and will residents be informed of this plan ahead of time?
- Increase in volume of traffic, LUAS and bus needs to be considered.
- Cycling on Emmet Road is currently very difficult, the scheme should include this consideration as part of the project, it should be well integrated and not an afterthought as it appears to be in other schemes.
- There are a lot of proposed residential developments along the red LUAS line, in the areas of Bluebell and O' Devaney Gardens, which will put a lot of pressure on the existing network.
- Charging for e-bikes and cargo bike storage will be key to enhance active travel provision.
- Consider car-parking for elderly, residents with disabilities and tradespeople. Development should not just be aimed at young professionals.

Appendix D: Feedback Records

Project Timeline & Delays

The following general comments related to Project Timeline & Delays were recorded as feedback at the open information sessions:

- How long will this project take? Where can we find updates on the project after this? Perhaps DCC could leave this model and exhibition in place as a drop in for the local residents to stay up to date with changes to plans and an updated timeline, planning status etc.
- When will this be finished. This area needs more high-quality housing near to the city centre.
- I'm concerned with getting it done right, and getting it done quickly.
- This project has taken a long time to get this far, I'm worried about the length of time it's taking.
- It's not clear when this project will be on-site and when it will be finished.
- I'm worried about the timeline of the retail units, if those are left until last, this will have a detrimental effect on the project. Facilities should be built first and then followed by the housing.

Appendix D: Feedback Records

Management & Maintenance

The following general comments related to Management and Maintenance were recorded as feedback at the open information sessions:

- My main concern is about the management of the complex after the construction is finished. How will that work? Will residents have easy access to the management body? How will the management body gain legitimacy within the community, users, residents and tenants?
- There needs to be sufficient funding for repairs to be done quickly to keep the building well-maintained. This has been an issue in similar schemes historically. How will you prevent this scheme from becoming shabby and falling into disrepair as time goes on?
- This scheme should look to Thornton Heights and learn from management issues which occur there.
- The project needs to be managed appropriately in order to prevent anti- social behaviour and criminal activity. DCC need to manage the intergenerational tenants. Ballymun did not fail because of architectural typology but because of a lack management and maintenance.
- Communal spaces need to be maintained.
- What are DCC's plans for the management of the scheme during the occupancy?
- The management of the development is of critical importance. We must learn from the past to ensure that this can be a flagship development and a model for urban regeneration.
- Who will provide overall management so we do not end up with a social ghetto in a few years?
- It is important to have a management office on-site
- I am impressed by the attractive green spaces; How are the spaces planted/ landscaped? Who is in charge of maintaining these? There is potential for these large spaces to become unused/ poorly looked after.

Appendix D: Feedback Records

*Other

Some of the feedback called for the provision of Community Services and Facilities, some mentioned are in the feedback were the following:

- Basketball Court
- Football Pitch
- Pharmacy
- Creche
- Doctor's Surgeries
- Boxing ring
- Facilities for Men's Shed
- More Public Spaces
- Skate Area
- Playground

Some comments related to the provision of facilities or community services were the following:

- Community facilities need to be defined at an early stage and integrated with existing facilities in the area.
- There will be a loss of community facilities.

Some of the feedback called for the project to add facilities or considerations related to Biodiversity and Sustainability, some of those suggestions were the following:

- Graveyard as space to encourage biodiversity. Possibility of wilding the area between cemetery wall and the parking spaces.
- Will it be sustainable both environmentally and socially?

Some of the feedback related to the quality of construction and materiality of the project.

- Materials should not be same as seen locally, different identity for the scheme.
- Don't want design build contract- concern with quality and life cycle.

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Comhairle Cathrach Bhaile Átha Cliath
Dublin City Council

Connect the Dots

APPENDIX B – CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

CONSTRUCTION AND ENVIRONMENTAL MANAGEMENT PLAN

Proposed Development at Emmet Road

For DCC

PROJECT NO. B967

26 September 2022

OCSC

O'CONNOR | SUTTON | CRONIN

Multidisciplinary
Consulting Engineers



CONSTRUCTION AND ENVIRONMENTAL MANAGEMENT PLAN

Proposed Development at Emmet Road

For DCC

PROJECT NO. B967

26 September 2022

CONSTRUCTION AND ENVIRONMENTAL MANAGEMENT PLAN

for

Proposed Development at Emmet Road

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Consulting Engineers

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DOCUMENT CONTROL & HISTORY

OCSC Job No.: B967	Project Code	Originator	Zone Volume	Level	File Type	Role Type	Number	Status / Suitability Code	Revision
	B967	OCSC	XX	XX	RP	S	0010	S4	P04

Rev.	Status	Authors	Checked	Authorised	Issue Date
P04	S4	IC	IC	PH	27.09.2022
P03	S3	IC	IC	PH	16.09.2022
P02	S3	IC	IC	PH	05.07.2022
P01	S3	IC	IC	PH	12.03.2021

CONSTRUCTION AND ENVIRONMENTAL MANAGEMENT PLAN

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1 INTRODUCTION

1.1 Appointment

O'Connor Sutton Cronin & Associates (OCSC) have been appointed by *DCC* as part of an integrated Design Team led by Bucholz McEvoy to undertake the Civil & Structural design for the proposed mixed-use development at Emmet Road, Inchicore, Dublin 8.

1.2 Administrative Jurisdiction

The proposed development is located in the jurisdiction of Dublin City Council.

1.3 Site Location

The site for the proposed development is located in the heart of Inchicore, as indicated in Figure 1.1 over.

Inchicore is a suburb of Dublin located approximately 4km to the west of Dublin city centre. Inchicore is primarily a residential area comprising predominantly of 2 storey early to mid 20th century housing stock with some medium rise apartments developments of both social and private built in more recent decades.

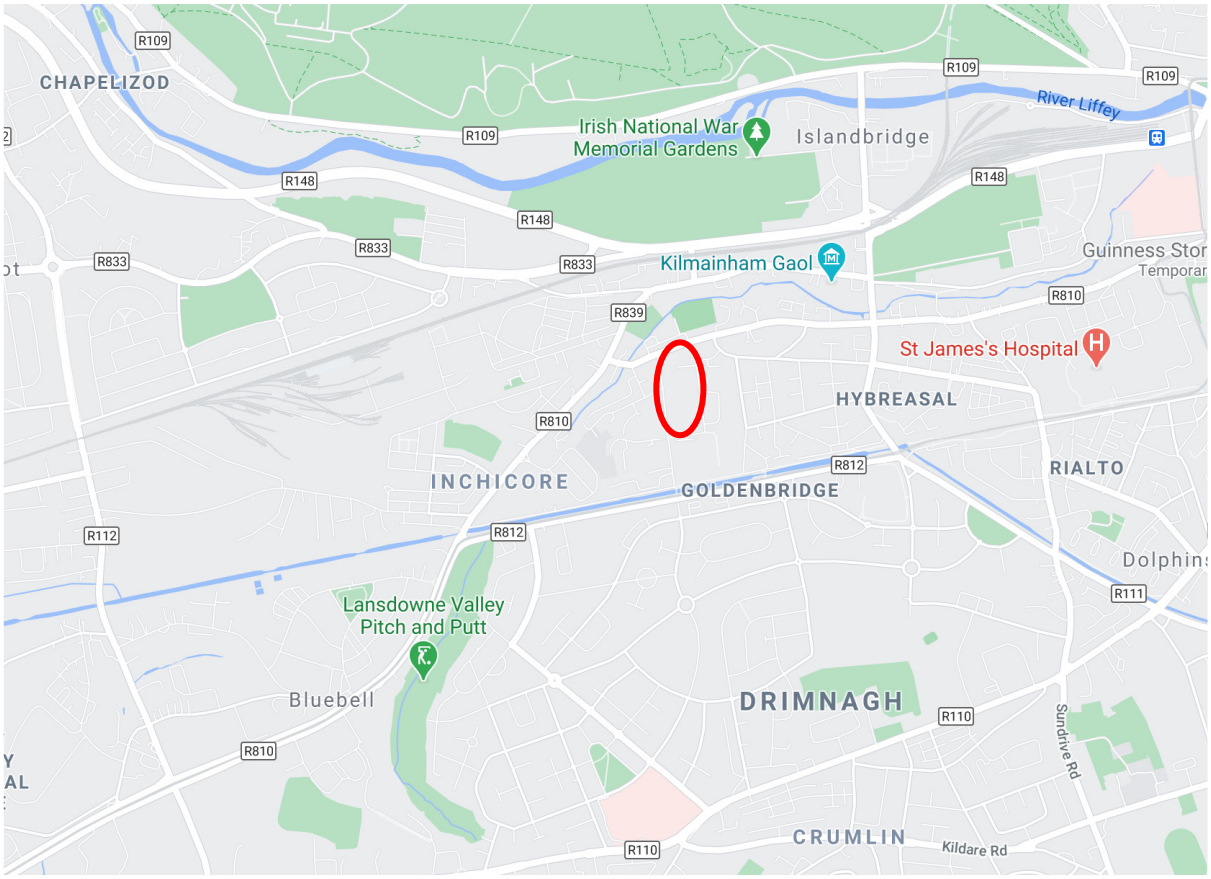


Figure 1.1 - Site Location (www.myplan.ie)

1.4 Existing Site Overview

The site covers an area of approximately 4.68 hectares (which includes water main upgrade works along emmet Road to the Junction with Tyrconnell Road/Grattan Crescent) and the main development site is c.3.8 hectares (9.4 acres) and is bounded by:

- Emmet Road to the north;
- St Vincent Street West to the western boundary;
- Goldenbridge Cemetery to the southern boundary;
- Patriots Path to the eastern boundary

The site currently comprises of a mixture of brownfield areas which previously housed the St Michaels Estate development together with the current existing buildings/structures:

- St Michael's Community Centre (to be demolished as part of permitted Part 8 Development 2221/21);
- Eve Tuiscint Health Centre (to be demolished as part of permitted Part 8 Development 2221/21);
- Inchicore Community Sports Centre (to be retained)
- Boundary wall to the north western corner of the site (some works to be undertaken but majority to be retained).

There are a number of existing structures outside of the site that are of importance. These include:

- Inchicore Primary Care Centre to the east of the site;
- Richmond Barracks to the east of the site.

The locations of the above buildings relative to the site are shown in Figure 1.2 over.

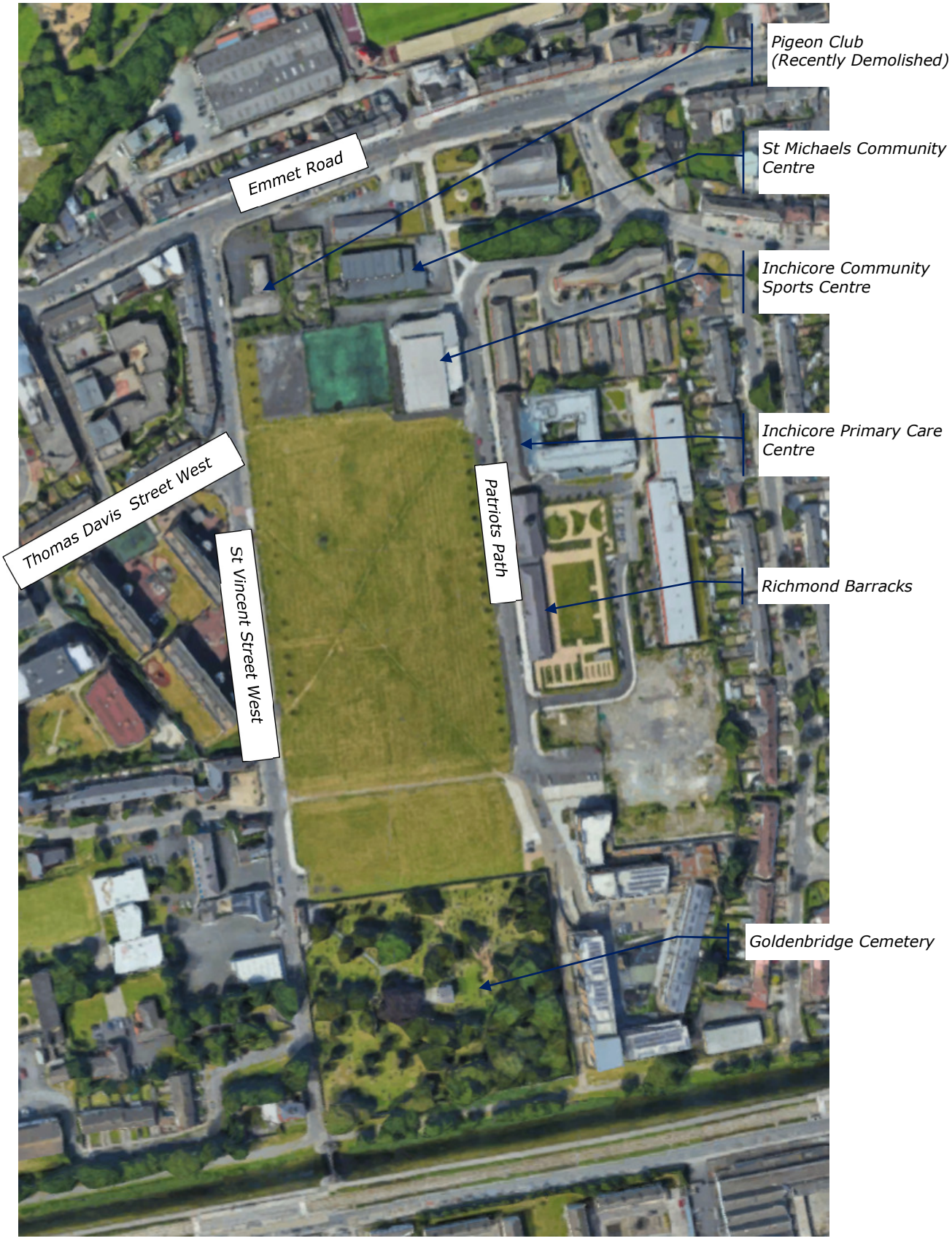


Figure 1.2 – Site Environs

1.5 Proposed Development Context

The proposed scheme consists of a mixed-use development with a strong emphasis on residential units in addition to commercial, retail and community facilities together with all associated infrastructure including roads, footpaths, services and landscaping.



Figure 1.3 – Proposed Site Layout-to be updated to final redline

The development will comprise 578 no. apartments, consisting of 110 no. studio apartments, 172 no. 1 bedroom apartments, 250 no. 2 bedroom apartments (including 10 no. duplex apartments) and 46 no. 3 bedroom apartments (all apartments to have balconies or terraces), community facilities Library/Community Hub, Creche, Supermarket, 5 no. units (retail/café/restaurant/class 2 financial services floorspace) & 2 no. Café units), a public plaza fronting onto Emmet Road and the installation of a new watermain c 200m in length along Emmet Road to the junction with Tyrconnell Road/Grattan Crescent. The proposal includes works to a protected structure (8705 - Richmond/Keogh Barracks, relating to works to rubble stone boundary walls).

2 SCOPE OF CONSTRUCTION AND ENVIRONMENTAL MANAGEMENT PLAN

This report has been prepared as an outline construction strategy setting out construction method and activities required for the construction of the proposed residential and commercial development. This outline plan seeks to demonstrate how works can be achieved in a logical, sensible and safe sequence with the incorporation of specific measures to mitigate the potential impact on people and the environment. This methodology will be required to be interrogated and developed by the Main Contractor prior to commencing works on site. It is noted that this document should be viewed as an outline plan with the fully detailed Construction and Environmental Management Plan to be developed by the appointed main Contractor in consultation with Dublin City Council the Planning Authority (as required) prior to works commencing on site. The mitigation measures contained in the EIAR will form part of the Contractor CEMP.

Discussed in the following sections are:

- Construction Management issues;
- Pre-Construction Activities;
- Foundations & Substructure;
- Services;
- Superstructure.

3 CONSTRUCTION MANAGEMENT

3.1 Overview

The works outlined in this methodology narrative outline the potential methods of construction available to the Main Contractor. The narrative indicates the prospective progress and gives an explanation of the associated activities and their interdependencies and how the project will be delivered. There are a number of constraints and requirements which have been clearly considered by the Project Team throughout the design process-these will need to be further developed upon by the appointed Main Contractor prior to works commencing on site.

In broad terms, the project will be sequenced as follows:

- Pre-construction activities;
- Site Clearance including demolition;
- Piling;
- Ground Beams;
- Site services (including watermain upgrade works);
- Construction of superstructure;
- Completion of façade;
- Mechanical & electrical works;
- Internal fit-out;
- Hard and soft landscaping;
- Completion

3.2 Project Delivery

The project is proposed to be constructed in two separate tranches with each tranche to be procured under separate contracts. The main portion of the development will be delivered by the Applicant and will incorporate the southern two thirds of the site together with the library and community facilities located in the north-eastern corner of the site. The north-western portion of the site, consisting of the retail/commercial spaces and residential units above, will be delivered by a third party developer under a future development agreement between the applicant and future developer. Although both contracts will have different start and end dates, it is envisaged that works will be on-going on both contracts at the same time.

The portions of the development to be completed by the applicant are envisaged to be delivered under a single contract but completed in phases due to the scale of the development. Those phases are likely to follow those indicated in Figure 3.1 but subject to change when detailed design is carried out and contractor appointed.

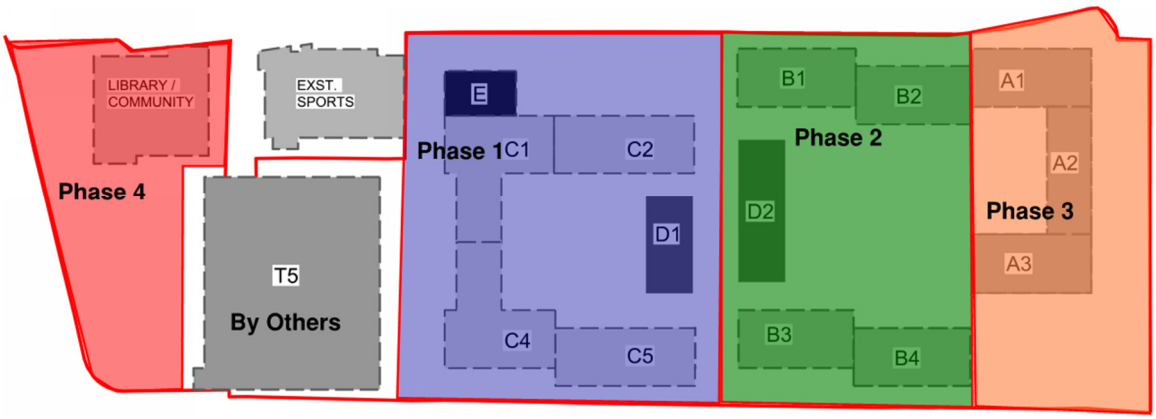


Figure 3.1 – Delivery of the Project

It is envisaged that the two contracts will be delivered by two different Main Contractors. The Main Contractors will be required to co-ordinate both their Construction Management Plans and their planned activities to ensure that the

more labour/deliveries intensive tasks are not being undertaken simultaneously on both site.

The items discussed in the following sections are relevant to both tranches of the overall development.

3.3 Site Management

The Main Contractor will be responsible for overall site management for the duration of the proposed works. Discussed below are a number of areas which the Main Contractor will be required to address within their Construction Environmental Management Plan and during the works.

3.3.1 Health & Safety

The Main Contractor must progress their works with reasonable skill, care, diligence and to, at all times, proactively manage the works in a manner most likely to ensure the safety and welfare of those carrying out construction works, interacting stakeholders, adjoining residents and the public. Contractors are further required to ensure that, as a minimum, all aspects of their works and project facilities comply with good industry practice, statutory instruments and all necessary consents. These will be further expanded and developed within the Main Contractor's Construction Management Plan in relation to Health & Safety requirements.

3.3.2 Hoarding & Site Security

The location of the site, adjacent to residential properties and public spaces, necessitates a prompt and detailed establishment of site compound and perimeter hoarding by the Main Contractor following possession of site. The overarching consideration in all elements of the site set-up will be to ensure the works can be undertaken in a safe manner for adjoining residents, members of the public, the Main Contractor and their staff.

The Main Contractor will commence by erecting a suitably robust hoarding around the site perimeter. This will typically take the form of a standard plywood hoarding up to a height of 3.6m with artwork or graphics embellishment. Appropriate access points will be provided to the site through the hoarding. Initially, this will be for personnel only but as works develop, vehicle access and egress routes through the hoarding will be developed.

The proposed hoarding alignment for the main construction phase of the works is indicatively shown orange below in Figure 3.2 below. It is noted that this plan layout may be altered locally during the works to facilitate different works such as piling, services tie ins etc. In addition, a further sub-division of the site will be required to facilitate the works to be undertaken to Tranche 5 under a separate development agreement as set out in Section 3.2.

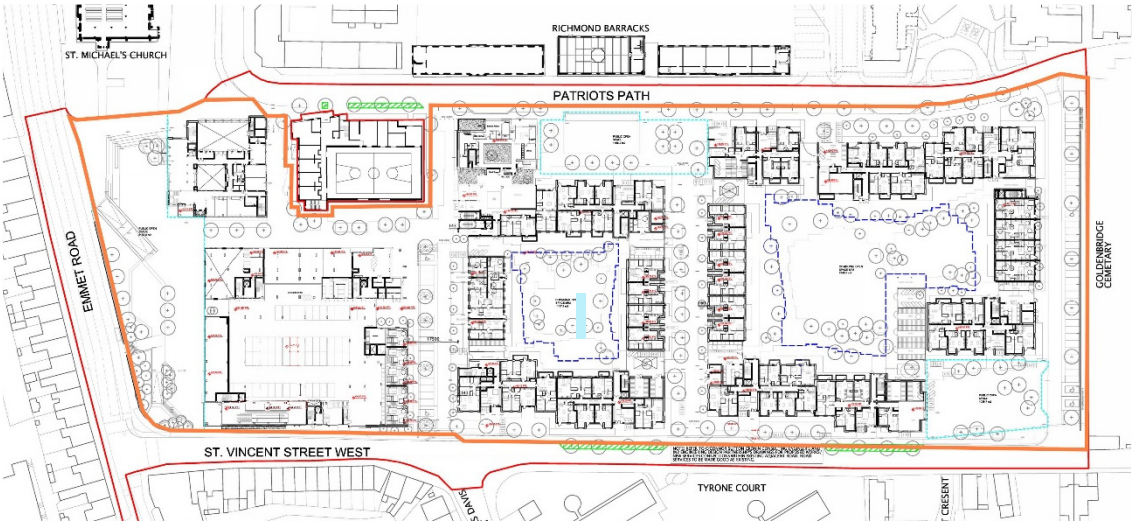


Figure 3.2 – Proposed Site Hoarding

The Main Contractor will be responsible for the security of the site for the duration of the works. The Main Contractor will be required to:

- Install and maintain adequate site hoarding to the site boundary with adequate controlled access and egress points;
- Maintain site security staff at all times;
- Install secure access in the form of turn-styles and gates for staff;
- Ensure restricted access is maintained to the works;
- Operate a site induction process for all site staff and visitors;
- Ensure all staff have current 'Safe Pass' and Construction Skills Cards;
- Monitor and record all deliveries to site and all material/waste taken off site for disposal to appropriate licences facility.

A fire watch system will be implemented and appointed fire watch supervisors will inspect the site at the end of each shift. All staff will be made fully aware of their individual responsibilities with regards to security and will undertake their work in line with guidelines. All staff and operatives will be fully inducted into the security, health and safety and logistic requirements on site.

3.3.3 Site Compound

The extent of compound and facilities required by the Main Contractor will vary throughout the duration of the works. The initial phase of works involving site set-up, surveys, diversions of services and commencement of siteworks are likely to have limited requirements for Contractors facilities. As the works advance, the Main Contractor's compound and facilities will be required to be enhanced. It is envisaged that such facilities will be provided within the hard and soft landscaped portions of the development, with locations to be selected by the Main Contractor to best suit their works methodologies and sequencing. As the main building works near completion, the requirements for facilities will be reduced and thus will allow the Main Contractor to remove sections of the compound to be able to complete the hard and soft landscaping works. Indicative possible locations for the Contractors compounds are shown in Figure 3.3 below.



Figure 3.3 – Possible Site Compounds

3.3.4 Site Access & Egress

The key driver in the provision of site access and egress is to ensure that safety of the public and the Contractor's staff if maintained at all times. It is envisaged that a number of access and egress points will be provided to suit both the division in the overall development and also the size of the site. This will entail access points from both Patriots Path and St Vincent Street West. Indicative possible layouts of these points are shown in Figure 3.4 below but it is noted that the selected Main Contractor's may alter these locations to suit their own particular site set up.

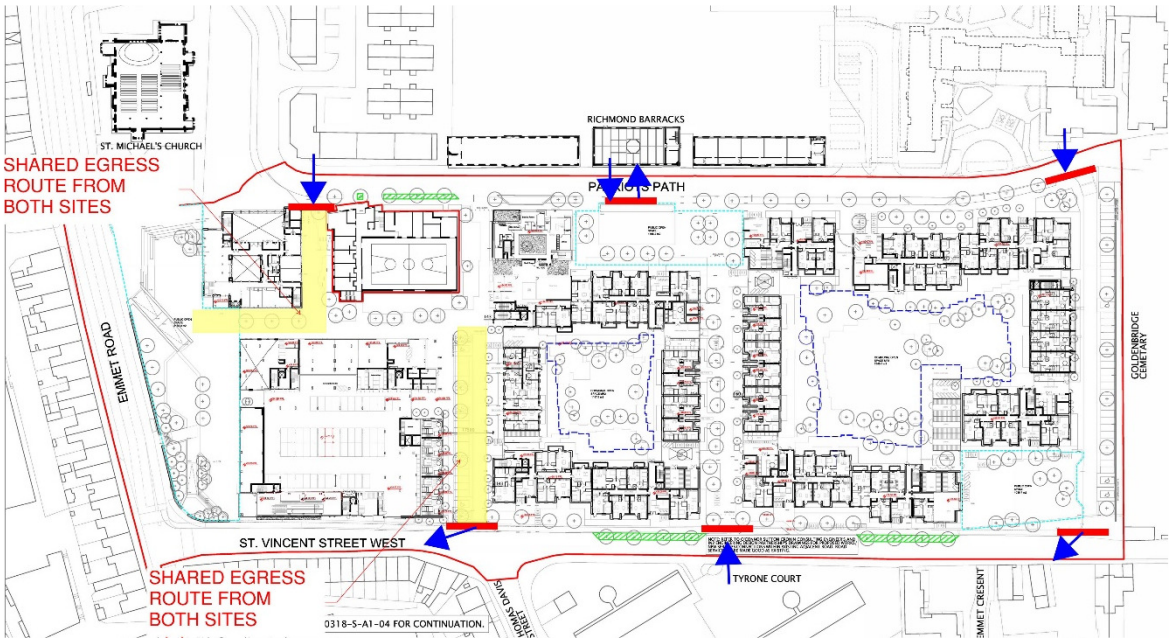


Figure 3.4 – Possible Site Access & Egress

3.3.5 Deliveries to Site

Construction deliveries to site will make use of the access and egress points indicated in Figure 3.4 above. A "just in time" approach will be generally be required for delivery of particular materials such as concrete formwork, reinforcement and prefabricated structural elements. That is to say that deliveries of materials will be planned, sequenced and programmed to ensure that materials as they are required on site. Works requiring multiple vehicle deliveries to site, such as large concrete pours, should be planned well in

advance with no queuing of trucks allowed or permitted on Emmet Road. It is envisaged that there may, from time to time, be a requirement for queuing of vehicles along Patriots Path or St Vincent Street West. The Main Contractor will be responsible for ensuring that this will not impact upon the movement of public pedestrians or vehicles along these routes. The Main Contractor will be required to provide a flagman to direct construction vehicles entering/exiting the site and manage the interaction between public and construction vehicle movements in a safe manner.

3.3.6 Storage of Materials on Site

There is scope for some storage of materials within the courtyard areas around the site. Any materials stored on site should be done so in a safe manner. Any fuels or chemicals on site should be stored within double sealed tanks with bunds to prevent any seepage of same into the groundwater. A fuel filling point should be set up on site with plant to be brought to this point for filling. All fuels and chemicals required to be stored on site should be clearly marked.

3.3.7 Removal of Materials from Site

The removal of materials from site will primarily be undertaken during the initial stages of the works. This will involve the removal of excavated material and pile arisings to facilitate the construction of the piled foundations and ground beams envisaged to be required. This phase of works will need to be managed effectively to ensure that no queuing of trucks occurs on public roadways. All trucks will have a built-on tarpaulin that will cover excavated material as it is being hauled off site and wheel wash facilities will be provided at all site egress points. All vehicles will make use of the access and egress points noted in Section 3.3.4 above. The Main Contractor will be required to provide a flagman to direct construction vehicles entering/exiting the site and manage the interaction between public and construction vehicle movements in a safe manner.

3.3.8 Craneage

It is envisaged that the works will require the use of multiple cranes on site. The final chosen structural form of the buildings will determine the likely type of cranes to be used, as discussed in Section 6 of this document. With a prefabricated solution-either precast concrete or timber frame-it is likely that mobile cranes would be used for the installation of same. If a cast in-situ concrete frame solution is adopted, then it is more likely that tower cranes would be used, with the layout of same to achieve maximum coverage of the site being determined by the Contractor. A mixed approach, with some tower cranes supplemented by mobile cranes, may also be adopted. The contractor will engage with and notify if necessary the Irish Aviation Authority in advance of the erection of tower cranes.

3.3.9 Water Supply

The Contractor will require a water source for the duration of the works. Water will be required for:

- Contractor's welfare facilities;
- Vehicle washdown (use recycled water where feasible);
- Dust suppression (as applicable);
- Curing of concrete in warm weather.

It is proposed that the Main Contractor will make use of existing water connections on the site for the purpose of water supply during the works.

3.3.10 Groundwater & Surface Water Control

The proposed development does not incorporate a full basement. There is a small section of below ground plant space provided under a portion of the residential Blocks. There will also be areas of excavations for foundations and below ground services. Any seepage of groundwater into these excavations or

surface ponding from rainfall events will be gathered locally to facilitate pumping with subsequent discharge, under licence, to the local drainage network. Prior to any discharge, the water will be passed through silt traps and hydrocarbon/oil interceptors within the site confines. This will result in the separation of sediment from the water prior to its discharge and will ensure that the water is of adequate quality before it enters the local authority sewerage drainage network.

The Contractor will be required to prepare and implement a Surface Water Management Plan (SWMP) that fully details all measures for groundwater and surface water control for agreement with the local authority prior to discharge of same from site. This SWMP will need to fully comply with all relevant mitigation measures as set out in the EIAR together with proposals within the Engineering Services Report.

3.3.11 Hours of Work

It is envisaged that the hours or work for the project will be as follows, unless conditioned otherwise:

- Monday to Friday 7.00am to 7.00pm
- Saturday 8.00am to 2.00pm
- Sundays and Bank Holidays No activity on site

We note that certain activities may be required, subject to prior agreement with Dublin City Council, to be undertaken outside of these working hours. It is acknowledged that special events such as large concrete pours, will require (in addition to the prior agreement with Dublin City Council) liaisons with the Local Authority, Garda and key stakeholders together with extensive pre-planning and programme management of site operations.

3.3.12 Public relations/Community Liaison

The site is located in the heart of Inchicore within a residential area. It is also adjacent to schools, a Primary Care Centre and other care settings. The Main Contractor will be required to ensure that all agents, sub-contractors and suppliers act in a manner to minimise disruption to the locality. Construction staff will be encouraged to remove all Personal Protective Equipment (PPE) and use wash down facilities before leaving the site.

The Project Team recognises the importance of the community liaison role in ensuring the smooth running of activities and in relation to residents and public welfare. Important key issues in ensuring good relations are:

- Regular community updates/leaflet drops/information briefings etc.;
- Correct points of contact, information and liaison;
- Responsiveness to contacts and information;
- Good housekeeping in all aspects of the operations.

Keeping people informed of site operations, through regular updates, mail drops & newsletters will help create good relationships and c co-operative atmosphere.

Due to the nature of construction works, it is essential to operate Good Neighbour Policies wherever possible. The key aspects of the Project Teams good neighbour policy include:

- Early implementation;
- Good client, Staff and Neighbourhood liaison;
- Reduction of nuisance factors;
- Clear access for neighbouring premises;
- Clear and concise information;
- Designated liaison officer.

It is essential that the Good Neighbour Policy and any necessary procedures be in place before any works are commenced on site.

3.3.13 Environmental Management

The appointed Contractor will be required to be accredited with ISO 14001 Environmental Management Systems.

3.3.14 Dust

A Dust Minimisation Plan will be formulated for the construction phase of the project. Dust prevention measures shall be included for control of any site airborne particulate pollution. The Contractor shall put in place a regime for monitoring dust levels in the vicinity of the site during the works using the Bergerhoff Method. The minimum criteria to be maintained shall be the limit specified by the environmental Protection Agency (EPA) for licensed facilities in Ireland which is 350mg/m^2/day as a 30-day average. The Contractor shall continuously monitor dust over the variation of weather and material disposal to ensure the limits are not breached throughout the project.

The level of monitoring and adoption of mitigation measures will vary throughout the construction works depending on the type of activities being undertaken and the prevailing weather conditions at the time. Additional monitoring and mitigation such as damping down of earth mounds on site would be undertaken if the prevailing weather conditions are dry and windy. It is noted that the stockpiling of excavated material on site is to be minimised with an immediate removal of excavated materials envisaged for the majority of the works.

3.3.15 Dirt

Given the volumes of traffic generated by aspects of the construction works, particularly during the excavations and groundworks phase, it shall be a requirement that the Contractor shall ensure, where appropriate:

- A wheel wash facility shall be provided at each egress point form the site (the proposed nature of the access and egress points may necessitate the use of more than one wheel wash for some phases of the works)
- All vehicles shall be required to pass through the wheel wash facility before exiting the site to the public road network via Patriots Path or St Vincent Street West. The wheel wash must be kept in place and used throughout the critical dirt generating activities of the construction works.
- Road sweepers shall be retained for the duration of the construction works with an increase in cleaning during the critical dirt/dust generating works. Regular road drain clearing will be implemented.
- Water supplies shall be recycled for use in the wheel wash. All waters shall be drained through appropriate filter material prior to discharge from the site.

3.3.16 Noise

The Contractor shall be required to monitor baseline noise levels at the site prior to commencement of the project, with a noise monitoring regime being developed for the duration of the construction works on site. Variation of noise levels from those experienced as part of everyday life in the area can result in disruption. The Contractor shall implement measures to minimise and mitigate noise levels during construction. Specifically, noise levels shall be kept below levels identified in Table 3.1 over or if further limits as imposed by the Local Authority.

Period over which criterion applies		Noise Impact Criterion ($L_{Aeq, 1hr}$)
Monday to Friday	Day 07:00 to 19:00	75dB
	Evening: 19:00 to 22:00	60dB*
	Night 22:00 to 07:00	The higher of 45dB of the ambient level*
Saturday: Day 08:00 to 14:00 (work outside these hours no higher than 45dB of ambient noise level)		65dB
Sundays and Bank Holidays	Day 08:00 to 14:00	60dB*

Note-*Construction activity at these times, other than that required for emergency works, will require the explicit permission of the relevant local authority

Table 3.1 – Noise Limit Criteria

3.3.17 Condition Surveys

Condition surveys of properties and structures adjoining the works shall be undertaken by a specialist survey company engaged by the Main Contractor prior to any works commencing on site. The survey company will record, within a Condition Report using photographs and sketches, the current structural condition of the property. These reports will assist to inform any specific requirements in terms of potential locations for monitoring during the works. The surveys should be undertaken on the following as a minimum:

- Boundary Wall of Goldenbridge Cemetery;
- Gate house of Goldenbridge Cemetery;
- Richmond Barracks;
- Inchicore Primary Care Centre;
- Inchicore Community Sports Centre;
- External elevation of Bulfin Court Residences;
- External elevation of Tyrone Place;
- External elevation of residences along St Vincent Street West;
- Remnant of historic boundary wall to Richmond Barracks at junction of Emmet Road/St. Vincent Street West;

- Roads and footpaths to the entire perimeter of the site.

It is noted that phased nature of the delivery of the works will require either surveys to be undertaken on multiple occasions or may only be undertaken at certain locations for one phase of the works.

3.3.18 Vibrations

Vibration monitoring (as a minimum) of the following areas shall be carried out for the duration of the works:

- Boundary wall of Goldenbridge Cemetery;
- Richmond Barracks;
- Sports Centre;
- Remnant wall of Richmond Barracks at junction of Emmet Road;
- Other areas to be agreed with project team.

Vibration monitoring stations should continually log vibration levels (including associated frequency) using the Peak Particle Velocity parameter (PPV, mm/s) in the X, Y and Z directions, in accordance with BS ISO 4866: 2010: Mechanical vibration and shock – Vibration of fixed structures – Guidelines for the measurement of vibrations and evaluation of their effects on structures. Vibration monitors, of both aural and visual type, with real time outputs to be located at agreed points.

The mounting of the recording equipment to the vibrating structure (or surface supporting sensitive equipment) shall comply with BS ISO 5348: 1998: Mechanical vibration and shock – Mechanical mounting of accelerometers. In summary, the following ideal mounting conditions apply:

- The recording equipment and its mountings should be as rigid as possible;
- The mounting surfaces should be as clean and flat as possible;
- Simple symmetric mountings are best, and;

- The mass of the mounting should be small in comparison to that of the structure under test.

The vibration limits for the duration of the construction works shall be set in line with the vibration criteria to be adopted at nearby sensitive and residential properties to avoid cosmetic damage, as taken from the German Standard DIN 4150-3 (1999-02) *Structural Vibration – Effects of vibration on structure*.

Traffic light system to be in place consisting of:

- Green-vibrations below all threshold limits-OK to proceed;
- Amber-vibrations exceed first threshold limit (2/3^{rds} of limit)-Stop and check;
- Red-vibrations exceed second threshold-Stop and action.

3.3.19 Harmful Materials

Harmful materials will be stored on site for use in connection with the construction works only. The following mitigation measures will be included for the works to prevent any spillages of fuels and prevent any resulting soil and/or groundwater quality issues:

- Designation of bunded refuelling areas on site;
- Provision of spill kit facilities across the site;
- Where mobile fuel bowsers are used, the following measures will be taken:
    - Any flexible pipe, tap or valve will be fitted with a lock and will be secured when not in use;
    - The pump or valve will be fitted with a lock and secured when not in use;
    - All bowsers to carry a spill kit and operatives must have spill response training;
    - Portable generators or similar fuel containing equipment will be placed on drip trays.

In the case of drummed fuel or other potentially polluting substances which may be used during construction, the following measures will be adopted:

- Secure storage of all containers that contain potential polluting substances in a dedicated internally bunded chemical storage cabinet unit or inside a concrete bunded area;
- Clear labelling of containers so that appropriate remedial measures can be taken in the event of a spillage;
- All drums to be quality approved and manufactured to a recognised standard;
- If drums are to be moved around site, they should be done so secured and on spill pallets;
- Drums to be loaded and unloaded by competent and trained personnel using appropriate equipment.

3.4 Waste Management

3.4.1 Introduction

The appointed contractor will be responsible for the preparation of a detailed site-specific resource and waste management plan (RWMP) to be submitted to Dublin City Council prior to commencement of works. Discussed below are key areas that will be developed upon by the Main Contractor in their detailed plan. In addition, the RWMP will incorporate the measures contained in the EIAR and the RWMP prepared by Byrne Environmental as part of this application.

3.4.2 Waste Management in Ireland

Overarching Legislation

The overarching legislative instruments governing waste management in Ireland are as follows:

- Waste Management Act 1996 (S.I. No. 10 of 1996) as amended 2001 (No. 36 of 2001), 2003 (No. 27 of 2003) and 2001 (No. 20 of 2011)

- Sub-ordinate legislation includes:
  - European Communities (Waste Directive) Regulations 2011 (S.I. 126 of 2011) as amended 2011 (S.I. No. 323 of 2011) and 2016 (S.I. 315 of 2016);
  - Waste Management (Collection Permit) Regulations 2007 (S.I. No. 820 of 2007) as amended 2008 (S.I. No. 87 of 2008), 2015 (S.I. No. 197 of 2015) and 2016 (S.I. No. 24 and 346 of 2016);
  - Waste Management (Facility Permit and Registration) Regulations 2007 (S.I. No. 821 of 2007) as amended 2008 (S.I. No. 86 of 2008), 2014 (S.I. No, 320 and No. 546 of 2014) and 2015 (S.I. No. 198 of 2015);
  - Waste Management (Licensing) Regulations 2000 (S.I. No. 185 of 2000) as amended 2004 (S.I. No. 395 of 2004), 2010 and (S.I. No. 350 of 2010);
  - Waste Management (Packaging) Regulations 2014 (S.I. 282 of 2014) as amended 2003 (S.I. No. 61 of 2003) as amended 2004 (S.I. No. 871 of 2004), 2006 (S.I. No. 308 of 2006) and 2007 (S.I. No. 798 of 2007);
  - Waste Management (Planning) Regulations 1997 (S.I. No. 137 of 1997);
  - Waste Management (Landfill Levy) Regulations 2015 (S.I. No. 189 of 2015) as amended 2011 (S.I. No. 434 of 2011) as amended 2012 (S.I. No. 221 of 2012);
  - European Union (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014);
  - European Union (Batteries and Accumulators) Regulations 2014 (S.I. No. 283 of 2014) as amended 2014 (S.I. No. 349 of 2014) and 2015 (S.I. No. 347 of 2015);
  - Waste Management (Food Waste) Regulations 2009 (S.I. 508 of 2009);
  - European Union (Household Food Waste and Bio-waste) Regulation 2015 (S.I. No. 191 of 2015);

  - Waste Management (Hazardous Waste) Regulations 1998 (S.I. No. 163 of 1998) as amended 2000 (S.I. No. 73 of 2000);
  - Waste Management (Shipments of Waste) Regulations 2007 (S.I. No. 419 of 2007) as amended;
  - Waste Management (Movement of Hazardous Waste) Regulations 1998 (S.I. No. 147 of 1998);
  - European Communities (Transfrontier Shipment of Waste) Regulations 1998 (S.I. No. 147 of 1998) as amended 1994 (SI 121 of 1994);
  - European Union (Properties of Waste which Render it Hazardous) Regulations 2015 (S.I. No. 233 of 2015).
- Litter Pollution Act 1997 (S.I. No. 12 of 1997) as amended by Protection of the Environment (amendment) Act 2003 as amended;
- Planning and Development Act 2000 as amended (S.I. No. 30 of 2010) and 2015 (S.I. No. 310 of 2015);
- Protection of the Environment Act 1992 as amended 2003 (S.I. No. 413 of 2003) and by Planning and Development Act 2000 as amended (S.I. No. 30 of 2010).

The above Acts and Regulations transpose European Union policy and Directives into Irish law. The over-riding 'Duty of Care' principle implies that the producer is responsible for waste from the time it is generated through until its legal disposal (including its method of disposal.). As it is not practical in most cases for the waste producer to physically transfer all waste from where it is produced to the final disposal area, waste contractors will be employed to transport waste to the final waste disposal site.

A waste collection permit, issued by the National Waste Collection Permit Office (NWCPO), must be held by every waste contractor engaged on the project. Waste receiving facilities must also be appropriately permitted or licensed to accept waste. Operators of such facilities cannot receive any waste, unless in

possession of a waste permit granted by the relevant Local Authority under the Waste Management (Facility Permit & Registration) Regulations 2007 and Amendments or a waste licence granted by the Environmental Protection Agency (EPA). The permit/licence held will specify the type and quantity of waste able to be received, stored, sorted, recycled and/or disposed of at the specified site.

National Waste Management Policy

The 1998 '*Changing Our Ways*' policy document by the Irish Government identified objectives for the prevention, minimisation, reuse, recycling, recovery and disposal of waste in Ireland. The target for C&D waste in this report was to recycle at least 50% of C&D waste within an initial five-year period with incremental increases to at least 85% by 2013. A waste industry task force of the *Forum for the Construction Industry* released '*Recycling of Construction and Demolition Waste*' recommending the development of a voluntary construction industry programme to meet Government objectives for the recovery of C&D waste. '*A Resource Opportunity - Waste Management Policy in Ireland*' published in 2012 stresses the environmental and economic benefits of better waste management, particularly in relation to waste prevention. In respect of C&D waste, the report commits to undertaking a review of specific producer responsibility requirements for C&D projects above a certain threshold.

The National Construction and Demolition Waste Council (NCDWC) published '*Best Practice Guidelines for the Preparation of Waste Management Plans for Construction and Demolition Projects*' in 2006 in conjunction with the Department of the Environment, Heritage and Local Government (DoEHLG). The Guidelines outline the issues that need to be addressed at the pre-planning stage of a development all the way through to its completion. These Guidelines have been followed in the preparation of this document and include the following elements:

- Predicted C&D wastes and procedures to prevent, minimise, recycle and reuse wastes;
- Waste disposal/recycling of C&D wastes at the site;
- Provision of training for waste manager and site crew;
- Details of proposed record keeping system;
- Details of waste audit procedures and plan; and
- Details of consultation with relevant bodies i.e. waste recycling companies, Dublin County Council etc.

In accordance with Section 3 of the Guidelines Construction and Demolition Waste Management plans should be submitted as part of development proposals for projects in excess of any of the following thresholds:

- New residential development of 10 units or more;
- New developments other than above, including institutional, educational, health and other public facilities, with an aggregate floor area in excess of 1,000m^2;
- Demolition/renovation/refurbishment projects generating in excess of 100 cubic metres in volume of construction and demolition waste, and;
- Civil engineering projects in excess of 500 cubic metres of waste materials used for development works on the site.

A RWMP, as a minimum, should include provision for the management of all construction and demolition waste arising on site, and make provision for the re-use of said material and/or the recovery or disposal of this waste to authorised facilities by authorised collectors. Where appropriate, excavated material from development sites should be reused on the subject site.

The proposed development at Emmet Road requires a RWMP under the following two criteria:

- New residential development of 10 units or more;

- New developments other than above, including institutional, educational, health and other public facilities, with an aggregate floor area in excess of 1,000m^2.

These guidance documents are considered to define best practice for construction and demolition projects in Ireland and describe how construction and demolition projects are to be undertaken such that environmental impacts and risks are minimised and maximum levels of waste recycling are achieved.

Regional Waste Management Plans

The proposed development is located within the Dublin City Council (DCC) administrative area. A new Regional Waste Management Plan for the Eastern-Midland Region was launched in November 2014 which covers the four Dublin Councils (DCC, FCC, DRCC & SDCC) as well as Kildare, Laois, Longford, Louth, Meath. Offaly, Wicklow and Westmeath. The final Eastern-Midland Region Waste Management Plan (EMWR) was published in late May 2015 to replace the 'Waste Management Plan for the Dublin Region 2005 – 2010'. This was replaced due to changing National policy as set out in '*A Resource Opportunity: Waste Management Policy in Ireland*' and changes being enacted by the Waste Framework Directive (2008/98/EC). The Plan's implementation will be led by the new Eastern-Midlands Regional Waste Office based in Dublin City Council.

The three key objectives of the Eastern-Midlands Region Waste Management Plan are:

- Prevent waste: a reduction of one per cent per annum in the amount of household waste generated over the period of the plan.
- More recycling: increase the recycle rate of domestic and commercial waste from 40 to 50 per cent by 2020.
- Further reduce landfill: eliminate all unprocessed waste going to landfill from 2016.

The strategic approach of the new plan is to place a stronger emphasis on preventing waste and material reuse, instead focusing on increasing the collection of quality materials to improve recycling. The plan seeks to further reduce the role of landfill in favour of higher value recovery options. The objective Eastern Midlands Region Waste Management Plan is to achieve more sustainable waste management practices in the C&D sector. The recycling rates for C&D waste adopted by the EMWR are 82%. The EC (Waste Directive) Regulations, 2011 sets a 70% target for the re-use, recycling and recovery of man-made C&D waste in Ireland by December 2020. It is reported by the EPA that this has already been achieved with a 97% waste recovery rate.

The Dublin City Development Plan 2016-2022 and the Draft Dublin City Development Plan 2022-2028 provides policies and objectives in relation to waste management in the city which are reflective of overarching EU, National and Regional policy and legislation.

The main objective of DCC policies in the current development plan and draft development plan is to promote an increase in the amount of waste re-used and recycled consistent with the Regional Waste Management Plan and Waste Hierarchy and facilitate recycling of waste through adequate provision of facilities and good design in new developments.

3.4.3 Waste Categorisation

Typical non-hazardous and hazardous waste streams generated by construction and demolition activities at typical sites are shown in Table 3.2 along with their accompanying European Waste Code (EWC) Classification.

It is anticipated that the non-hazardous materials listed above will be encountered during the works on the Emmet Road development with the potential for some of the hazardous materials as discussed over.

Waste Materials Categorisation		
Category	Description	Code
Non-Hazardous	Metals	17 04
	Wood, glass, plastic	17 02
	Soil, stones, dredged soils	17 05
	Gypsum based materials	17 08
	Cardboard	15 01 01
	Glass	17 02 02
	Bituminous mixtures, coal tar, tar products	17 03
	Concrete, bricks, tiles, ceramics	17 01
Hazardous	Electrical and Electronic Components	16 02
	Liquid Fuels	13 07
	Wood Preservatives	03 02
	Batteries	16 06
	Soil and stones containing dangerous substances	17 05 03
	Waste construction material containing asbestos	17 06 05
	Other construction and demolition wastes containing dangerous substances	17 09 03

Table 3.2 – Waste Material Categorisation

Non-Hazardous Materials

The classification of materials as non-hazardous and/or hazardous will be based on the www.hazwasteonine.com web based system as well as classification using Waste Acceptance Criteria in accordance with the European Communities (EC) Council Decision 2003/33/EC, which establishes criteria for the acceptance of waste at landfills.

In addition, non-hazardous waste materials are likely to be generated during all phases of the construction works from casting of concrete, through to installation of face, mechanical and electrical services and internal fit-out.

Hazardous Materials

There is the potential for hazardous materials to be uncovered, particularly during the demolitions and excavations phases of the project as discussed below:

- ***Asbestos***

  A type 3 Asbestos Survey will be carried out by a certified company on behalf of the Main Contractor prior to any demolition works commencing on site. If any asbestos is uncovered, the removal of same must be carried out by a suitably qualified contractor in accordance with S.I. No. 386 of 2006 Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010. All material to be taken to a suitably licensed or permitted facility.

- ***Contaminated Soil***

  The building works will require excavations to facilitate foundation construction, together with installation of below ground services and the section of lower ground floor plant space. Given the brownfield nature of the site, there is potential for the soil to have elements of contaminant contained within it. An initial assessment of the site has been undertaken by OCSC to classify the materials to be encountered on site from a waste soils perspective. The Main Contractor will be responsible for the classification of all material to be removed from site and compliant disposal in accordance with the Wate Management Act 1996 as amended and all relevant Regulations.

- ***Fuels/Oils***

  In the event that there is to be any on site storage of fuels or oils during the demolition, piling, excavation or basement construction phases of the project, then all storage tanks and draw-off points will be bunded and located in a dedicated, secure are of the site. Provided that these requirements are adhered to, and site crew are trained in the appropriate refuelling techniques, it is note expected that there will be any fuel/oil wastage at the site.

3.4.4 Waste Arisings

The Environmental Protection Agency (EPA) produce figures on the amounts of waste generated by various developments. These figures are contained in EPA databases. The split between individual C&D waste categories is shown in Table 3.4.

Waste Types	%
Metals	2.2
Concrete, Brick, Tile, Gypsum	7.2
Bituminous mixtures	1.3
Mixed C&D waste	4.5
Soils & Stones	84.8
Total	100

Table 3.4 – Waste Generation

Further figures are available for typical overall waste generation figures for construction sites based on the type and scale of development. Therefore, by using the EPA category split figures and the industry standard overall waste generation figures, the C&D waste arising's for the subject site can be estimated.

It should be noted that until final materials and methods of construction have been determined it is not possible to predict with a high level of accuracy the construction waste that will be generated. These details will be required to be included by the Main Contractor in their RWMP to be prepared and agreed with DCC in advance of works commencing on site.

<u>Site Waste Management Operations</u>

Waste materials generated will be segregated on site where it is practical. Where the on-site segregation of certain wastes types is not practical, off-site segregation will be carried out. There will be skips and receptacles provided to

facilitate segregation at source. All waste receptacles leaving site will be covered or enclosed. The appointed waste contractor will collect and transfer the wastes as receptacles are filled.

Any soil removed off-site will be carried by contractors licensed under the Waste Management Acts 1996 - 2008, the Waste Management (Collection Permit) Regulations 2007 and Amendments and the Waste Management (Facility Permit & Registration) Regulations 2007 and Amendments. Waste arising shall be handled by an approved waste contractor holding a current waste collection permit. All waste arising requiring disposal off-site will be disposed of at a facility holding the appropriate licence or permit, as required.

Written records will be maintained by the contractor(s) detailing the waste arising throughout the construction and demolition phases, the classification of each waste type, the contact details and waste collection permit number of all waste contactors who collect waste from the site and the end destination and waste facility permit or licence number for all waste removed and disposed off-site. Dedicated bunded storage containers will be provided for hazardous wastes such as batteries, paints, oils, chemicals etc., if required.

3.4.5 Record Keeping, Auditing & Consultation

Record Keeping

Records will be kept for each waste material, which leaves the site, either for reuse on another site, recycling or disposal. A system will be put in place to record the construction waste arisings on site.

The Waste Manager or a member of his team will record the following:

- Waste taken for Reuse off-site (i.e. for capping of landfill cells or at another site);
- Waste taken for Recycling;
- Waste taken for Disposal;
- Reclaimed waste materials brought on-site for reuse.

For each movement of waste on- or off-site, the Waste Manager will obtain a signed docket from the contractor, detailing the weight and type of the material and the source and destination of the material. This will be carried out for each material type. This system will also be linked with the delivery records. In this way, the percentage of construction waste generated for each material can be determined.

The system will allow the comparison of these figures with the targets established for the recovery, reuse and recycling of construction waste and to highlight the successes or failures against these targets.

Outline Waste Audit Procedure

The appointed Waste Manager on site will be responsible for conducting a waste audit at the site. A review of all the records for the waste generated and transported on- or off-site will be undertaken. If waste movements are not accounted for, the reasons for this should be established in order to see if and why the record keeping system has not been maintained.

A Summary Report will be prepared and compared with the established recovery/reuse/recycling targets for the site. Each material type will be examined, in order to see where the largest percentage waste generation is occurring. The waste management methods for each material type will be reviewed in order to highlight how the targets can be achieved. Waste management costs will also be reviewed.

Consultation

Consultation with waste contractors and Dublin City Council through the construction phase will be pursued to ensure best practices for waste management are being followed on site.

3.5 Construction Traffic

The proposed development will have a certain amount of construction traffic associated with same to facilitate the works. As the site is located outside Dublin City Centre, the heavy vehicle restrictions imposed by Dublin City Council do not govern the traffic management proposals. However, the construction access strategy to serve the site will still need to be developed by the Main Contractor in a manner taking cognisance of the designated HGV routes in the city centre. These routes are indicated in Figure 3.5 below with approximate site outline included.

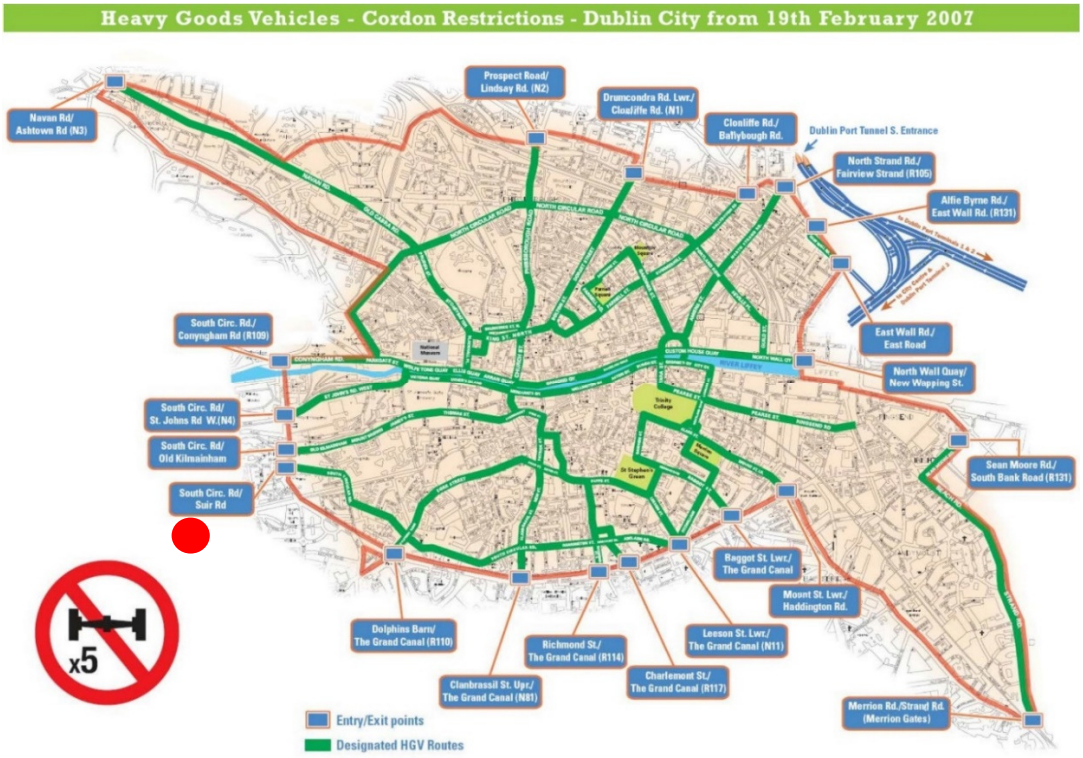


Figure 3.5 – Heavy Goods Vehicle Cordon Restrictions (with site location)

3.5.1 Traffic Generation

It is envisaged that traffic will be generated for the duration of the works by the proposed development. This will be from a number of sources:

- Hauling of excavated material off site;

- Concrete deliveries;
- Deliveries of reinforcement & formwork to site;
- Deliveries of prefabricated structural elements;
- Deliveries of glazing and precast panels for façade;
- Deliveries of building services equipment to site;
- Construction Workers.

It is noted that there will be no designated parking for construction workers on or around the site.

The levels of construction traffic will vary during the weeks with peak volumes predicted to be during the following activities:

- **Piling & Foundations**

  The piling and excavation works will require hauling of spoil off site. This will occur in tandem with deliveries for concrete and reinforcement for the piled foundations and ground beams.
- **Concrete pours**

  Concrete pours will be required throughout the works, with the size/volume of same dependant on the final structural form selected. In addition to the foundations/ground beams, concrete pours will be required to the library/community building as well as to the commercial spaces. All concrete works will require continued supply of concrete to site with deliveries for the duration of the period of the pour. The concrete works will be required to be carefully planned, sequenced and managed by the Main Contractor to ensure that works can be undertaken without undue disruption to the neighbourhood.
- **Deliveries of Prefabricated structural elements**

  The selection of the chosen structural form for the residential blocks may necessitate the delivery of precast concrete elements. These deliveries will need to be carefully planned, sequenced and managed by the Main Contractor to ensure that they are undertaken at the

appropriate time in the works sequence so as not to cause undue disruption to the neighbourhood.

3.5.2 Contents of Traffic Management Plan

The Construction Phase Traffic Management Plan will be prepared by the appointed Contractor and shall identify:

- Primary Contact Name;
- Primary Contact Mobile Phone Number;
- Secondary Contact Name;
- Secondary Contact Mobile Phone Number.

The primary contact shall act as a Liaison Officer with the Local Authority, Gardai, local residents and businesses.

The Construction Stage Traffic Management Plan is to be formulated in the style as specified in the Dublin City Council Publication *"Directions for the Control and Management of Roadworks in Dublin City",* March 2005 with reference to the DTO publications *"Traffic Management Guidelines Manual"* and the Traffic Signs Manual". The document should contain information on the following issues:

- Temporary signage (type and location);
- Temporary road markings (type and location);
- Temporary changes to existing signage and markings required to enable a road closure, if applicable;
- Location of proposed temporary traffic signals, if applicable;
- Arrangements for local access and pedestrian access;
- Proposed lighting arrangements;
- Proposals for the use of flagmen;
- Proposals to erect barriers;
- Proposals to change street infrastructure to enable road works;

- Proposals for pedestrian movements including those of mobility impaired;
- Proposed changes to on-street parking;
- Arrangements that will apply during the road works.

4 PRE-CONSTRUCTION ACTIVITIES

4.1 Prior to Commencement of Development

It is noted that there are a number of existing buildings on site to be demolished to facilitate the proposed development as discussed under Section 1.4 of this document. The demolition of these buildings is envisaged to be undertaken in advance of the Emmet Road Development as part of permitted Part 8 Development 2221/21.

4.2 Site Set-Up

The location of the site adjacent to a residential area within the heart of Inchicore village increases the requirement for a prompt and detailed establishment of the site compound by the Contractor following possession of the site. The overarching consideration in all elements of the site set-up will be to ensure the works can be undertaken in a safe manner for adjoining residents, users of adjoining buildings, members of the public and the Contractor & their staff.

Please refer to section 3.3 of this document for additional detail on site set-up, hoarding and security etc.

4.3 Surveys

A number of surveys will be required prior to works commencing on site. This include:

- Condition Surveys of adjoining properties (refer to section 3.3.17)
- Targeted slit trench surveys are required supplement the GPR survey undertaken to date to establish location and detail of all existing services on site.
- Baseline readings for noise, vibration, dust etc in advance of the establishment of monitoring regime and action of same;

- Targeted slit trench investigations/trial pits at site boundaries to establish any constraints;
- Surveys to identify asbestos or toxic/hazardous materials which may be present on site.

4.4 Monitoring Regime

A full and detailed monitoring regime to assess potential impact of noise, vibration, dust etc. to a level agreed between the Main Contractor and the project team is to be implemented in advance of any works commencing on site.

5 FOUNDATION & SUB-STRUCTURE WORKS

5.1 Overview

A detailed site investigation of the entire site has been undertaken to inform the proposed foundation solution. The current envisaged piled foundation solutions are shown in Figure 5.1 below for the Community and Library Hub building-foundations to other buildings will be of a similar form. It is noted that these proposed foundation solutions will be interrogated further during the detailed design phase of the project and may be subject to development.

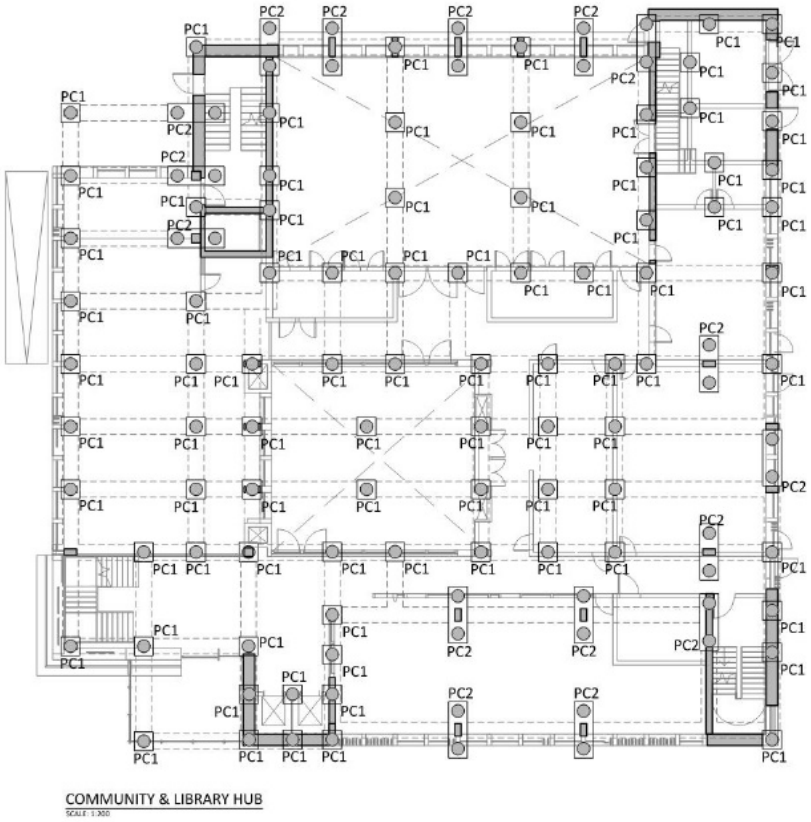


Figure 5.1 – Envisaged Foundation Solutions-Community and Library Hub

5.2 Piling

The proposed piled foundations will be constructed using rotary bored techniques. The piles will be constructed through the overburden soil with the

piles to be end bearing in the underlying bedrock. Due to the size of the site, it is envisaged that a number of piling rigs will be on site simultaneously to complete the necessary piling works. The rotary boring of the piles will generate spoil which will be hauled off site and disposed of at an appropriately licenced facility. The casting of the piles will require concrete deliveries and deliveries of reinforcement cages for the duration of this element of works.

In addition to the piled foundations, a small section of secant pile wall will be required to the perimeter of the lower ground floor plant space. This wall will be formed from a series of interlocking male and female bored piles along the c.115m perimeter of the lower ground floor space. The provision of a secant pile wall to facilitate excavations is a tried and trusted construction method, particularly within Dublin City. It has been adopted successfully on numerous projects for which O'Connor Sutton Cronin have acted as Structural Engineers- even in close proximity to existing buildings.



Figure 5.2 – Image of piling works and secant pile wall

5.3 Excavations

As the piling works advance on site, works will commence on excavations to form the ground beams. Excavations will commence with removal of topsoil from under the building footprint together with excavations along the lines of the ground beams-these will typically align with the perimeter of the proposed buildings together with the internal load bearing structural elements.

It is noted that additional excavations will be required to facilitate the lower ground floor plant space. The footprint of this space only constitutes a very small portion of the overall site and excavation volumes will be c. 1,800m^3 of material to be removed off site.

5.4 Lower Ground Floor Slab

The lower ground floor slab consists of a cast in-situ RC slab supported on a series of piled foundations and will be constructed in a sequence as follows:

- Completion of overburden excavation;
- Breaking down of piles;
- Immediate placing of a concrete blinding layer to protect the foundation formation;
- Installation and placing of waterproofing membrane & drainage;
- Placing of reinforcement;
- Casting & curing of concrete.

5.5 Ground Beams

The actions required to form the ground beams will consist of:

- Breaking down of piles to correct levels;
- Completion of excavations;
- Fixing of reinforcement;
- Casting of concrete.

Once the concrete has cured sufficiently, works can proceed on the follow on works.

5.6 Below slab services

The variety of building uses at ground floor will require the provision of services below slab. These will include foul drainage and water supply. These services will be provided in tandem with the construction of the ground beams.

5.7 Ground floor slab

The nature of the ground conditions on site necessitate that the ground floor slabs be suspended in all instances. Thus, a precast concrete ground floor slab will be provided to span between ground beams. An indicative detail of the suspended ground floor slab and build-up is shown in figure 5.3 below. It is noted that the precast slab and structural screed will be provided first to facilitate the construction of the superstructure-the insulation, build-up and finishes can be progressed as the works proceed on the upper levels.

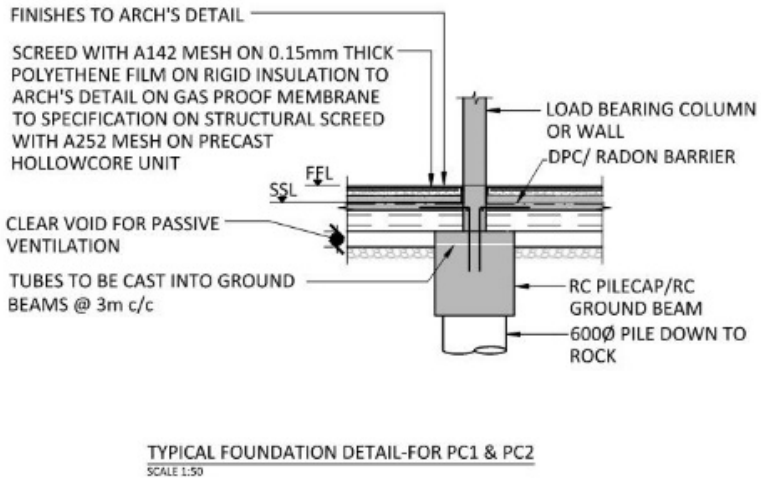


Figure 5.3 – Image of typical ground floor detail

6 SUPERSTRUCTURE

6.1 Overview

The proposed development is as described in Section 1.5 of this document and as per Figure 6.1 below.



Figure 6.1 – Image of overall development

6.2 Structural Works

A number of different possible structural forms are being considered for the proposed development. The forms of structure will be evaluated throughout the detailed design phase of the project with the possibility that a combination of a number of options will ultimately be chosen to be brought forward to construction stage as the final design solutions.

Discussed below is a brief description of the forms of structure and how they could be adopted within the proposed development.

6.2.1 Structural Options

Cast In-Situ Frame

A cast in-situ concrete frame is arguably the most commonly used form of multi-storey residential developments currently on the Irish market. It generally consists of a series of columns-either rectangular or rectilinear-aligned with dividing walls between residential units or internal partition walls which support a flat slab at each level. This flat slab soffit provides an uninterrupted route for services distribution at each level.



Figure 6.2 – Example of In-situ Flat Slab Construction

If a cast in-situ frame solution were to be adopted, the construction sequence would follow:

- Completion of ground beams;
- Fixing of reinforcement for rising elements (columns and walls) from ground to underside of first;
- Placing of formwork to rising elements and casting of same;
- Placing of formwork and propping to underside of first floor slab;
- Fixing of reinforcement to first floor slab;
- Casting of first floor slab;
- Fixing of reinforcement for rising elements (columns and walls) from first to underside of second and repeat.

Precast Concrete Frame

Precast concrete frames can consist of a number of differing forms. With residential buildings, the general layouts give rises to cross walls which allow

for a logical layout of precast elements. These precast walls can be twin wall construction which would allow for a high quality finish to both exposed faces or of solid precast construction. The walls would support a precast slab (either wideslab or hollowcore) with a structural screed topping. An example of this form of structure is shown in Figure 6.3 below.



Figure 6.3 – Precast Concrete Frame Construction

If a precast solution were to be adopted, the construction sequence would follow:

- Completion of ground beams;
- Erection of precast twinwalls from ground to underside of first;
- Casting of in-situ element within twinwall;
- Placing of precast floor slabs at first floor level;
- Casting of structural screed topping;
- Erection of precast first to underside of second and repeat.

Timber Frame Construction

It is envisaged that timber will be used in the structure of a number of buildings on site. These include the duplex units within the main residential spaces and also the Community Hub and Library Building. The timber form of construction will differ given the different building uses with a timber joist and timber stud

walling solution for the residential spaces but a combination of glulam and cross laminated timber for the Community Hub and Library Building.

If a timber frame solution were to be adopted, the construction sequence would follow:

- Completion of ground beams;
- Erection of rising elements (walls and columns) from ground to first;
- Installation of first floor (timber joists or glulam beams & CLT flooring)
- Casting of first floor slab;
- Erection of rising elements (walls and columns) from first to underside of second and repeat.

6.3 Façade Works

Throughout the design, a strong emphasis has been placed on durability and robustness of materials as an integral aspect of long term sustainability of low maintenance and the use of natural materials such as clay bricks, clay blocks, timber and lime-based render is maximised.

A variety of façade types are proposed throughout the development including:

- Brick;
- Glazing;
- White lime render;
- Terracotta tiles;
- Curtain walling;
- Hardwood timber cladding;

6.4 Internal Fit-Out

The internal fit out works will follow on once the building has been made weather tight by the façade. The nature of the fit out works will vary between the Residential and Commercial spaces but would generally follow a sequence such as:

- Installation of any stud walls or internal partitions as well as any areas of raised access floors;
- Installation of flooring and wall finishes
- Installation of ceilings (following completion of M & E fit-out noted below);
- Installation of kitchens and bathrooms;
- Installation of equipment and associated connections to services;
- Completion of finishes

6.5 M & E Fit-Out/Commissioning

The Mechanical and Electrical works/commissioning will follow the completion of the superstructure and façade. The works will involve:

- M & E first fix will be progressed in tandem with the ground works and structure and will include all underground services and the installation of primary mechanical and electrical services distribution including pipework, cable trays, bracketing and ductwork;
- M & E second fix will commence once the buildings are weathertight and will included the installation of sensitive equipment as well as the secondary distribution of pipework and cables within the buildings;
- M & E third fix will follow the installation of walls and ceilings within the buildings and includes the final installation of sanitary ware, lights, switches, sockets etc.
- Commissioning and testing to be completed.

7 SITEWORKS

7.1 Overview

The siteworks for the proposed development will entail the installation of all below ground services distribution around the site as well as the proposed landscaping works.

7.2 Site Services

A large variety of services are required to be constructed to provide functionality to the proposed development. These services include items such as storm drainage, foul drainage, water supply, power supply, gas supply etc.

The site services works are likely to proceed following completion of the foundations of the main buildings and will continue throughout the superstructure works.

The site services works will generally involve:

- Excavation of services trench;
- Placing of bedding as required for each service;
- Placing of service pipe/conduit within the trench;
- Placing of warning tape as required by each utility;
- Backfilling of trench.

It is noted that certain portions of the site services works will require connections to the public utilities outside of the site boundaries, with works to be undertaken in public spaces. These works will be undertaken under agreement with both the relevant departments of Dublin City Council and the utility provider. Appropriate method statements will be required to be prepared for each element of work including appropriate protection measures to be put in place to facilitate the works.

7.3 Hard & Soft Landscaping

The externals to the site are made up of a number of differing soft and hard landscaping finishes.

The soft finishes include:

- Private gardens;
- Public gardens;
- Internal courtyards.

The hard landscaping includes:

- Pathways;
- Access roads;
- Carparking;
- Communal areas;
- Plaza areas.

The hard landscaping works for the site are there to enhance the overall design, compliment the soft finishes and allow for pedestrian and vehicular traffic to and around the site. The hard and soft landscaping works will be undertaken following the completion of the main elements of construction.

The soft landscaping works will involve:

- Placing of topsoil;
- Planting of tress and shrubs;
- Seeding of grass;
- Placing of furniture and fittings.

The hard landscaping works will involve:

- Placing and compacting of hardcore sub-base;
- Casting of concrete kerbs and footpaths;
- Laying of road surfacing;
- Installation of paving;
- Placing of furniture and fittings.

8 OUTLINE CONSTRUCTION PROGRAMME

8.1 Overview

It is envisaged that construction works would commence in early summer 2024 with a completion date of summer 2027, subject to successful grant of planning, completion of detailed design and tendering prior to spring 2024.



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APPENDIX C – LAND AND SOILS

Appendix C1 OCSC Waste Soil Classification Report

Appendix C2 GII Report 2020

Appendix C3 OCSC Generic Quantitative Risk Assessment (GQRA) Report

Appendix C4 Utilities Survey

Appendix C1 OCSC Waste Soil Classification Report

WASTE SOIL CLASSIFICATION REPORT

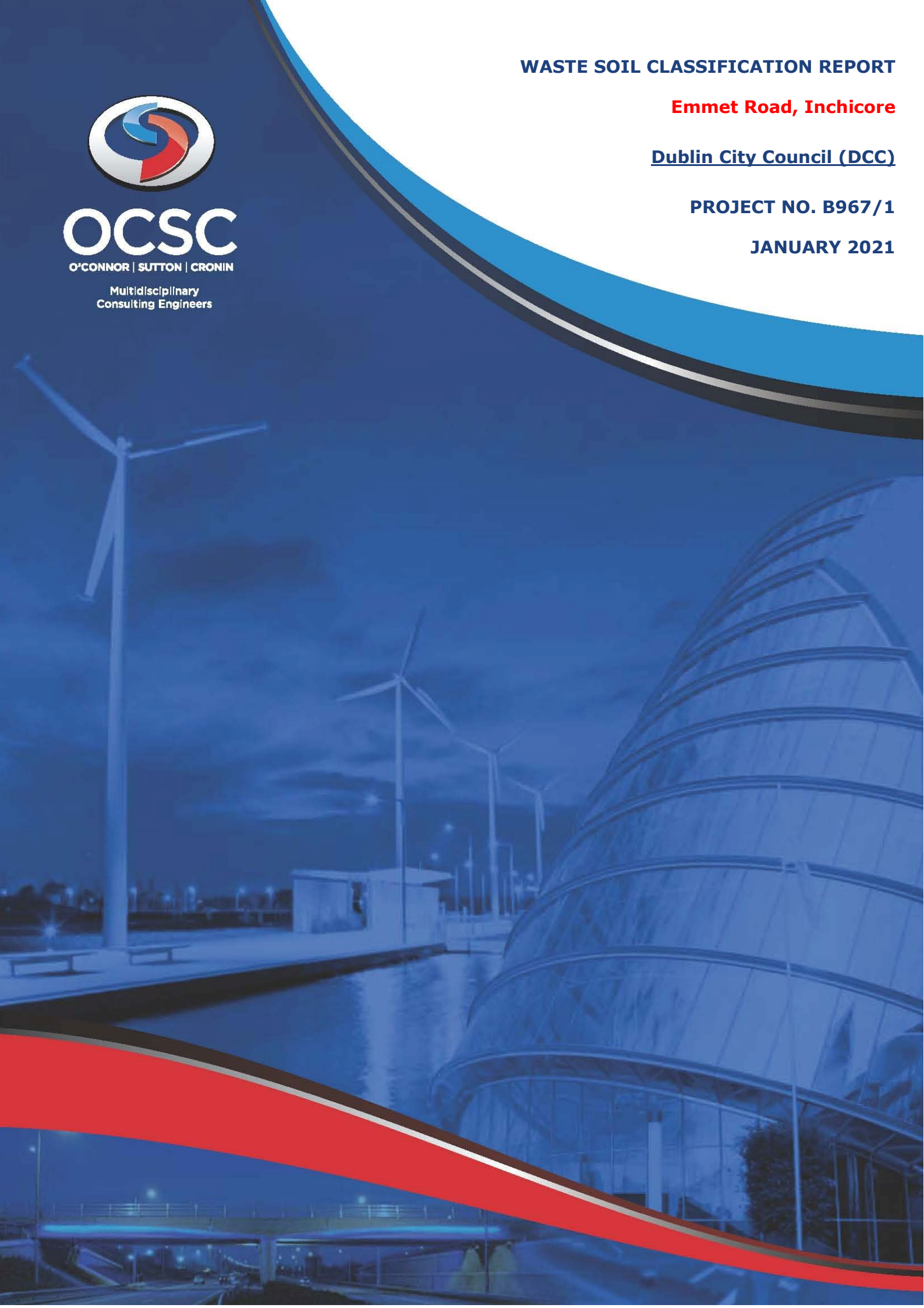
Emmet Road, Inchicore

Dublin City Council (DCC)

PROJECT NO. B967/1

JANUARY 2021

OCSC
O'CONNOR | SUTTON | CRONIN
Multidisciplinary
Consulting Engineers



Waste Soil Classification Report

Emmet Road, Dublin 8

for

Dublin City Council.

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NOTICE

This document represents the findings from a Waste Soil Classification (WSC) exercise conducted at the above referenced site. Best practice was followed at all times and within the limitations stated. This document has been produced by O'Connor Sutton Cronin & Associates for Dublin City Council. It may not be used for any purpose other than that specified by any other person without the written permission of the authors.

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1. INTRODUCTION

1.1. Project Contractual Basis & Parties Involved

This report has been prepared by O'Connor Sutton Cronin & Associates Ltd. (OCSC) at the request of their Client, Dublin City Council (DCC) as part of the Civil and Structural Engineering Scope of services for the proposed development. The site for assessment is at Emmet Road in Inchicore, Dublin 8 and currently comprises of a vacant grass field (demolished former residential estate), a former halting site, a recreational club building, an employment building centre and a health community centre.

The field assessment and reporting was undertaken by Kate Santos, Environmental Engineer with OCSC and Richard Thompson, Chartered Geologist (EuroGeo and PGeo) and Member of the Institute of Geologists of Ireland (MIGI) with OCSC and approved by Eleanor Burke, Chartered Scientist (CSci) and Member of the Institution of Environmental Sciences (MIEnvSc) who is the Environmental Division Manager of OCSC.

1.2. Background Information

The site is located in Inchicore adjacent to various recreational, retail, residential and commercial facilities (refer to Figure 1.1). The site area extends across c. 3.8 hectares of land and is bounded by Emmet Road (R810) to the North, by Patriots Path and St Michael's Estate Road to the East, by a protected stone boundary wall and Goldenbridge Cemetery to the south, and to the west by St Vincent's Street West.

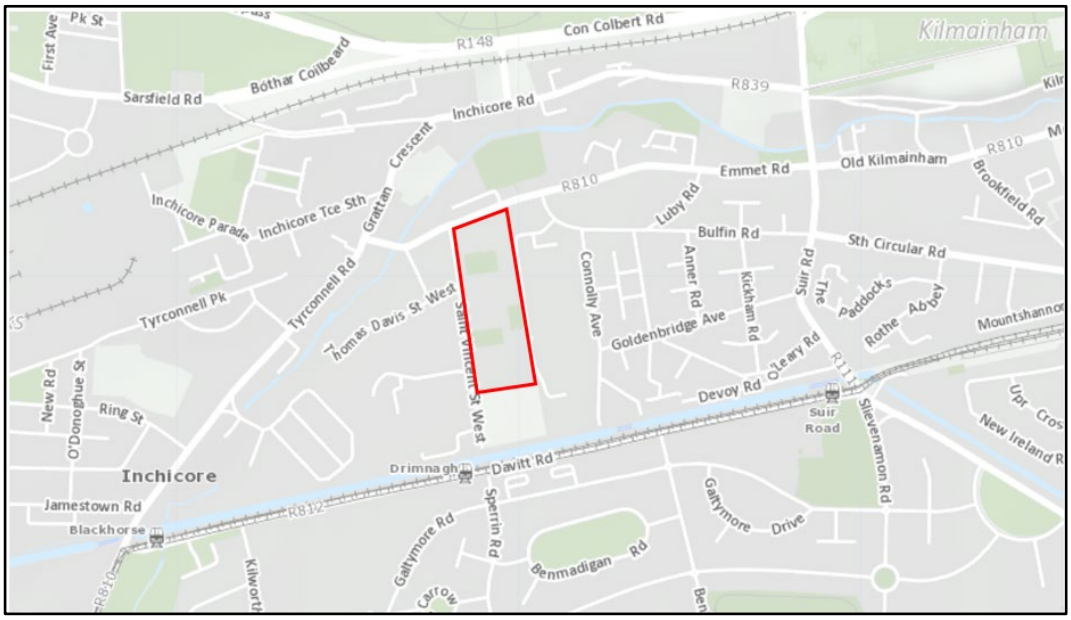


Figure 1.1: Site Location (approximate site boundary in red. Source: OSI, 2020)

The north section of the site comprises existing recreational, social and community facilities with associated landscaping and car parking. The middle and southern area of the site consists of a grass field, the location of the former St. Michaels Estate (Dublin City Council Social Housing) which has been demolished.

The Inchicore Community Sports Centre and the St. Michael's Parish Community Centre are accessed by St Michael's Estate Road, the Celtic Pigeon Club (demolished in November 2020) by St Vincent's Street West, and EVE Tuiscint Health Centre by Emmet Road. The open grassed area is accessed by pedestrian paths from St Michael's Estate Road and St Vincent's Street West.

The site is relatively flat with a fall from south to north of approximately 6m. The topographic map is included in Appendix B. The centre of the site is at Ordnance Survey of Ireland (OSI) ITM reference 712063E, 733325N.



Figure 1.2: Aerial Image of the site (Source: Google Earth)

1.3. Proposed Development

The site is located in Inchicore adjacent to various recreational, retail, residential and commercial facilities. The proposed development includes a mixed used development of approximate 484No. duplex and apartment units in addition to commercial, retail and community facilities and associated infrastructure, including roads, footpaths, services and landscaping.

The middle and southern area of the site consists of the former St. Michaels Estate (Dublin City Council Social Housing) which has been demolished and exists now as open space. The north section of the site comprises a partially demolished building, a former halting site as well as active recreational, social and community facilities with associated landscaping and car parking. A number of structures will be demolished to make way for the proposed development including St. Michaels Community

Centre, EVE Tuiscint Health Centre and the Celtic Pigeon Club (demolished in November 2020). The Inchicore Community Sports Centre will be retained, refurbished and incorporated into the proposed scheme. There are a number of options being considered regarding the layout of the redevelopment; proposed plans are included in Appendix A.

1.4. Project Objectives

The overall project objectives include:

- Provide environmental information on the site including its environmental setting, past activities and current soil quality in terms of contamination; and
- Classify the waste deposited on site in terms of (inert, non-hazardous or hazardous, assess total pollutant content data via HazWasteOnline software, assess leachate data against Irish Landfill Acceptance Criteria and to characterise the material in terms of the physical and chemical components as per the EPA List of Waste

1.5. Methodology and Approach

The methodology and approach for the proposed work will follow:

- BS 10175:2011+A2:2017, Investigation of potentially contaminated sites, Code of Practice;
- EPA, 2020, Guidance on waste acceptance criteria at authorised soil recovery facilities;
- EPA, 2015, Waste Classification, List of Waste & Determining if Waste is Hazardous or Non-hazardous;
- EPA 2013, Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites;
- EPA 2007, Code of Practice, Environmental Risk Assessment for Unregulated Waste Disposal Sites;
- EA, 2015, Guidance on the classification and assessment of waste, Technical Guidance WM3;
- EA, 2004, Model Procedures for the Management of Land Contamination (CLR11);
- Environment Agency (2004) Model Procedures for the Management of Land Contamination. Contaminated Land Report 11; and
- DoELG, EPA and GSI, 1999. Groundwater Protection Schemes. Department of Environment and Local Government, Environmental Protection Agency and Geological Survey of Ireland, Dublin, Ireland.

1.6. Scope of Works

To meet the project objectives the following scope of works were completed:

- Undertake and record a site visit and walkover including reference to readily available local information; specifically obtaining information regarding storage of deleterious materials or potential contamination related to historical operations on site;
- Obtain, where possible, records of past spillages which could potentially have impacted upon the soil and/or groundwater, and any environmental reports on the site's historic operations and condition;
- Undertake and present a historical site and area review, primarily referring to old Ordnance Survey Ireland (OSI) Maps but utilising other sources as appropriate and readily available including previous site investigations and data available;
- Present a discussion of the current site status and key environmental influences around the site;
- Complete an updated Site Investigation to inform the Waste Soil Classification exercise;
- Review of analytical data of soil sampled on-site at selected locations;
- Complete a Waste Soil Classification exercise.
- Document the Waste Soil Classification in terms of a report and bulk dig plans.

1.7. Limitations

This Waste Soil Classification (WSC) Report has been prepared for the sole use of Dublin City Council ("the Client"). No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by OCSC. This Report is confidential and may not be disclosed by the Client nor relied upon by any other party without the prior and express written agreement of OCSC.

This assessment is based on results from a site investigation undertaken in October 2020, a review of available historical information, environmental records, consultations, relevant information and reports from third parties. All information received has been taken in good faith as being true and representative. There was lack of accessibility to a former halting site area, located directly east adjacent to the former Pigeon Club building.

This report has been prepared in line with best industry standards. The methodology adopted and the sources of information used by OCSC in providing its services are outlined in this Report. The scope of this Report and the services are accordingly factually limited by these circumstances.

OCSC disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to OCSC's attention after the date of the Report.

The conclusions presented in this report represent OCSC's best professional judgement based on review of the relevant information available at the time of writing. The opinions and conclusions presented are valid only to the extent that the information provided was accurate and complete.

2. ENVIRONMENTAL SITE SETTING

2.1. Site Location

The site location is in Inchicore, Dublin 8 and comprises of a vacant grass field (former St. Michaels Estate), a former halting site, and four existing buildings.

The regional site location is illustrated on Figure 2.1 by the red star.

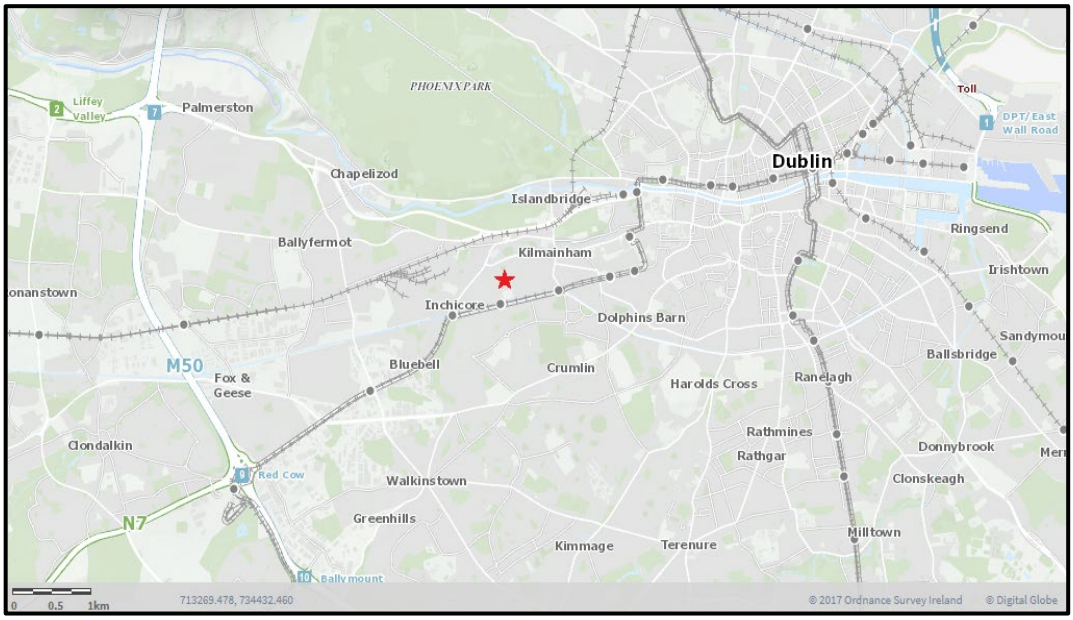


Figure 2.1 Regional Site Location (approximate site location indicated by red star. Source: OSI, 2020)

2.2. Surrounding Land Use

The surrounding area is residential with a mixture of residential, recreational and commercial/retail buildings.

North of the site is Emmet Road (R810), residential and commercial structures, Grattan Crescent Park and Richmond Park. East of the site is Patriots Path, St Michael's Estate Road, Saint Michael`s Church, Bulfin Court Day Centre, residential buildings, Inchicore Primary Care Centre and Richmond Barracks Cultural Centre with associated gardens and a vacant site. Further east is residential. South of the site is Goldenbridge Cemetery and the Common Ground Art building. Further south is the Grand Canal, the Luas Line transport link (red line), Davitt Road (R812) and residential buildings. West of the site is St. Vincent Street West, residential buildings, commercial businesses and retail outlets.

Refer to Figure 1.2 in Section 1 for an aerial photograph of the site. The adjacent land uses are listed in Table 2.1 below.

Table 2.1 – Adjacent Land Uses

BOUNDARY	LAND USE
North	Emmet Road (R810), residential and commercial structures, Grattan Crescent Park and Richmond Park.
East	Patriots Path, St Michael's Estate Road, Saint Michael`s Church, Bulfin Court Day Centre, residential buildings, Inchicore Primary Care Centre, Richmond Barracks Cultural Centre with associated gardens, a vacant site.
South	Goldenbridge Cemetery, Common Ground Art building, The Grand Canal, The Luas line transport link (red line), Davitt Road (812), residential buildings.
West	St Vincent Street West, residential buildings, commercial and retail businesses.

2.3. Site History

An understanding of the site history was gained by undertaking a review of the following primary sources including:

- Review of available extracts of historical Ordnance Survey of Ireland (OSI) maps at http://map.geohive.ie/mapviewer.html;
- Review of information held by the Environmental Protection Agency (EPA) EnVision online Mapping;
- Aerial images available of the site (OSI, Google Earth and Google Maps);
- Geological Survey of Ireland (GSI) online map tool at https://dcenr.maps.arcgis.com/apps/MapSeries/index.html;
- National Parks and Wildlife Service online map tool; and
- Richmond Barracks history website at http://www.richmondbarracks.ie/history/keogh-square/.

2.4. Site Development

The following section outlines the historically mapped features in the immediate environs of the site.

The 6" historical map dated 1837-1842 shows the site as part of the western portion of the Richmond Barracks, a military complex inside the Goldenbridge North Townland. The site is comprised of building structures along the perimeter of the site with an open area in the centre.

To the east boundary of the site is the remaining eastern portion of Richmond Barracks military camp buildings, vacant lots, the Maria Mount, the Rosetta Cottage, the Art Mount and Harcourt Lodge.

To the north of the site is a roadway, a vacant lot and the Susan Vale's Lake connected to an unnamed river. The roadway heads from southwest to northeast and connects to an avenue to the west. The avenue runs from the southwest to the northeast.

To the south of the site is a cemetery with a R.C. Chapel, a Guard House, and Grand Canal. To the southeast of the site was an extension of the military camp area and, the Mount Shannon Mills on the south border of to the canal.

To the west of the site was an area of building structures, agricultural areas, a weir, vacant lots and a roadway. The structures include Richmond Spa, the Meeting House, the Infant School, the Spa Cottage, the Richmond Cottage, the Goldenbridge House and the Paper Mill.



Figure 2.2. Approximate site boundary indicated by red line on a 6 inch historical map dated 1837-1842 (Source: OSI, 2020).

The 25" historical map (1888-1913) (Figure 2.3) shows the site area occupied by the military structure of Richmond Barracks with additional buildings along the northern and southern sections of the site, including a Church in the northeast.

The main road on the north boundary was identified as Emmet Road. A tramway, Post Office and a Church are depicted north of the site. The Susan Vale's lake on the north was converted in a Mill Pond, and the river connected to the lake was then identified as Cammock River.

East of the site is depicted with additional buildings to the Richmond and Barracks military camp. South of the site are additional buildings close to the Mount Shannon Mills. West of the site is depicted with building developments, including Tramway

Depot, St. Vincent's Industrial School, St. Josephs Industrial School, Convent School, Christian Brothers School and St. Vincent's R.C. Church.

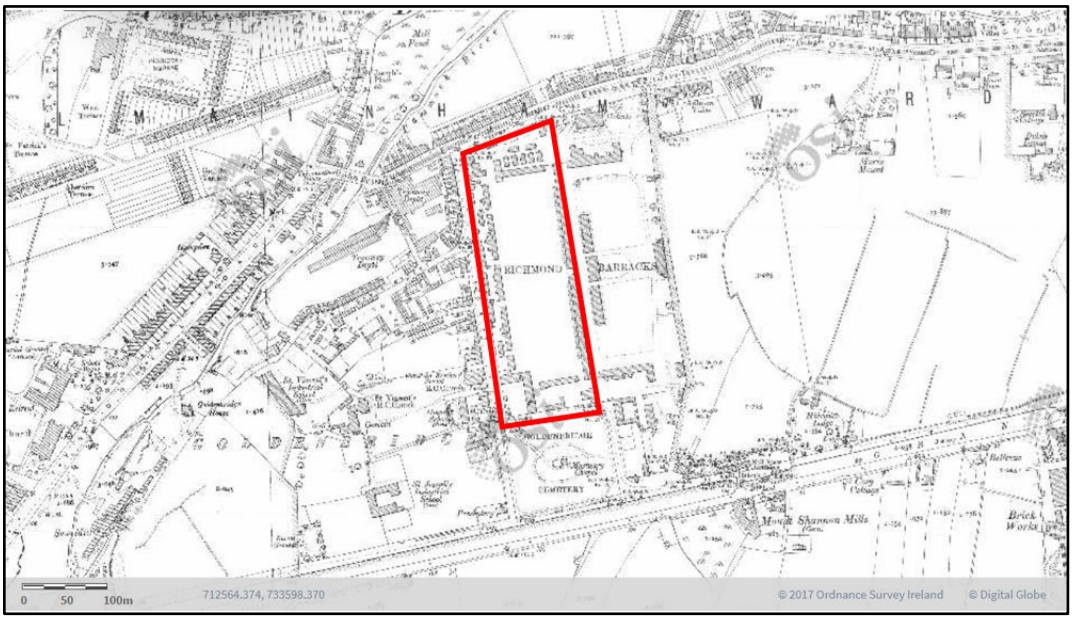


Figure 2.3. Approximate boundary of the subject site indicated by a red line on historic 25 inch map (1888-1913) (Source: OSI, 2020)

The 6" Cassini historical map (Figure 2.4) identifies a change to the layout of Richmond Barracks which appears to have been divided and converted into residential buildings and a school.

The site is occupied by Keogh Square and a main building block (residential) in the centre surrounding by other (residential) structures. Dispy and an unidentified building were depicted in the northern section of the site and residential buildings and Bulfin Street were depicted in the southern section of the site.

The surrounding general area is depicted with residential developments and additional building structures. Richmond Park is depicted north of the site. A school, residential structures, Connolly and Goldenbridge Avenues depicted east of the site. A Paint and Varnish Factory is depicted circa 150 meters to the south side of the Grand Canal. A Chassis Works, Omnibus Works and Saw Mills are depicted approximately 40 m, 150 m and 320 m to the west of the site, respectively.

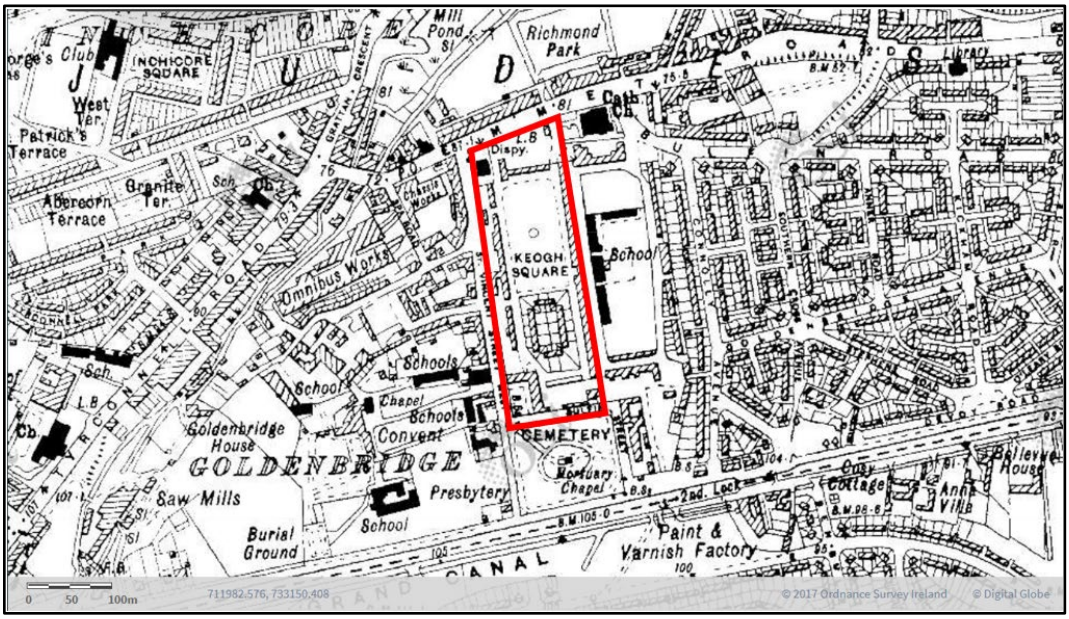


Figure 2.4. Approximate site boundary indicated by red line on a 6 inch Cassini map (1830 - 1930). (Source: OSI, 2020)

From a review of the Ordnance Survey Ireland aerial images, the earliest 1995 aerial image (see figure 2.5) and 2000 aerial image (refer to figure 2.6) show the site area has undergone many changes when compared with the 6" Cassini historical map (Figure 2.4). Keogh Square and related structures on the site gave way to St Michael's council estate (residential), which consisted of seven apartments/flat complex buildings separated by open areas within site. The north section of the site was occupied by playing yards, a halting site east adjacent to the Pigeon Club and three building structures.

North of the site, Susan Vale's Lake was converted into an open green area. East of the site, replacing the old school depicted in the 6 Inch Cassini Map, residential structures were built, Richmond Barracks Museum, and Hollybrook Lodge Residential Units (hospital care). Additional buildings are depicted south and west of the site.



Figure 2.5. Approximate boundary of the subject site indicated by a red line on historic 25 inch map (1995) (Source: OSI, 2020)



Figure 2.6. Approximate boundary of the subject site indicated by a red line on the 2000 aerial image (Source: OSI, 2020)

The aerial images dated 2005 - 2012 (refer to Figure 2.7) shows that three of the seven buildings of the St Michaels Estate were demolished at the time of the images.

Development of residential housings is depicted at Bulfin Court. The residential properties which bound the barracks to the south had undergone demolition post-dating 2000.



Figure 2.7. Approximate boundary of the subject site indicated by a red line on the 2005-2012 aerial image (Source: OSI, 2020)

Analysis of aerial images from 2013 – 2018 (refer to Figure 2.8) shows the site in its current form with the St. Michaels estate fully demolished thereby leaving open space which remains now as a grass field. On the north of the site, the Inchicore Community Sports Centre was built, one of the northern buildings was partially demolished and the other three buildings remain similar to what they were in the aerial images dated 2005 - 2012 (refer to Figure 1.2). The halting site is depicted as demolished.



Figure 2.8. Approximate boundary of the site indicated by a red line on the 2013-2018 aerial image (Source: OSI, 2020)

2.5. Site Physical Setting

Information regarding the site topography, hydrology, geology, hydrogeology and ecology of the area has been obtained from records held by the Geological Survey of Ireland (GSI), Environmental Protection Agency (EPA) Envision online mapping tool, Ordnance Survey of Ireland (OSI), Water Framework Directive Maps and National Parks and Wildlife Service (NPWS) databases.

2.5.1. Topography

The topography of the site varies from 28.70mAOD in the southwest corner to 22.81mAOD in the northern end.

Contour lines decrease from southwest to northeast. Land Survey and Elevation maps for existing and nearby buildings and for adjacent streets are in Appendix B.

2.5.2. Area of Geological Interest

GSI online mapping service was consulted regarding areas of geological interest in the area of the site. The nearest area of geological heritage is the Phoenix Park (site code DC009) which is located approximately 0.9 km north of the site. The site comprises an extensive natural landscape scanning out over an area of 707 hectares (ha). The site is designated due to the complexity of the native glacial sediments. Refer to Figure 2.9 from the GSI online mapping for further information.

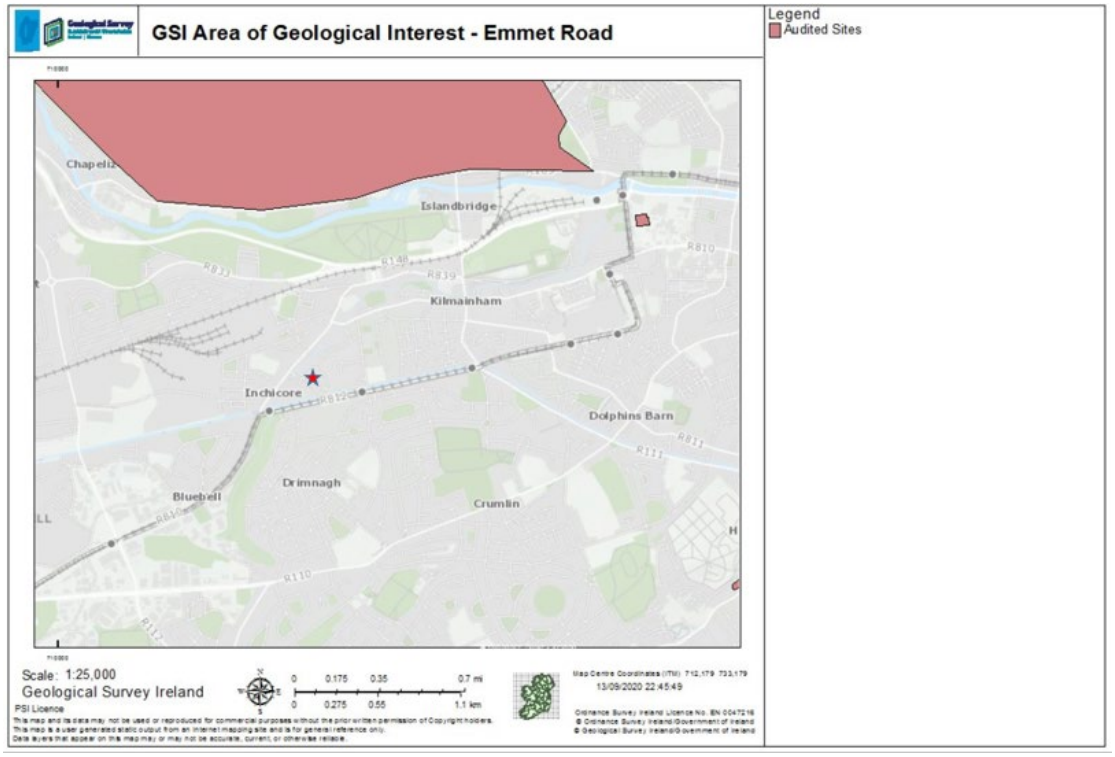


Figure 2.9 Area of Geological Interest (Approximate site location indicated by the red star) (Source: GSI, 2020)

2.5.3. Unconsolidated Geology

The topsoil beneath the site and the immediately surrounding area have been classified as Made ground. Refer to Figure 2.10 from the GSI online mapping for further information.

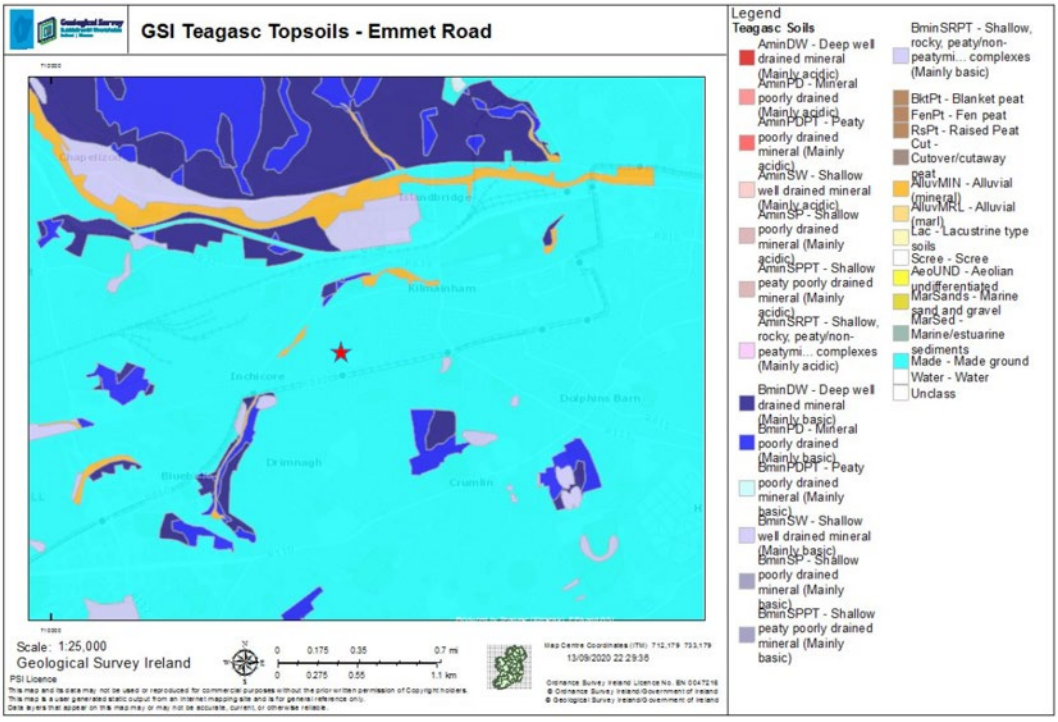


Figure 2.10. Teagasc Topsoils (Approximate site location indicated by the red star) (Source: GSI, 2020)

2.5.4. Unconsolidated Geology

The Quaternary geology of Ireland – Sediments Map is a representation of the surficial geology of Ireland at a scale of 1 to 50,000. The map shows the sediments mapped within 1 metre of the surface which were laid down during the quaternary, bedrock at or close to the surface water bodies or made ground. Quaternary sediments are categorised according to their genesis. The main types of sediment recognised are tills, (glacio) fluvio/lacustrine deposits, alluvium, lacustrine sediments and peat. Bedrock and karstified bedrock at or close to the surface are also mapped out as separate units." The Quaternary sediments have been described beneath the site as `tills derived from limestones`. Refer to Figure 2.11.

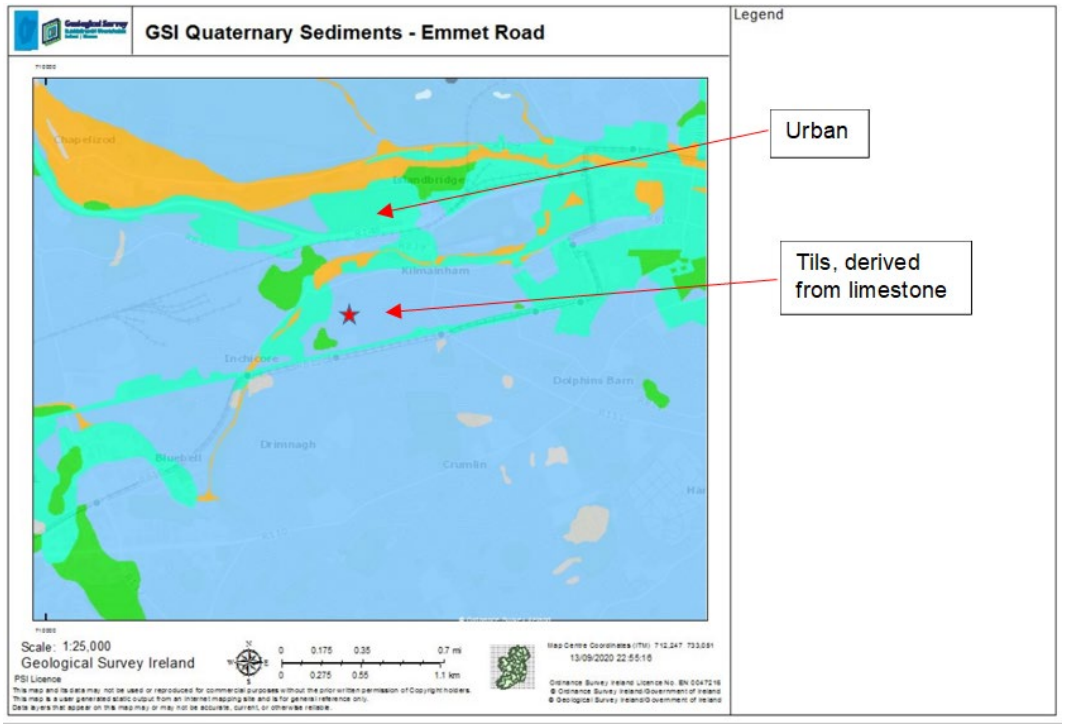


Figure 2.11 Quaternary Sediments (approximate site location indicated by red star)

2.5.5. Geology

The bedrock beneath the site area consists of the Carboniferous Lucan Formation, which is dark limestones and shale. "The formation comprises dark-grey to black, fine-grained, occasionally cherty, micritic limestones that weather paler, usually to pale grey. There are rare dark coarser grained calcarenitic limestones, sometimes graded, and interbedded dark-grey calcar" (GSI). The local geology mapped by the GSI is illustrated on Figure 2.12.

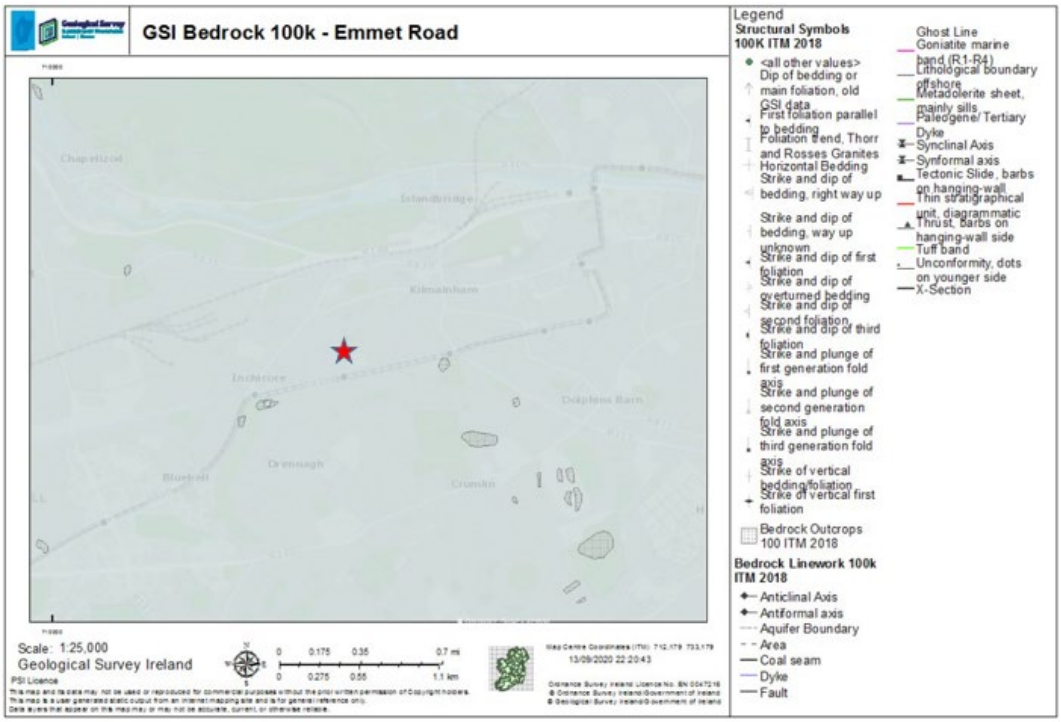


Figure 2.12. Bedrock 100K (Approximate site location indicated by the red star) (Source: GSI, 2020)

2.5.6.Aquifers

The GSI provides a methodology for aquifer classification based on resource value (Regionally Important, Locally Important and Poor) and vulnerability (Extreme, High, Moderate or Low). Resource value refers to the scale and production potential of the aquifer whilst vulnerability refers to the ease with which groundwater may be contaminated by human activities (vulnerability classification primarily based on the permeability and thickness of subsoils).

The site is underlain by a LI - locally important aquifer which spans out/covers an area of 1,309 km^2. The bedrock Aquifer is moderately productive only in local zones. (Refer to Figure 2.13).

The limestone is part of the Dublin Urban Ground Water Body (GWB) which is described as poorly productive. The GWB covers an area of 837km^2 over the Dublin area and towards Kildare. The GSI Summary Characteristics of the Dublin GWB identify that the transmissivity of these rock units are likely to be low (1-10m^2/d).

Most flow in this aquifer will occur near the surface in fractures. In general, the effective thickness of this aquifer is likely to be about 10 m, comprising a weathered zone of a few metres and a connected fractured zone below this. However, deep water strikes are commonly found in more isolated faults/ fractures at depths of 30 – 50 mbGL. Flow path lengths are not considered to be on a regional scale and are typically less than 1km in length.

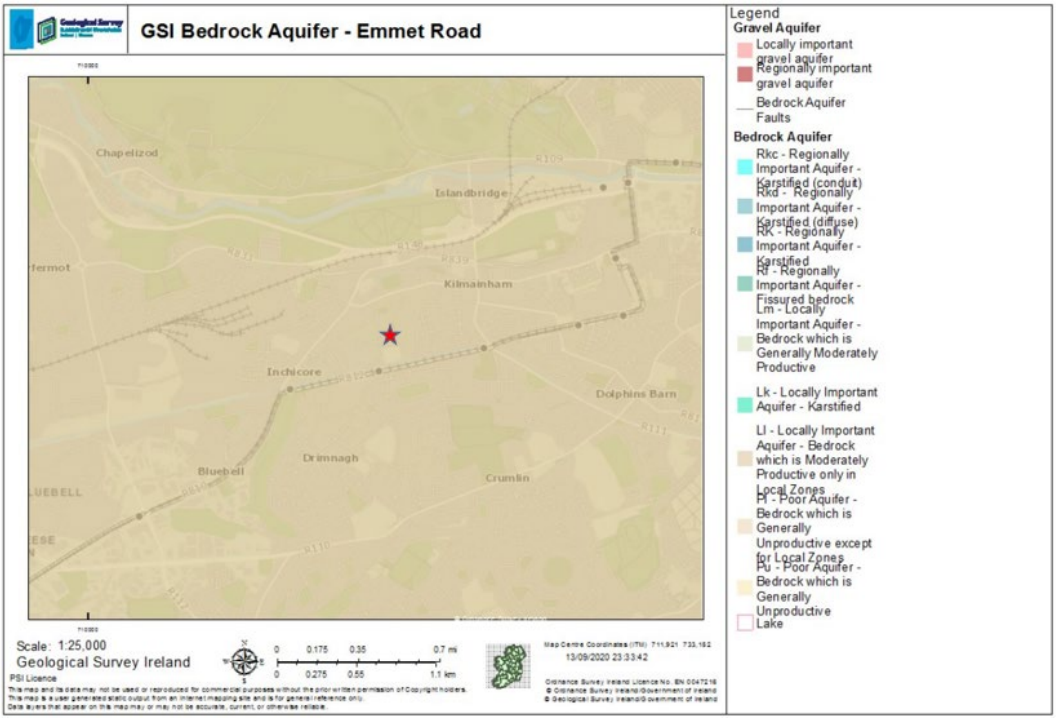


Figure 2.13 Aquifers (Approximate site location indicated by the red star) (Source: GSI, 2020)

2.5.7. Aquifer Vulnerability

The groundwater vulnerability beneath the site is ***High*** and there are localized ***Extreme*** zones within 0.6 km southeast and southwest of the site, refer to Figure 2.14 (GSI). Vulnerability ratings are related to a function of overburden thickness and permeability which might offer a degree of protection and/or attenuation to the underlying aquifer from surface activities and pollution.

There were no karst features identified adjacent to the site.

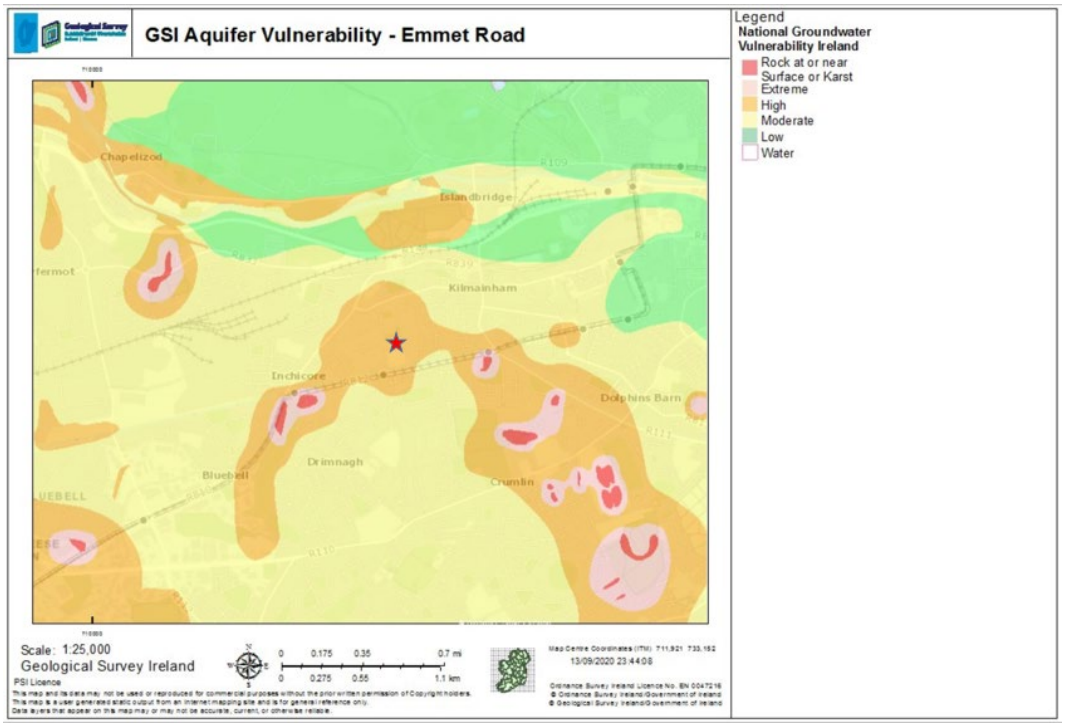


Figure 2.14 Groundwater Vulnerability (Approximate site location indicated by the red star) (Source: GSI, 2020)

2.5.8. Groundwater Status

An assessment carried out under the Water Framework Directive (WFD) 2013-2018 groundwater body (EPA, 2020) has concluded that the groundwater within the bedrock aquifer is presently of 'Good Status'. Accordingly, the objective is to protect the "Good Status" by recognizing that the quality of groundwater is at risk due to point and diffuse sources of pollution. Refer to figure 2.15.

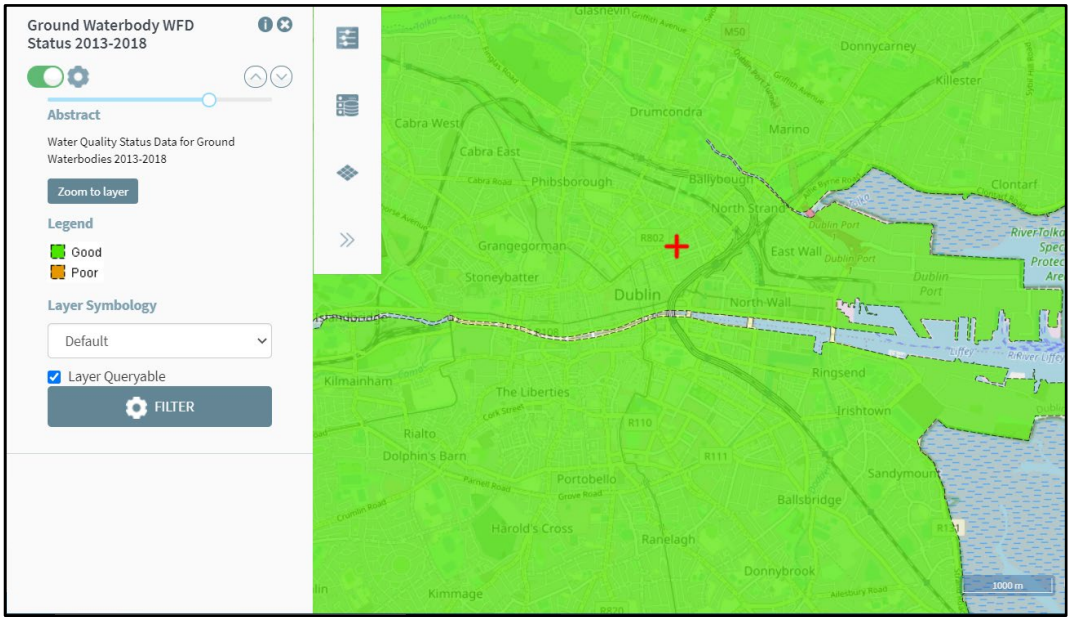


Figure 2.15 WFD Status 2013-2018 (Approximate site location indicated by the red cross star) (Source: EPA maps, 2020)

According to the Water Framework Directive Classification Scheme, the WFD Risk Scoring System has identified a groundwater water body risk status of 'Not at risk' of deteriorating or being at less than Good status in the future for the Dublin bedrock aquifer (see Figure 2.16).

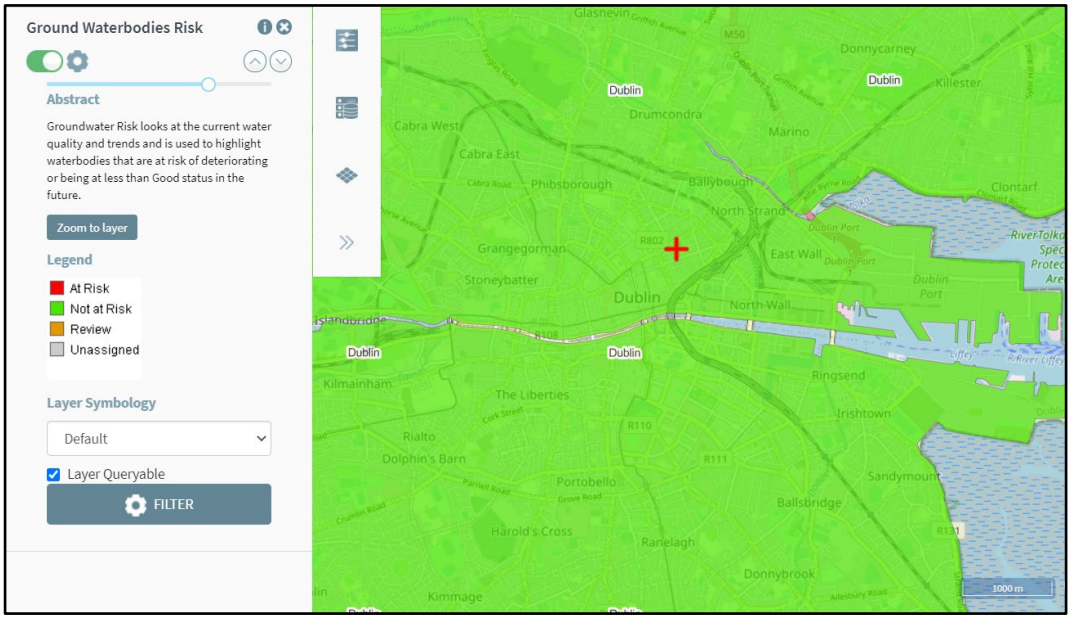


Figure 2.16 WFD Risk Status (Approximate site location indicated by the red cross) (Source: EPA maps, 2020)

2.5.9. Groundwater Recharge

Diffuse recharge generally occurs via rainfall percolating through the subsoil and reaching the aquifer. Recharge is higher in areas where the subsoil is thinner and/or more permeable. The proportion of the effective rainfall that recharges the aquifer is largely determined by the thickness and permeability of the soil and subsoil, and by the slope.

The GSI's groundwater recharge model parameters for the site are summarised in Table 2.2. Figure 2.17 contains a drawing from the GSI indicating the recharge zone. This does not account for leakage to ground from water supply, storm drains and sewers.

The site lies above part of the Dublin Groundwater Body (GWB) described by GSI Summary as mostly Locally Important (LI) aquifer, which is moderately productive only in local zones. The GWB covers an area of 1,309 km2 under the Dublin area and areas southwest.

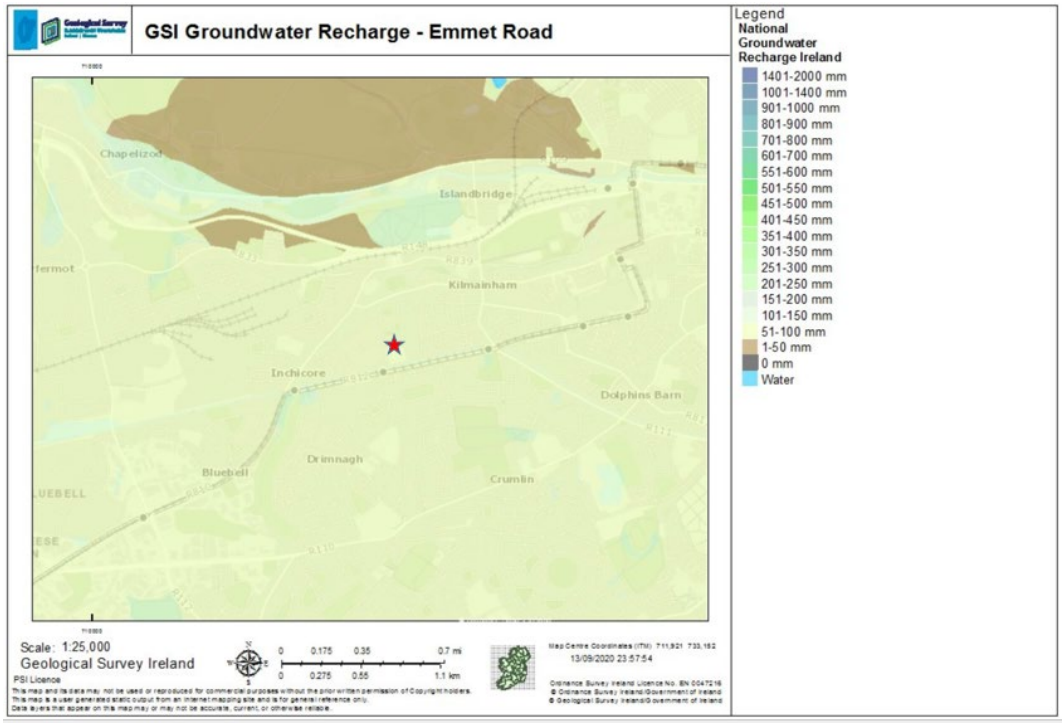


Figure 2.17 Groundwater Recharge (Approximate site location indicated by the red star) (Source: GSI, 2020)

Table 2.2 GSI Groundwater Recharge Parameters

Groundwater Recharge Parameters	
Average Recharge (mm/yr):	70
Hydrogeological Setting Description:	Made ground
Soil Drainage:	MADE
Subsoil Type:	Made
Subsoil Description:	Made ground
Subsoil Permeability:	L
Subsoil Permeability Description:	Low
GW Vulnerability:	H
GW Vulnerability Description:	High
Aquifer Category:	LI
Aquifer Category Description:	Locally important aquifer- Bedrock which is moderately productive only in local zones
Recharge Coefficient (%):	20
Maximum Recharge Capacity (mm/yr):	200
Effective Rainfall (mm/yr):	350

2.5.10. Wells & Springs

A search of the GSI groundwater well database was conducted to identify registered wells in the surrounding area. The well in closest proximity to the site is located approximately 1.3 km to the south/southeast of the site in Drimnagh, Dublin 12. It was drilled on 4th January 1996. The depth of this well is 3.3 m and the purpose of this well remains unknown. The second nearest is a borehole drilled on 1st August 1949 with 41.1 meters depth for industrial use.

The GSI (1999) also provides a framework for the protection of groundwater source zones (e.g. areas of contribution to water supply bores). There are no reported source protection zones (SPZs) within a 20km radius of the site.

Mapped wells and springs in the general vicinity of the site identified by the GSI are illustrated on Figure 2.18.

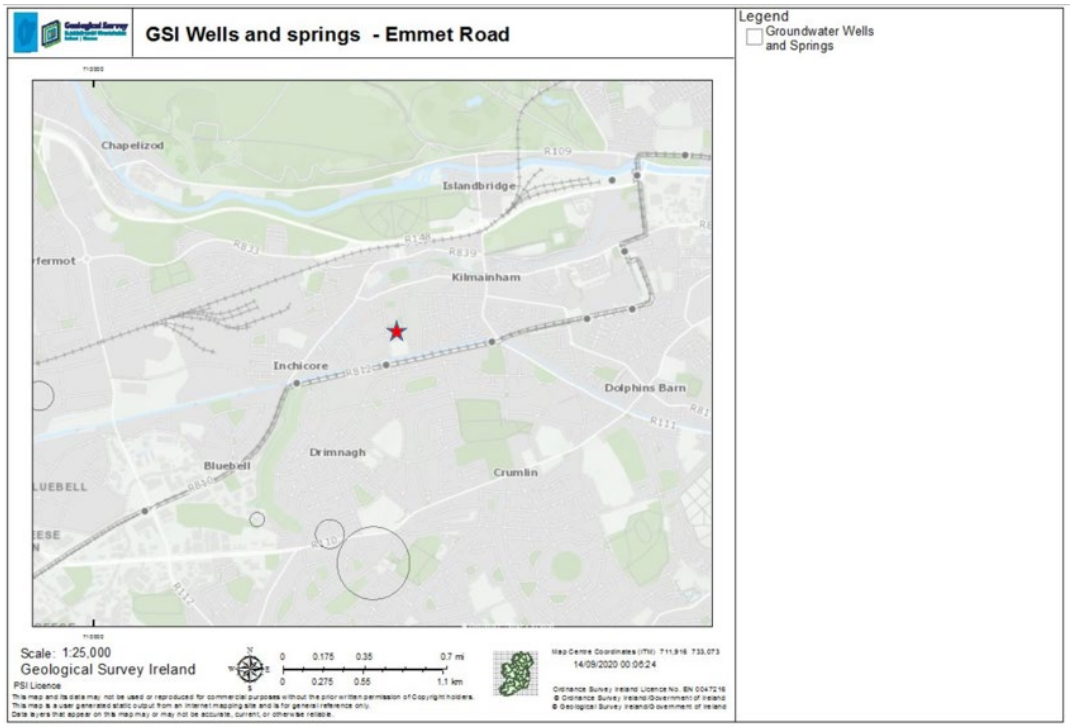


Figure 2.18 Wells and springs (Approximate site location indicated by the red star) (Source: GSI, 2020)

2.5.11. Hydrology

The Grand Canal, at its closest point, is located approximately 0.11 km south of the site and flows in a west to east direction. The status of the Grand Canal has been designated as 'Good'. The Camac River is approximately 0.07 km northwest of the sites boundary (NW), and has been given a 'Poor' WFD. The River Liffey is found c. 0.65 km directly north of the site and has been identified as a river waterbody with a 'Moderate' status, according to the WFD scoring system. Refer to Figure 2.19.

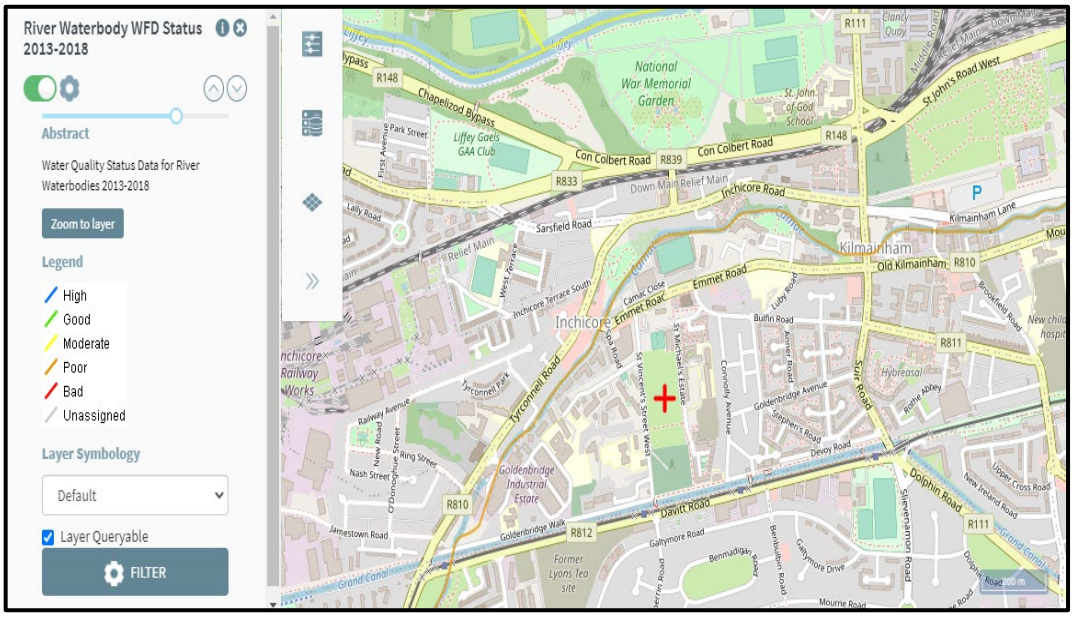


Figure 2.19 River Waterbody Status 2013-2018 (Approximate site location indicated by the red star) (Source: EPA, 2020)

The status of the Grand Canal has been designated as 'Not at Risk' under the WFD (EPA, 2013-2018). Conversely, the Camac River and River Liffey are both identified as 'At Risk' river waterbodies on the River Risk scoring system. Refer to Figure 2.20.

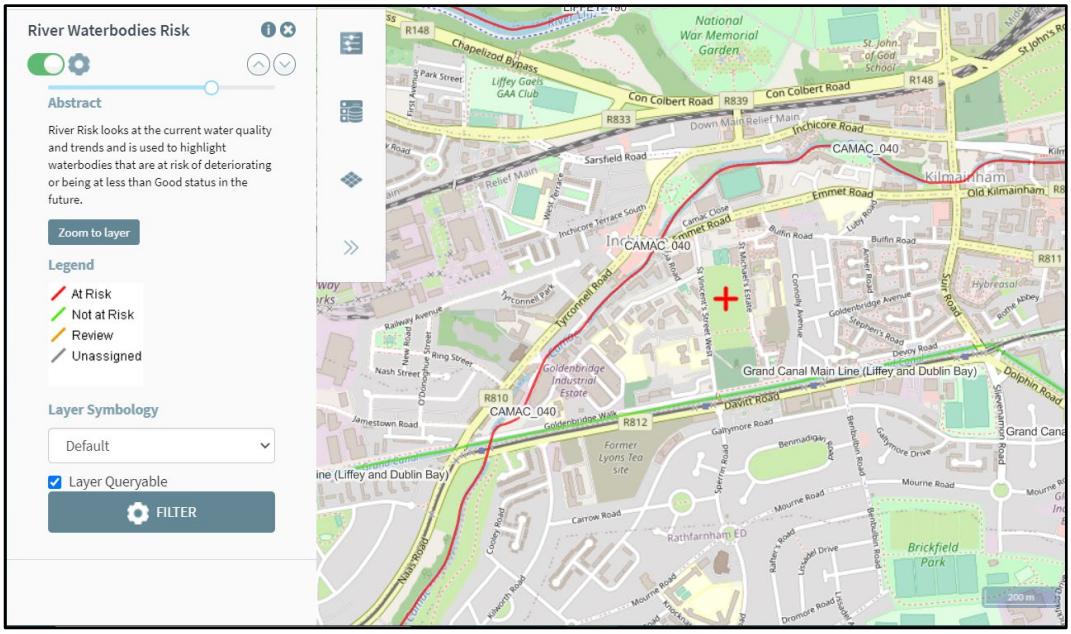


Figure 2.20 WFD Risk score 2013- 2018 (Approximate site location indicated by the red star)(Source: EPA, 2020)

2.5.12. Radon

According to the EPA (now incorporating the Radiological Protection Institute of Ireland) between one and five percent of the homes in this 10 km^2 grid square are estimated to be above the Reference Level of 200 Bq/m^3. This is considered a low-medium ranking score. Refer to Figure 2.21.

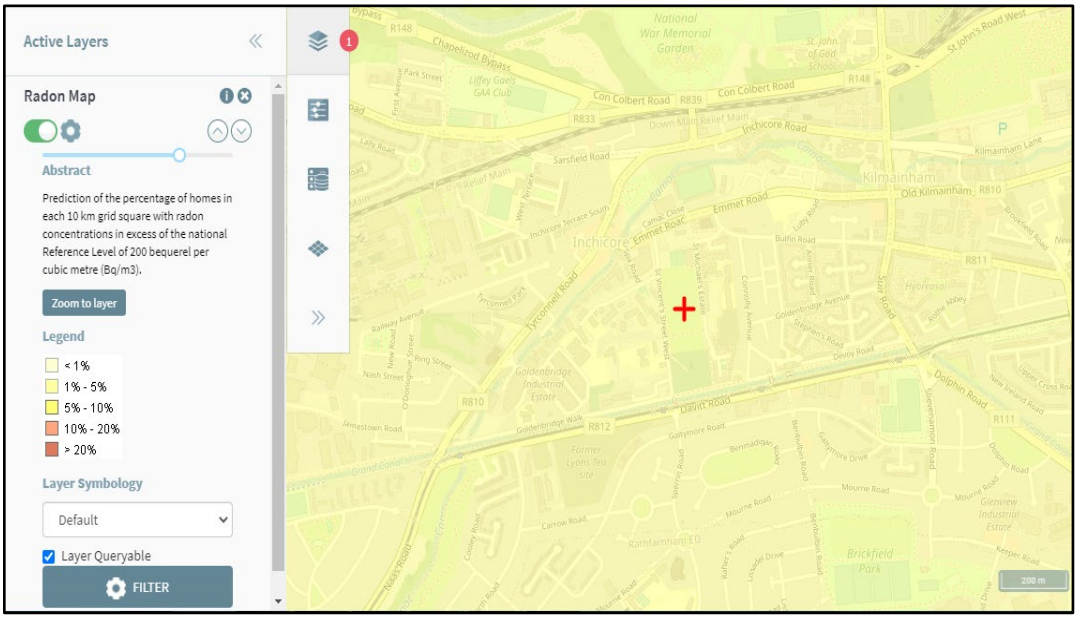


Figure 2.21 Radon Map (EPA, 2019) (Approximate site location indicated by the red star)(Source: EPA, 2020)

2.5.13. Designated Area of Conservation

The nearest European designated site is South Dublin Bay and River Tolka Estuary Special Protection Area, (SPA) and is 6.3km northeast of the site. The SPA site code for this is feature is 004024. The nearest designated area of conservation is the Grand Canal located ca.100 meters to the south of the site (refer to figure 2.22). The Proposed Natural Heritage Area (pNHA) site code for this feature is 002104.

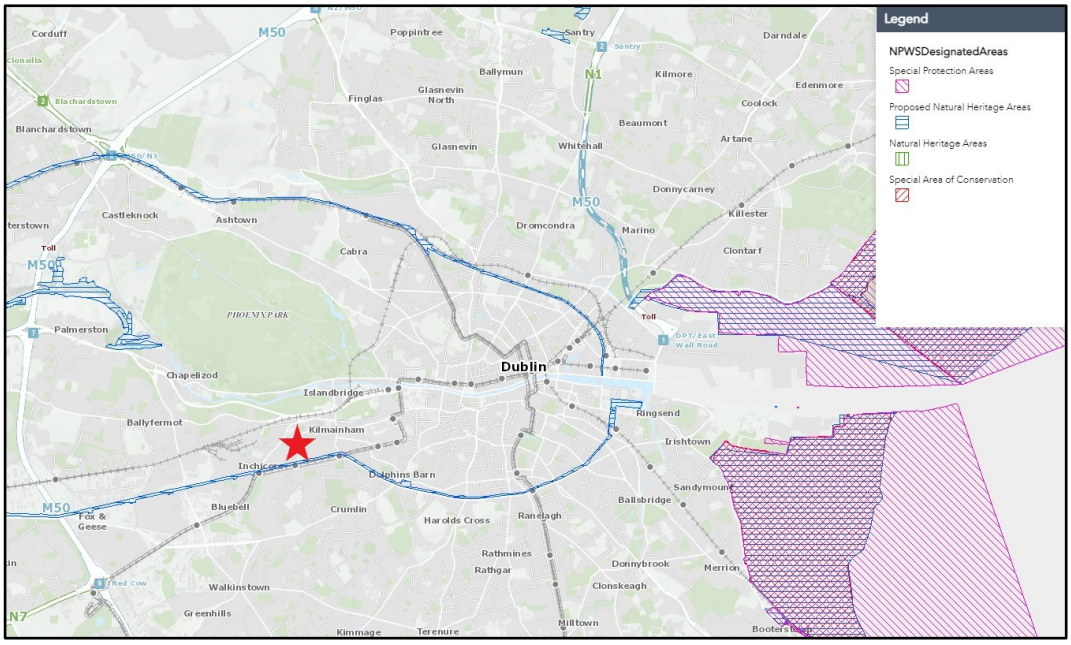


Figure 2.22 NPWS Designated Area (approximate site perimeter location indicated by red line)

2.5.14. Summary of the Physical Site Setting

Summary of the site physical setting are outlined in Table 2.3.

Table 2.3 Summary Site Setting

FEATURE	DETAILS & COMMENTS
Topography	The site is relatively flat with a fall from south to north of approximately 6m.
Geology	**Topsoil and Subsoil:** Made ground and 'Urban'.
	Solid Geology: According to GSI data, the bedrock geology beneath the site is underlain by Carboniferous Lucan Formation comprising dark limestones and shales
Hydrogeology	**Aquifer Classification:** ***LI -*** Locally Important which is moderately productive only in for local zones
	Vulnerability & Recharge: The vulnerability has been classified as ***High***. The maximum recharge capacity has been modelled at 200 mm/year.
	Groundwater Flow: The regional bedrock groundwater flow direction is from the southwest to the north and east of the site.
	Well Search: There were no Source Protection Zones identified and therefore the assumption is that there are no public supply wells within a 20km zone. The nearest registered borehole is located approximately 1.4 km to the south/southeast of the site in Drimnagh. It was drilled on January 4th, 1996, to a depth of 3.3m. The function or purpose of this borehole remains unknown. The second nearest is a borehole drilled on August 1st 1949 with 41.1 meters depth for Industrial use.
Hydrology	**Surface Water Courses:** There are no surface watercourses on the site. The Grand Canal main line, the Camac river, and the River Liffey are 110m, 70m and 650m respectively, from the site. The WFD

	scoring is 'Good' for Grand Canal, 'Poor' for Camac and 'Moderate' for the Liffey. Grand Canal was designated 'Not at Risk'; River Liffey and River Camac are designated 'At Risk'.
Designated sites	The nearest European designated site is South Dublin Bay and River Tolka Estuary Special Protection Area, (SPA) and is 6.3km northeast of the site. The nearest designated area of conservation is the Grand Canal located ca.100 meters to the south of the site.

2.6. Site Walkover

OCSC undertook a site walkover survey at the site in October 2020. Photographs taken during the site investigation are included in Appendix C. The main observations of the survey are summarised below.

2.6.1. Infrastructure

Four buildings were on-site, including the Pigeon Club, Inchicore Community Sports Center, EVE Tusicint Health Building and St. Michaels Parish Community Center. The Pigeon Club building was demolished in November 2020 to ground level. The former halting site located directly east of the Pigeon Club, was not accessible, was bounded by stone walls and inside contained large boulders, shrubs, trees and fly-tipped waste.

2.6.2. Waste

The entire site is littered with general waste and domestic waste, with evidence of fly-tipping, in addition to routine waste burning noted throughout the ground investigation works in the site area.

2.6.3. Surface Waterbodies

No surface waterbodies were observed during the site walkover. Camac River at its closest is 0.07km northwest of the site and the Grand Canal is 0.11km south of the site.

2.6.4. Monitoring Infrastructure

No monitoring infrastructure was observed during the site walkover.

2.6.5. Asbestos

No asbestos was observed during the site walkover. However, waste was routinely littered onto the site throughout the ground investigation and therefore there is potential for Potentially Containing Asbestos Material (pACM) within the flytipped waste.

3. SOIL CLASSIFICATION

3.1. Hazardous Waste Assessment

To comply with S.I. 233 of 2015 a hazardous waste assessment was carried out utilising HazWasteOnline software using classification engine WM3.v1.1. The software enables the user to review the total pollutant content analysis in terms of any hazardous properties the material may have. The material is assessed against an array of hazardous property thresholds as prescribed in the relevant regulations and guidance.

Soil Classification tables and drawings that detail the soil sampling and laboratory analysis carried out to classify the material as required under S.I. 233 of 2015, Waste Management Act and Landfill Directive will be made available to the contractor as required. These will provide information to allow the Contractor to manage any material which requires export from the site.

The site was prepared with approximate 25mx25m grid spacings with samples taken within each grid within 1m bands down through the strata.

Laboratory Analysis Certificates are attached in Appendix D

The HazWasteOnline (HWOL) Reports are attached in Appendix E.

Waste Soil Classification Grids are attached in Appendix F.

3.2. Waste Acceptance Criteria Assessment

The leachate analysis results and a selection of total pollutant content results have been compared with the thresholds for acceptance of waste at inert, non-hazardous and hazardous landfill facilities as prescribed in the Landfill Directive. An additional category was included which is based on the Integrated Material Solutions Facility waste acceptance criteria which are the same as the inert criteria with the exception of total PAHs (100mg/kg) and a number of metal concentrations. The classification categories are outlined in Table 3.1.

The assessment for each sample is contained in the Waste Assessment Criteria Table at the end of the report and the Laboratory Analysis Certificates are contained in Appendix F.

While OCSC provide an opinion on which potential Receivers may accept any particular type of material, it is up to the individual Receivers to confirm they can accept the material (based on results, site acceptance criteria, void space, percentage of non-natural materials within made ground etc).

Table 3.1 Classification Categories

WASTE CATEGORY	TITLE	CLASSIFICATION CATEGORY	POTENTIAL OUTLET
Category A - Waste Permitted or Recovery Sites	Inert Waste Criteria	Reported concentrations less than inert waste guidelines, which are based on waste acceptance criteria set out by the adopted EU Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II of Directive 1999/31/EC (2002). Results found to be non-hazardous using the HazWasteOnline application. Generally only soil and stone free from anthropogenic contamination (e. g. physical contaminants brick, concrete etc <2%. Free from PAHs, Hydrocarbons, etc). Refer to Guidance on waste accceptance at authorised recovery facilities (EPA, 2020)	Potentially suitable for reuse or recovery subject to Planning and/or Waste Permissions and acceptance criteria.
B1 - e.g. IMS Landfill	Inert Licenced	Analytical results greater than Category A criteria but less than Category B2 waste guidelines, which are based on acceptance criteria set out by adopted EUC Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II of Directive 1999/31/EC (2002) no limit for TOC. Results found to be non-hazardous using the HazWasteOnline.	Disposal at Integrated Material Solutions (IMS) or Walshestown Restoration or similar
Category B2 - e.g. IMS Landfill Inert Inc. Limits	Inert Licenced with elevated limits	Analytical results greater than Category B1 criteria but less than non- hazardous waste guidelines, which are based on acceptance criteria set out by adopted EUC Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II of Directive 1999/31/EC (2002) no limit for TOC. Results found to be non-hazardous using the HazWasteOnline.	Disposal at Integrated Material Solutions (IMS) or Walshestown Restoration or similar
Category C1	Non–Haz Criteria	Acceptance Criteria as laid out in Waste Licence W0129-02 and W0254-01. Reported concentrations less than inert waste guidelines, which are based on waste acceptance criteria set out by the adopted EU Council Decision 2003/33/EC establishing criteria and procedures for the acceptance os waste at landfills pursuant to Article 16 and Annex II of Directive 1999/31/EC (2002) **with the exception of PAHs (Total 17 < 100mg/kg).** Results found to be non-hazardous using the HazWasteOnline application.	Ballynagran, Co. Wicklow W165-02. Drehid, Co. Kildare W0201-01. East Galway, Co. Galway W0178-02. Knockharley Co. Meath W0146-2 or similar or Export
Category C2	**Non–Haz Criteria but with trace asbestos**	Results as per C1 but with trace asbestos	Material will need to be disposed of at a licensed landfill if trace asbestos confirmed. If asbestos level is quantifiable then it may have to be disposed in N. Ireland
Category D	Hazardous	Analytical results found to be hazardous using the HazWasteOnline application.	Enva Portlaoise W0184-02 or direct Export.

NOTE: HazWasteOnline accessed through http:// hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1.1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

NOTE: Where material is sent for RECOVERY it does not incur the Landfill tax (currently €75/tonne)

NOTE: The classifications do not take account of any soil contaminated with invasive plant species.

NOTE: The list of facilities is non-exhaustive

NOTE: While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable. The regulations also allow Waste Receivers to agree increased specific limits (e.g. TOC, Sulphates) following Risk Assessment, agreement with the EPA and notification of the EC.

3.3. Waste Codes

Two main soil types and one main rock type were observed during the site investigation:

- MADE GROUND – MADE GROUND depths varied throughout the site, and some surface layers consisted of tarmac or concrete, while others consisted of grass topsoil at the surface layer. Brown silty sandy gravelly CLAY with fragments of mortar, concrete, plastic, timber, glass, and bricks. Multiple brick building structures were observed at varying depths.
- NATIVE – Brown-dark brown firm sandy gravelly CLAY. Dark grey sandy gravelly CLAY with cobbles and boulders.
- BEDROCK – Bedrock was encountered at varying depths throughout the site from 3.05mbgl to 12.6mbgl. Strong thinly laminated grey fined argillaceous LIMESTONE with occasional calcite veins interbedded with weak to medium strong thinly laminated black fine grained calcareous MUDSTONE with pyrite lamination.

Details of waste types, their respective waste codes (List of Waste) are included in Table 3.2:

Table 3.2. Waste Types

Description	LOW Code
SOIL and STONES containing hazardous substances	17 05 03*
SOIL and STONES with construction and demolition waste	17 05 04

3.4. Summary of Soil Classification to Date

Table 3.3 summarises the soil assessment carried out on samples from the site investigation at Emmet Road. The full results of the soil classification including their comparison against the Irish landfill acceptance criteria are compiled in the table presented at the end of the report.

Table 3.3 Soil Classification Results (in situ samples only)

A	B1	B2	C1	C2	D	D
Inert – Waste Permitted or Recovery Sites	e.g. IMS Landfill	e.g. IMS Landfill Inert Inc. Limits	Non-Haz	Non-Haz Quantifiable asbestos	Hazardous	Hazardous with Asbestos > 0.1%
11	98	30	26	1	16	1

183 total samples were included in this WSC analysis.

3.5. Asbestos fibres and sheeting fragments

All of the soil samples collected from the sample locations were submitted to IOM laboratories for asbestos identification and quantification, if required. Results confirmed that all but two of the 183No. samples were negative for asbestos. The two samples containing quantifiable levels were from two hotspots with percentages of 0.003% and 0.176% chrysotile identified in TP19 (2-3mbGL) and WS13 (0-1mbGL), respectively.

There were no asbestos fragments identified during the works. In the event visible asbestos sheeting/fragments is observed or in the instance of WS13 0-1mbgL, have concentrations in excess of 0.1% asbestos, then the soil is typically treated as Hazardous soil.

4. CONTRACTOR REQUIREMENTS AND RECOMMENDATIONS

The following section outlines requirements and recommendations which the Contractor is required to implement regarding the management of waste soil throughout the project.

4.1. Watching Brief

It is possible that unknown isolated hotspot areas which could contain potential contamination could be present on site.

Should the contractor encounter any ground conditions which differ from those outlined in this report and/or the ground investigation reports they should suspend works in that area and notify the Client or their representative.

The contractor is required to ensure that no cross-contamination and/or mixing of materials of different waste categories occurs on site.

4.2. Export from Site

All excavated soil and wastes requiring export from the site, for recovery or disposal offsite, shall require waste classification. Waste classification shall be carried out by a suitability qualified and experienced person via sampling and analysis following best industry practice and relevant legislation including:

- List of Waste & Determining if Waste is Hazardous or Non-Hazardous (EPA, 2015);
- European Waste Framework Directive (2008/98/EC);
- Guidance on the classification and assessment of waste, Technical Guidance WM3 (EA et al, 2015);
- EU Council Decision 2003/33/EC and 1999/31/EC (2002);
- European Union (Properties of Waste which render it Hazardous) Regulations 2015 – S.I. 233 of 2015;
- EC Classification, Labelling & Packaging Regulations (No. 1272/2008).

Written confirmation shall be obtained from the proposed Receiver (either under an Article 27 Declaration or Waste Permission) in advance of materials being removed from site. All Waste Receivers and Waste Hauliers shall hold valid and appropriate permissions and shall be preapproved by the Client or their Representative.

Where material is to be exported out of the State it shall be carried out with the agreement of the TFS office and in accordance with all relevant legislation including:

- Waste Management (Movement of Hazardous Waste) Regulations, 1998 (S.I. No. 147 of 1998);
- The European Communities (Transfrontier Shipment of Hazardous Waste) Regulations, 1988 (S.I. No. 248 of 1988);
- The Basel Convention; and

- European Communities (Shipments of Hazardous Waste exclusively within Ireland) Regulations 2011 (S.I. No. 324 of 2011).

4.3. Documentation

Waste disposal shall be documented within a Waste Documentation System which shall be developed by the Contractor within the overall document management system for the works and shall be included in the Construction Management Plan (CMP). The documentation to be maintained in relation to wastes shall include the following:

- Details of all parties involved in the transport of material (including. Hauliers, Agents, Shipping details etc.);
- Details of the Waste Receivers including any intermediary facilities;
- Written confirmation of the acceptance and recovery/disposal of any hazardous waste consignments;
- The tonnages and Waste Code for all waste materials;
- Details of each individual consignment of waste including:
    - Docket number of consignment;
    - Date and time;
    - Name of Haulier, vehicle registration and Driver;
    - Volume/weight of consignment;
    - Description of material and origin (stockpile or cell number);
    - Name of receiving facility;
    - Date and time of arrival at receiving facility; and
    - Docket/weighbridge ticket number from receiving facility.
- All Waste Transfer Forms for hazardous waste.

The Contractor shall maintain an electronic register with the aforementioned details, as well as copies of all dockets from hauliers, and receivers. The Contractor shall provide regular reports to the Client or its representative including copies of the register and dockets if required.

5 CONCLUSIONS AND RECOMMENDATIONS

- The site for assessment is on Emmet Road at Inchicore, Dublin 8 and currently comprises of a vacant grass field (demolished former St. Michaels residential estate), a former halting site, a recreational club building, an employment building centre and a health community centre. The surrounding area is a mixture of residential, commercial/industrial/retail and recreational land use.
- The proposed development includes the provision of residential buildings in addition to commercial, retail and community facilities and all associated with new infrastructure, including roads, footpaths, services and landscaping.
- The former halting site, located directly east of the Pigeon Club, was not accessible during the site investigation and was bounded by stone walls and inside contained large boulders, shrubs, trees and fly-tipped waste.
- The ground investigation was completed between September to October 2020. In total 183No. soil samples were analysed from 68No. locations including boreholes, trial pits and window sampling.
- A total of 11No. samples have been identified as category A Inert, 98No. samples as category B1 Inert, 30No. samples as category B2 Inert Inc. Limits, 26No. samples as C1 Non-Haz, 1No. samples as C1 Non-Haz with Quantifiable asbestos, 16No. samples as D Hazardous and 1No. sample as D Hazardous with >0.1% asbestos.

5.1 Recommendations

- An asbestos survey should be completed in the buildings to be demolished or refurbished prior to the demolition of any buildings or removal of material.
- It is recommended that a watching brief is undertaken for asbestos containing materials or observed contamination to ensure the most appropriate disposal.
- As required, seek confirmation in writing from the individual facilities that they can accept the material as classified.
- Consider undertaking additional site investigation of the former halting site.

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Table

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Appendix A
Proposed Development Plans

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Appendix B
Topography

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Appendix C
Photographic Log

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Appendix D
Laboratory Analysis Certificates

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Appendix E

HazWasteOnline (HWOL) Reports

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Appendix F
Waste Soil Classification Grids

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Table

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/12733 WS05 24.25 1.00-2.00 **23.25 to 22.25** 16/09/2020	20/12733 WS05 24.25 2.00-2.90 **22.25 to 21.35** 16/09/2020	20/12733 WS01 24.29 0.02-1.00 **24.27 to 23.29** 16/09/2020	20/12733 WS01 24.29 1.00-2.00 **23.29 to 22.29** 16/09/2020	20/12733 WS01 24.29 2.00-2.70 **22.29 to 21.59** 16/09/2020	20/12733 WS09 24.51 0.00-1.00 **24.51 to 23.51** 16/09/2020	20/12733 WS09 24.51 1.00-2.00 **23.51 to 22.51** 16/09/2020	20/12733 WS09 24.51 2.00-3.00 **22.51 to 21.51** 16/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	A - Inert	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	A - Inert	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	A - Inert
Solid Waste Analysis																		
Total Organic Carbon [#]	<0.02	%		3	6	-	-	-	-	0.42	0.4	0.56	2.39	0.37	0.55	2.46	0.44	0.56
Loss On Ignition	<1.0	%						-	-	1.7	2	2.1	4.3	2	2.1	5.3	2.1	2.6
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs [#]	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 [#]	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	<0.22	3.73	<0.22	<0.22	4.09	<0.22	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	<0.64	5.98	<0.64	<0.64	7.34	<0.64	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	<30	<30	<30	<30	48	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	<0.02	0.04	<0.02	<0.02	0.04	<0.02	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	0.044	<0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	<0.03	0.04	0.04	<0.03	<0.03	0.11	<0.03	0.03
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.02	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.12	0.32	0.27	0.12	0.32	0.09	0.08	0.24
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	<0.03	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	3	6	3	<3	4	<3	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	<3	<3	13	4	4	<3	<3	<3
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	15	25	39	16	16	6	<5	14
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1047	0.098	0.104	0.1019	0.101	0.1043	0.0999	0.1005
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	40	30	30	30	30	50	20	30
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.62	8.44	8.29	8.42	8.38	8.4	8.61	8.59
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	<350	<350	580	370	430	680	430	420
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/12733 WS09 24.51 3.00-3.30 **21.51 to 21.21** 16/09/2020	20/12733 WS02 23.81 0.085-1.00 **23.72 to 22.81** 16/09/2020	20/12733 WS02 23.81 1.00-2.00 **22.81 to 21.81** 16/09/2020	20/12733 WS02 23.81 2.00-2.75 **21.81 to 21.06** 16/09/2020	20/12733 WS13 24.83 0.00-1.00 **24.83 to 23.83** 17/09/2020	20/12904 WS13 24.83 1.00-2.00 **23.83 to 22.83** 17/09/2020	20/12904 WS10 24.28 0.09-1.00 **24.19 to 23.28** 17/09/2020	20/12904 WS10 24.28 1.00-2.00 **23.28 to 22.28** 17/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	A - Inert	D - Hazardous with >0.1% Asbestos	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.67	0.81	0.42	0.57	1.88	1.06	0.93	0.33
Loss On Ignition	<1.0	%						-	-	1.7	2.1	2.3	1.9	2.2	2.7	1.7	2.5	1.6
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	1.84	<0.22	<0.22	14.65	4.43	1.01	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	3.32	<0.64	<0.64	27.43	8.45	1.81	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	<30	<30	<30	<30	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	0.03	0.03	<0.02	0.05	0.03	<0.02	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	<0.025	<0.025	0.038	0.056	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.05	<0.03	<0.03	<0.03	0.05	<0.03	0.04	<0.03
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.34	0.09	0.14	0.22	0.05	0.05	0.08	0.11
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	0.17	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	0.04	0.04	0.04
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	4	4	3	<3	5	4	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	25	<3	<3	<3	4	<3	<3	<3
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	70	<5	<5	13	17	19	200	<5
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.0996	0.1035	0.1039	0.0992	0.1086	0.1087	0.1097	0.1009
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	30	<20	30	20	60	40	30	30
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.41	8.44	8.53	8.66	8.47	8.3	8.32	8.6
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	580	<350	<350	<350	700	650	730	<350
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**Chrysotile - 0.176% Asbestos from ACM**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/12904 WS10 24.28 2.00-3.00 **22.28 to 21.28** 17/09/2020	20/12904 WS10 24.28 3.00-3.40 **21.28 to 20.88** 17/09/2020	20/12904 WS14 24.71 0.13-1.00 **24.58 to 23.71** 17/09/2020	20/12904 WS14 24.71 1.00-2.00 **23.71 to 22.71** 17/09/2020	20/12904 WS14 24.71 2.00-3.00 **22.71 to 21.71** 17/09/2020	20/12904 WS14 24.71 3.00-3.40 **21.71 to 21.31** 17/09/2020	20/12904 WS04 23.56 0.00-1.00 **23.56 to 22.56** 17/09/2020	20/12904 WS04 23.56 1.00-2.00 **22.56 to 21.56** 17/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non Haz Criteria	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non Haz Criteria	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.74	0.74	1.7	0.34	0.75	0.69	1.4	0.35
Loss On Ignition	<1.0	%						-	-	1.7	1.8	1.9	3.3	1.5	1.8	1.7	3.4	2
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	<0.22	0.79	<0.22	<0.22	<0.22	5.54	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	<0.64	1.36	<0.64	<0.64	<0.64	10.56	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	63	<30	<30	<30	<30	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.17	0.37	0.07	<0.03	0.05	0.35	0.08	<0.03
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.22	0.23	0.18	0.07	0.34	0.32	0.06	0.06
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	0.27	0.44	<0.03	<0.03	0.2	0.42	<0.03	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	0.05	0.04	0.04	0.05	0.05	0.04	0.05	0.04
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	0.0001	0.0004	<0.0001	<0.0001	<0.0001	0.0004	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	<3	5	<3	3	4	3	4
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	83	122	10	<3	58	123	<3	<3
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	220	268	169	16	149	333	12	<5
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.0964	0.1007	0.102	0.1024	0.0984	0.0991	0.1049	0.1061
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	40	50	<20	30	50	30	40	30
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.33	8.39	8.26	8.45	8.49	8.45	8.4	8.45
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	1451	1070	830	470	780	1181	660	580
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/12904 WS04 23.56 2.00-3.00 **21.56 to 20.56** 17/09/2020	20/12904 WS04 23.56 3.00-3.40 **20.56 to 20.16** 17/09/2020	20/12904 WS15 24.41 0.03-1.00 **24.38 to 23.41** 18/09/2020	20/12904 WS15 24.41 1.00-2.00 **23.41 to 22.41** 18/09/2020	20/12904 WS15 24.41 2.00-3.00 **22.41 to 21.41** 18/09/2020	20/12904 WS15 24.41 3.00-3.40 **21.41 to 21.01** 18/09/2020	20/12904 WS18 24.63 0.00-1.00 **24.63 to 23.63** 18/09/2020	20/12904 WS18 24.63 1.00-2.00 **23.63 to 22.63** 18/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non Haz Criteria	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.21	0.54	1.57	0.38	0.64	0.77	0.86	0.32
Loss On Ignition	<1.0	%						-	-	1.7	1.1	2.3	5.4	2.3	2.1	1.8	2.9	1.3
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	<0.22	0.45	<0.22	<0.22	<0.22	0.24	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	<0.64	0.81	<0.64	<0.64	<0.64	<0.64	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	<30	<30	<30	<30	<30	83	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	<0.02	<0.02	<0.02	0.03	0.04	<0.02	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	<0.03	<0.03	<0.03	<0.03	0.14	0.24	<0.03	<0.03
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.1	0.13	0.07	0.18	0.2	0.19	0.11	0.19
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	<0.03	<0.03	<0.03	<0.03	0.25	0.39	<0.03	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	<0.03	0.04	0.04	0.03	0.04	0.04	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0004	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	<3	4	4	<3	<3	<3	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	4	<3	<3	<3	65	105	<3	<3
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	15	15	37	15	217	288	97	78
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1101	0.1005	0.1085	0.104	0.0999	0.1012	0.1024	0.0984
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	<20	<20	40	<20	<20	30	40	<20
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.55	8.58	8.12	8.39	8.26	8.39	8.43	8.62
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	420	440	660	470	840	950	720	410
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/12904 WS18 24.63 2.00-3.00 **22.63 to 21.63** 18/09/2020	20/12904 WS18 24.63 3.00-3.40 **21.63 to 21.23** 18/09/2020	20/12904 WS17 24.73 0.00-1.00 **24.73 to 23.73** 18/09/2020	20/12904 WS17 24.73 1.00-2.00 **23.73 to 22.73** 18/09/2020	20/12904 WS17 24.73 2.00-3.00 **22.73 to 21.73** 18/09/2020	20/12904 WS17 24.73 3.00-3.40 **21.73 to 21.33** 18/09/2020	20/12992 WS 16 25.03 0.00-1.00 **25.03 to 24.03** 21/09/2020	20/12992 WS 16 25.03 1.00-2.00 **24.03 to 23.03** 21/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	C1 - Non Haz Criteria	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.5	0.65	0.44	0.26	0.58	0.85	0.63	0.41
Loss On Ignition	<1.0	%						-	-	1.7	1.9	1.9	1.9	<1.0	1.8	1.9	2.6	2
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	0.64	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	1.26	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	<30	59	<30	<30	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.381	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.06	0.25	<0.03	<0.03	0.08	0.48	0.04	0.05
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.027	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.16	0.13	0.07	0.1	0.2	0.21	0.05	0.1
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	<0.03	0.27	<0.03	<0.03	<0.03	0.41	<0.03	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	0.03	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	0.0007	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	<3	<3	<3	3	<3	<3	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	<3	78	13	<3	5	106	3	<3
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	112	287	13	10	37	237	70	30
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1016	0.0995	0.1015	0.0999	0.1046	0.0975	0.1002	0.1007
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	20	30	30	<20	<20	30	40	<20
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.5	8.19	8.67	8.57	8.44	8.32	9.67	8.78
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	680	1650	1241	360	500	880	710	520
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/12992 WS 16 25.03 2.00-3.00 **23.03 to 22.03** 21/09/2020	20/12992 WS 20 25.31 0.00-1.00 **25.31 to 24.31** 21/09/2020	20/12992 WS 20 25.31 1.00-2.00 **24.31 to 23.31** 21/09/2020	20/12992 WS 20 25.31 2.00-3.00 **23.31 to 22.31** 21/09/2020	20/12992 WS 20 25.31 3.00-3.30 **22.31 to 22.01** 21/09/2020	20/12992 WS 21 24.97 0.00-1.00 **24.97 to 23.97** 21/09/2020	20/12992 WS 21 24.97 1.00-2.00 **23.97 to 22.97** 21/09/2020	20/12992 WS 21 24.97 2.00-3.00 **22.97 to 21.97** 21/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.78	0.43	0.14	0.51	0.62	0.44	0.44	0.83
Loss On Ignition	<1.0	%						-	-	1.7	1.5	1.9	1.1	2.5	1.5	1.4	2.2	2.3
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	0.37	11.73	<0.22	<0.22	0.24	<0.22	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	0.78	25.63	<0.64	<0.64	<0.64	<0.64	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	<30	<30	<30	<30	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	0.253	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.16	0.04	<0.03	0.05	0.1	0.06	0.08	0.15
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.38	0.03	0.05	0.19	0.27	0.06	0.12	0.17
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	0.16	<0.03	<0.03	<0.03	0.07	<0.03	<0.03	0.21
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	0.04	0.05	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	<3	<3	<3	<3	<3	<3	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	63	<3	<3	<3	13	<3	<3	52
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	186	<5	<5	52	91	38	29	134
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.0977	0.0993	0.0974	0.1012	0.1029	0.1007	0.0962	0.0977
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	<20	30	<20	<20	30	40	<20	30
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.42	8.66	8.68	8.57	8.61	8.61	8.57	8.53
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	860	390	370	570	750	570	550	770
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/12992 WS 21 24.97 3.00-3.40 **21.97 to 21.57** 21/09/2020	20/12992 WS 22 24.65 0.00-1.00 **24.65 to 23.65** 21/09/2020	20/12992 WS 22 24.65 1.00-2.00 **23.65 to 22.65** 21/09/2020	20/12992 WS 22 24.65 2.00-3.00 **22.65 to 21.65** 21/09/2020	20/12992 WS 22 24.65 3.00-3.40 **21.65 to 21.25** 21/09/2020	20/13079 WS23 24.51 0.00-1.00 **24.51 to 23.51** 22/09/2020	20/13079 WS23 24.51 1.00-2.00 **23.51 to 22.51** 22/09/2020	20/13079 WS23 24.51 2.00-3.00 **22.51 to 21.51** 22/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Hazardous	Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	C1 - Non Haz Criteria	C1 - Non Haz Criteria	C1 - Non Haz Criteria	B2 - e.g. IMS Landfill Inert Inc. Limits	B2 - e.g. IMS Landfill Inert Inc. Limits	B1 - e.g. IMS Landfill	D - Hazardous	D - Hazardous
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.6	NDP	1.86	0.72	0.69	1.77	0.83	0.68
Loss On Ignition	<1.0	%						-	-	1.7	1.5	NDP	4.5	1.6	1.2	4.3	2.7	2
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.051	0.175
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	2.68	1.11	<0.22	<0.22	0.57	0.27	<2.20
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	4.97	1.99	<0.64	<0.64	1.07	1.1	<6.40
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	107	99	<30	<30	125	655	1297
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	0.03	<0.02	<0.02	0.04	0.09	<0.02	<0.02	0.05
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.66	0.52	0.34	0.26	0.46	0.12	0.23	0.38
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.13	0.04	0.45	0.17	0.11	0.14	0.26	0.25
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	0.07	<0.02	0.03	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	0.32	<0.03	<0.03	0.15	0.27	<0.03	<0.03	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	0.06	<0.03	0.04	<0.03	<0.03	<0.03	<0.03	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	0.0008	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	<3	<3	<3	<3	4	3	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	76	<3	50	23	63	3	5	8
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	187	13245	13605	657	310	29	43	<5
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1017	0.1026	0.11	0.1019	0.098	0.1024	0.1041	0.0987
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	30	<20	60	20	<20	20	30	<20
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.54	7.67	7.73	8.1	8.45	8.33	8.18	8.27
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	770	21061	21555	1330	1171	540	940	1070
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/13079 WS23 24.51 3.00-3.40 **21.51 to 21.11** 22/09/2020	20/13079 WS08 23.42 0.15-1.00 **23.27 to 22.42** 22/09/2020	20/13079 WS08 23.42 1.00-2.00 **22.42 to 21.42** 22/09/2020	20/13079 WS08 23.42 2.00-3.00 **21.42 to 20.42** 22/09/2020	20/13079 WS08 23.42 3.00-3.40 **20.42 to 20.02** 22/09/2020	20/13079 WS06 23.49 0.00-1.00 **23.49 to 22.49** 22/09/2020	20/13079 WS06 23.49 1.00-2.00 **22.49 to 21.49** 22/09/2020	20/13079 WS06 23.49 2.00-3.00 **21.49 to 20.49** 22/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	C1 - Non Haz Criteria	D - Hazardous	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	C1 - Non Haz Criteria	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non Haz Criteria
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.54	1.44	0.31	0.36	0.47	0.45	0.32	0.7
Loss On Ignition	<1.0	%						-	-	1.7	<1.0	1.7	2.1	1.4	1.1	1.4	<1.0	1.1
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	0.031	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	3.96	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	9.92	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	57	900	<30	<30	<30	102	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.22	0.04	<0.03	<0.03	0.22	0.04	0.23	0.48
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.1	0.18	0.08	0.23	0.2	0.04	0.18	0.18
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	0.35	<0.03	<0.03	<0.03	0.35	<0.03	0.27	0.35
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	0.04	0.05	<0.03	<0.03	<0.03	<0.03	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0006	0.0007
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	4	<3	<3	3	<3	<3	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	23	4	<3	<3	54	<3	96	102
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	60	126	23	12	82	6	160	183
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1005	0.1052	0.1019	0.1001	0.1034	0.0972	0.1003	0.0995
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	<20	30	<20	<20	<20	<20	30	20
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.33	8.32	8.55	8.77	8.82	8.75	8.55	8.47
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	860	820	500	440	610	<350	930	1100
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

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									20/12733	20/13079	20/13079	20/13079	20/13079	20/13184	20/13184	20/13184	20/13184
									WS05	WS07	WS07	WS07	WS07	WS11	WS11	WS11	WS11
									24.25	23.50	23.50	23.50	23.50	23.92	23.92	23.92	23.92
									0.075-1.00	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.12-1.00	1.00-2.00	2.00-3.00	3.00-3.40
									24.17 to 23.25	**23.50 to 22.50**	**22.50 to 21.50**	**21.50 to 20.50**	**20.50 to 20.10**	**23.80 to 22.92**	**22.92 to 21.92**	**21.92 to 20.92**	**20.92 to 20.52**
Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	16/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non Haz Criteria	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non Haz Criteria
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.61	0.46	0.76	0.74	0.25	0.18	0.72	0.74
Loss On Ignition	<1.0	%						-	-	1.7	1.4	1.8	1.1	1.1	1.5	<1.0	1.3	1.7
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	1.13	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	2.19	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	<30	<30	<30	<30	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	0.043	<0.025	<0.025	<0.025	0.044	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.04	<0.03	0.07	0.51	0.05	0.04	0.32	0.45
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	0.035	<0.015	<0.015	<0.015	0.059	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.14	0.1	0.3	0.24	0.08	0.06	0.15	0.22
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	<0.03	<0.03	0.28	0.43	<0.03	<0.03	0.25	0.37
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	0.0002	0.001	0.0001	<0.0001	0.0005	0.0009
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	4	<3	<3	<3	<3	<3	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	<3	<3	89	128	<3	<3	75	78
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	84	6	207	267	220	7	152	209
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1018	0.1017	0.1004	0.0965	0.1009	0.096	0.1013	0.1026
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	50	<20	<20	<20	30	<20	40	40
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	9.7	8.66	8.35	8.28	10.7	9.04	8.43	8.32
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	760	430	940	1100	960	<350	740	870
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/13184 WS27 24.57 0.00-1.00 **24.57 to 23.57** 23/09/2020	20/13184 WS27 24.57 1.00-1.50 **23.57 to 23.07** 23/09/2020	20/13184 WS26 24.83 0.00-1.00 **24.83 to 23.83** 23/09/2020	20/13184 WS26 24.83 1.00-2.00 **23.83 to 22.83** 23/09/2020	20/13184 WS26 24.83 2.00-2.80 **22.83 to 22.03** 23/09/2020	20/13184 WS25 25.25 0.00-1.00 **25.25 to 24.25** 23/09/2020	20/13184 WS25 25.25 1.00-2.00 **24.25 to 23.25** 23/09/2020	20/13184 WS25 25.25 2.00-3.00 **23.25 to 22.25** 23/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	C1 - Non Haz Criteria	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	C1 - Non Haz Criteria	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	2.5	0.39	1.06	0.8	0.64	0.66	0.4	0.85
Loss On Ignition	<1.0	%						-	-	1.7	3.8	1.7	3.1	2.3	1.7	2.8	1.9	2
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	0.049	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	5.52	<0.22	5.4	0.61	<0.22	0.29	<0.22	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	11.07	<0.64	9.98	1.1	<0.64	0.64	<0.64	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	92	514	90	<30	<30	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	0.04	0.03	<0.02	0.05	<0.02	<0.02	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	0.097	<0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.3	1	0.05	0.03	0.42	<0.03	<0.03	0.08
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.15	0.55	0.04	0.21	0.2	0.08	0.13	0.23
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	<0.03	<0.03	<0.03	<0.03	0.4	<0.03	<0.03	0.14
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0004	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	<3	<3	3	<3	<3	<3	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	71	11	<3	<3	98	<3	<3	52
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	162	8	14	20	221	30	21	192
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1062	0.1052	0.1026	0.1051	0.0999	0.1038	0.0979	0.1015
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	40	40	50	30	50	40	30	20
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.03	8.14	8.55	8.39	8.31	8.47	8.52	8.45
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	1221	800	760	600	920	640	580	810
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/13184 WS25 25.25 3.00-3.20 **22.25 to 22.05** 23/09/2020	20/13299 WS24 25.42 0.00-1.00 **25.42 to 24.42** 24/09/2020	20/13299 WS24 25.42 1.00-2.00 **24.42 to 23.42** 24/09/2020	20/13299 WS24 25.42 2.00-3.00 **23.42 to 22.42** 24/09/2020	20/13299 WS24 25.42 3.00-3.40 **22.42 to 22.02** 24/09/2020	20/13299 WS28 25.71 0.00-1.00 **25.71 to 24.71** 24/09/2020	20/13299 WS29 25.45 0.00-1.00 **25.45 to 24.45** 24/09/2020	20/13299 WS29 25.45 1.00-2.00 **24.45 to 23.45** 24/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	A - Inert	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.75	0.57	0.33	0.5	0.84	1.51	1.84	0.3
Loss On Ignition	<1.0	%						-	-	1.7	1.7	2.1	1.7	1.2	1.9	3.6	4.8	1.3
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	0.71	<0.22	<0.22	<0.22	5.71	0.35	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	1.29	<0.64	<0.64	<0.64	12.44	0.74	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	63	<30	<30	40	71	65	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	0.02	<0.02	<0.02	0.02	<0.02	0.03	<0.02	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.033	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.15	0.07	0.05	0.29	0.63	0.29	0.04	<0.03
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.34	0.12	0.15	0.21	0.12	0.14	0.07	0.13
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	0.18	<0.03	<0.03	0.22	<0.03	<0.03	<0.03	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	0.03	<0.03	<0.03	<0.03	<0.03	0.05	0.04
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	0.0002	<0.0001	<0.0001	0.0002	0.0005	<0.0001	0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	<3	<3	<3	<3	<3	4	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	79	13	<3	68	83	7	<3	<3
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	208	50	89	190	184	937	48	24
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1033	0.0987	0.0977	0.0992	0.0983	0.111	0.0997	0.1023
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	20	50	30	40	40	50	60	40
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.43	8.44	8.49	8.31	8.29	8.09	9.2	9.45
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	910	740	510	870	920	2120	640	440
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/13299 WS29 25.45 3.00-3.40 **22.45 to 22.05** 24/09/2020	20/13299 WS30 25.17 0.00-1.00 **25.17 to 24.17** 24/09/2020	20/13299 WS30 25.17 1.00-2.00 **24.17 to 23.17** 24/09/2020	20/13299 WS30 25.17 3.00-3.40 **22.17 to 21.77** 24/09/2020	20/13299 WS03 23.37 0.00-1.00 **23.37 to 22.37** 24/09/2020	20/13299 WS03 23.37 1.00-2.00 **22.37 to 21.37** 24/09/2020	20/13299 WS03 23.37 2.00-3.00 **21.37 to 20.37** 24/09/2020	20/13299 WS03 23.37 3.00-3.40 **20.37 to 19.97** 24/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	C1 - Non Haz Criteria	B1 - e.g. IMS Landfill	D - Hazardous	B2 - e.g. IMS Landfill Inert Inc. Limits	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	A - Inert	C1 - Non Haz Criteria
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.53	1.12	0.34	0.63	1.16	0.44	0.57	0.74
Loss On Ignition	<1.0	%						-	-	1.7	1.9	4.2	1.2	1.3	3.8	2.2	2.1	2.1
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	0.235	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	0.65	<0.22	<0.22	9.31	<0.22	<0.22	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	1.27	1.02	<0.64	18.22	<0.64	<0.64	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	<30	1289	<30	<30	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	0.03	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	0.037	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.11	0.05	1.81	0.25	0.07	<0.03	0.07	0.2
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	0.017	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.21	0.05	0.22	0.1	0.14	0.1	0.26	0.21
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	0.32	<0.03	<0.03	0.17	<0.03	<0.03	<0.03	0.41
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	0.03	<0.03	<0.03	0.05	<0.03	0.03	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	0.0001	<0.0001	<0.0001	0.0005
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	4	<3	<3	5	4	<3	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	162	<3	4	77	4	<3	5	89
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	255	12	69	166	52	9	16	224
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.0987	0.1047	0.0998	0.0987	0.1111	0.1019	0.1023	0.0996
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	40	40	30	<20	50	30	30	30
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	9.5	8.5	7.94	8.42	9	8.5	8.54	8.3
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	1410	710	880	830	640	440	380	910
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/13299 WS31 24.78 0.00-1.00 **24.78 to 23.78** 25/09/2020	20/13299 WS31 24.78 1.00-1.60 **23.78 to 23.18** 25/09/2020	20/13299 WS34 25.53 0.00-1.00 **25.53 to 24.53** 25/09/2020	20/13299 WS34 25.53 1.00-2.00 **24.53 to 23.53** 25/09/2020	20/13299 WS34 25.53 2.00-3.00 **23.53 to 22.53** 25/09/2020	20/13299 WS34 25.53 3.00-3.40 **22.53 to 22.13** 25/09/2020	20/13299 WS32 25.69 0.00-1.00 **25.69 to 24.69** 25/09/2020	20/13299 WS32 25.69 1.00-2.00 **24.69 to 23.69** 25/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Hazardous	Hazardous	Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	D - Hazardous	D - Hazardous	D - Hazardous	C1 - Non Haz Criteria	C1 - Non Haz Criteria	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.82	0.45	2.24	0.5	0.51	0.68	0.53	0.39
Loss On Ignition	<1.0	%						-	-	1.7	2.2	1.3	4.7	2.6	1.9	1.8	2.8	1.9
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	0.054	0.184	0.337	0.039	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	0.48	<0.22	<2.20	<2.20	<0.22	<0.22	0.22	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	1.08	1.76	<6.40	<6.40	0.81	<0.64	<0.64	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	819	1583	2974	606	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	0.05	<0.02	<0.02	<0.02	0.22	<0.02	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.09	0.24	0.17	0.22	0.61	0.64	0.08	0.05
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.1	0.16	0.11	0.13	0.28	0.07	0.11	0.1
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.13	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.5	<0.03	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	0.04	<0.03	0.03	<0.03	0.03	0.05	<0.03	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	<3	3	5	6	<3	4	4
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	3	6	13	30	12	71	<3	<3
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	18	13	25	<5	<5	41	111	159
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1009	0.1088	0.1065	0.1089	0.1026	0.1031	0.0994	0.1021
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	40	60	60	60	40	40	40	<20
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.33	7.98	8.05	7.86	8	8.09	8.5	8.44
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	480	950	1030	950	910	920	770	730
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/13299 WS32 25.69 2.00-3.00 **23.69 to 22.69** 25/09/2020	20/13299 WS30 25.17 2.00-3.00 **23.17 to 22.17** 25/09/2020	20/13350 WS 36 26.03 0.0-1.0 **26.03 to 25.03** 28/09/2020	20/13350 WS 36 26.03 1.0-2.0 **25.03 to 24.03** 28/09/2020	20/13350 WS 36 26.03 2.0-2.5 **24.03 to 23.53** 28/09/2020	20/13350 WS 37 25.95 0-0-1.0 **25.95 to 24.95** 28/09/2020	20/13350 WS 38 25.79 0-0-1.0 **25.79 to 24.79** 28/09/2020	20/13350 WS 38 25.79 2.0-3.0 **23.79 to 22.79** 28/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	C1 - Non Haz Criteria	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.4	0.53	1.01	0.38	0.4	0.61	1.31	0.33
Loss On Ignition	<1.0	%						-	-	1.7	<1.0	1.3	3.1	1.6	1.9	2.8	4.2	1.2
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	0.059	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	<0.22	0.78	<0.22	<0.22	0.38	2.18	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	<0.64	1.46	<0.64	<0.64	0.81	4.19	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	126	<30	<30	340	<30	52	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	0.254	<0.025	<0.025	0.111	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	<0.03	0.14	0.06	<0.03	0.07	0.04	0.18	<0.03
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	0.02	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.11	0.1	0.1	0.15	0.17	0.04	0.05	0.05
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	0.09	0.35	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.03	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	<3	6	<3	<3	<3	5	4
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	19	7	9	<3	11	<3	<3	<3
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	48	20	173	8	<5	28	138	17
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1006	0.1008	0.1033	0.0986	0.1031	0.1062	0.1081	0.101
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	<20	30	60	<20	30	30	30	<20
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.39	8.29	9.79	8.79	8.45	8.51	8.08	8.51
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	530	510	1230	430	570	600	980	550
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733	20/13350	20/13350	20/13350	20/13350	20/13444	20/13444	20/13444	20/13444
										WS05	WS 39	WS 39	WS 39	WS 39	WS43	WS43	WS43	WS42
										24.25	25.36	25.36	25.36	25.36	25.56	25.56	25.56	25.58
										0.075-1.00	1.0-2.0	2.0-3.0	3.0-3.2	0.0-1.0	0.00-1.00	1.00-2.00	2.00-2.50	0.00-1.00
										24.17 to 23.25	**24.36 to 23.36**	**23.36 to 22.36**	**22.36 to 22.16**	**25.36 to 24.36**	**25.56 to 24.56**	**24.56 to 23.56**	**23.56 to 23.06**	**25.58 to 24.58**
										16/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020
HazWaste Assessment Result										Non Hazardous	Hazardous	Hazardous	Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	D - Hazardous	D - Hazardous	D - Hazardous	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	B1 - e.g. IMS Landfill
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.5	0.53	0.33	1.13	2.03	0.74	0.68	0.42
Loss On Ignition	<1.0	%						-	-	1.7	2.1	1.9	1.2	1.5	5	1.9	1.4	1.8
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	0.219	0.098	0.089	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<2.20	<0.22	<0.22	1.3	1.18	0.91	0.28	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	7.78	1.17	1.07	2.61	2.23	1.83	0.82	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	2448	1004	732	<30	<30	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	0.07	0.06	0.03	<0.02	<0.02	<0.02	0.03	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.84	1.25	0.83	0.16	0.06	0.16	0.19	<0.03
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.18	0.17	0.1	0.09	0.15	0.37	0.16	0.05
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	<0.03	<0.03	0.08	<0.03	<0.03	<0.03	0.15	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	<0.03	0.06	<0.03	<0.03	<0.03	0.04	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	<3	<3	4	4	6	4	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	3	15	7	4	4	4	42	<3
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	5	21	37	49	12	194	284	17
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1001	0.1031	0.0998	0.1033	0.1036	0.1086	0.1036	0.1048
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	20	<20	20	40	40	20	40	20
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.09	8.11	8.28	8.66	8.15	8.28	8.56	8.55
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	790	880	550	760	600	820	960	530
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

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Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444
										WS05	WS42	WS42	WS41	WS41	WS41	WS40	WS40	WS40
										24.25	25.58	25.58	26.09	26.09	26.09	26.23	26.23	26.23
										0.075-1.00	1.00-2.00	2.00-2.50	0.00-1.00	1.00-1.50	2.00-2.50	0.00-1.00	1.00-2.00	2.00-2.40
										24.17 to 23.25	**24.58 to 23.58**	**23.58 to 23.08**	**26.09 to 25.09**	**25.09 to 24.59**	**24.09 to 23.59**	**26.23 to 25.23**	**25.23 to 24.23**	**24.23 to 23.83**
										16/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	A - Inert	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	C1 - Non Haz Criteria	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	A - Inert
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.44	0.88	0.76	0.29	0.45	1.88	0.46	0.35
Loss On Ignition	<1.0	%						-	-	1.7	1.9	2.1	2.9	1.4	<1.0	5.8	2	1.7
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	<0.22	0.63	<0.22	<0.22	0.6	<0.22	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	<0.64	1.22	<0.64	<0.64	1.05	<0.64	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	<30	<30	<30	<30	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	<0.025	0.03	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	<0.03	<0.03	<0.03	<0.03	0.61	<0.03	<0.03	<0.03
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.16	0.16	0.04	0.13	0.02	0.05	0.14	0.12
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	0.1	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	<0.03	<0.03	<0.03	<0.03	0.34	<0.03	<0.03	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	4	4	<3	6	4	4	5
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	4	7	4	<3	120	5	<3	<3
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	6	22	10	<5	267	9	<5	14
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1051	0.104	0.1055	0.0977	0.1071	0.1098	0.1056	0.1025
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	<20	<20	30	<20	<20	40	<20	<20
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.31	8.42	8.28	8.67	8.01	8.25	8.64	8.5
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	400	390	710	<350	1601	700	450	440
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/13444 WS44 26.70 0.00-1.00 **26.70 to 25.70** 29/09/2020	20/13444 WS44 26.70 1.00-2.00 **25.70 to 24.70** 29/09/2020	20/13444 WS44 26.70 2.00-3.00 **24.70 to 23.70** 29/09/2020	20/13444 WS44 26.70 3.00-3.40 **23.70 to 23.30** 29/09/2020	20/13523 WS 45 26.27 0.0-1.0 **26.27 to 25.27** 30/09/2020	20/13523 WS 45 26.27 1.0-2.0 **25.27 to 24.27** 30/09/2020	20/13523 WS 45 26.27 2.0-3.0 **24.27 to 23.27** 30/09/2020	20/13523 WS 45 26.27 3.0-3.4 **23.27 to 22.87** 30/09/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	C1 - Non Haz Criteria	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	A - Inert	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	C1 - Non Haz Criteria	C1 - Non Haz Criteria
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	12.92	0.75	0.5	0.51	0.82	0.26	0.48	0.43
Loss On Ignition	<1.0	%						-	-	1.7	16.5	2.8	2.4	2.3	3	1.3	1.2	<1.0
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	0.47	<0.22	<0.22	<0.22	0.48	<0.22	<0.22	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	0.86	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	35	<30	<30	<30	44	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	0.02	0.02	0.08	<0.02	<0.02	0.03	<0.02	0.05
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	<0.025	<0.025	0.027	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	<0.03	0.04	0.11	0.04	0.04	<0.03	0.08	0.06
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.07	0.18	0.18	0.14	<0.02	0.09	0.19	0.12
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	1.17	0.4
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	0.04	<0.03	<0.03	<0.03	0.03	<0.03	<0.03	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	4	3	<3	4	3	<3	<3	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	5	4	5	5	<3	<3	17	65
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	66	43	52	26	15	<5	34	88
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1056	0.1037	0.1015	0.106	0.1	0.0994	0.0989	0.0984
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	40	<20	<20	<20	30	20	30	<20
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.48	8.36	8.26	8.33	8.06	8.76	8.72	6.48
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	740	620	570	550	630	<350	600	800
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/13523 WS 46 25.87 1.0-2.0 **24.87 to 23.87** 30/09/2020	20/13523 WS 46 25.87 2.0-2.5 **23.87 to 23.37** 30/09/2020	20/13523 WS 46 25.87 0.0-1.0 **25.87 to 24.87** 30/09/2020	20/13523 WS 47 25.63 0.0-1.0 **25.63 to 24.63** 30/09/2020	20/13523 WS 47 25.63 1.0-1.85 **24.63 to 23.78** 30/09/2020	20/13660 WS51 26.09 0.00-1.00 **26.09 to 25.09** 01/10/2020	20/13660 WS51 26.09 1.00-1.70 **25.09 to 24.39** 01/10/2020	20/13660 WS50 26.20 0.00-1.00 **26.20 to 25.20** 01/10/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	A - Inert	B1 - e.g. IMS Landfill	D - Hazardous	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.34	0.74	1.07	1.58	0.52	0.35	0.69	0.89
Loss On Ignition	<1.0	%						-	-	1.7	1.5	1.7	3.7	5.6	2.3	1.8	2	4.6
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	<0.025	0.007	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	<0.22	2.37	12.56	4.73	1.94	<0.22	0.33
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	<0.64	4.17	21.76	8.3	4.12	<0.64	0.69
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	<30	<30	1742	58	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	<0.02	0.03	0.02	<0.02	<0.02	0.05	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	0.127	<0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	<0.03	0.03	0.05	<0.03	0.09	<0.03	<0.03	0.04
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	0.049	0.066	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.08	0.19	0.04	0.05	0.25	0.05	0.16	0.05
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	<0.03	0.04	0.03	0.04	<0.03	<0.03	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	4	4	6	<3	<3	<3	5
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	<3	<3	<3	5	27	<3	7	<3
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	7	16	139	115	112	11	28	19
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.0992	0.1022	0.1046	0.112	0.1022	0.1016	0.1013	0.1067
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	30	30	60	60	50	<20	20	50
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.81	8.75	8.65	8.72	8.49	8.49	8.76	8.42
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	480	450	970	660	630	630	450	750
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/13660 WS50 26.20 1.00-2.00 **25.20 to 24.20** 01/10/2020	20/13660 WS48 26.76 0.00-1.00 **26.76 to 25.76** 01/10/2020	20/13660 WS48 26.76 1.30-2.00 **25.46 to 24.76** 01/10/2020	20/13660 WS48 26.76 2.40-3.00 **24.36 to 23.76** 01/10/2020	20/13660 WS49 26.48 0.00-0.90 **26.48 to 25.58** 01/10/2020	20/14108 TP19 24.41 0.00-1.00 **24.41 to 23.41** 09/10/2020	20/14108 TP19 24.41 1.00-2.00 **23.41 to 22.41** 09/10/2020	20/14108 TP19 24.41 2.00-3.00 **22.41 to 21.41** 09/10/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	B1 - e.g. IMS Landfill	A - Inert	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	C2 - Non-Haz Criteria but with Trace Asbestos
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.43	5.38	0.25	0.43	1.11	1.8	0.4	0.41
Loss On Ignition	<1.0	%						-	-	1.7	2.3	5.2	<1.0	1.9	4.1	3.1	1.8	1.4
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	0.013	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	0.95	<0.22	<0.22	1.46	1.03	<0.22	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	1.79	<0.64	<0.64	3.2	1.92	<0.64	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	<30	<30	<30	<30	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	<0.02	<0.02	0.04	<0.02	0.05	<0.02	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	<0.025	<0.025	0.094	0.062	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.04	0.11	<0.03	<0.03	0.04	0.06	<0.03	<0.03
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.018	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.12	0.08	0.05	0.1	0.04	0.05	0.1	0.06
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	0.04	0.04	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	<3	<3	<3	3	<3	3	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	<3	<3	<3	<3	<3	3	<3	<3
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	16	56	9	9	24	17	46	9
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1018	0.1043	0.0979	0.1021	0.1041	0.1074	0.1067	0.1148
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	30	40	<20	<20	60	40	<20	<20
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.7	8.38	8.83	8.87	8.33	8.44	8.73	8.45
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	510	780	<350	380	750	870	620	480
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**Chrysotile - 0.003% Asbestos as unbound fibres**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108
										WS05	TP27	TP27	TP27	TP35	TP35	TP35	TP35	TP33
										24.25	24.40	24.40	24.40	25.35	25.35	25.35	25.35	25.56
										0.075-1.00	1.50-2.00	2.00-3.00	3.00-3.20	0.00-0.85	1.00-2.00	2.00-3.00	3.00-3.20	0.20-1.00
										24.17 to 23.25	**22.90 to 22.40**	**22.40 to 21.40**	**21.40 to 21.20**	**25.35 to 24.50**	**24.35 to 23.35**	**23.35 to 22.35**	**22.35 to 22.15**	**25.36 to 24.56**
										16/09/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	B2 - e.g. IMS Landfill Inert Inc. Limits	B1 - e.g. IMS Landfill	D - Hazardous	B2 - e.g. IMS Landfill Inert Inc. Limits	B2 - e.g. IMS Landfill Inert Inc. Limits	B1 - e.g. IMS Landfill
Solid Waste Analysis																		
Total Organic Carbon [#]	<0.02	%		3	6	-	-	-	-	0.42	0.81	0.76	0.75	0.96	0.54	0.7	0.67	0.37
Loss On Ignition	<1.0	%						-	-	1.7	1.6	1.2	1.9	2.7	1.8	1.4	1.3	1.8
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	0.015	<0.025	0.229	<0.025	<0.025	<0.025
Sum of 7 PCBs [#]	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 [#]	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	<0.64	<0.64	<0.64	1.85	<0.64	<0.64	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	46	<30	<30	<30	1185	<30	73	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	0.05	0.05	<0.02	0.04	0.17	0.13	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	0.028	<0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.15	0.91	0.56	0.06	1.14	0.57	0.62	0.06
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.26	0.29	0.27	0.06	0.55	0.09	0.12	0.05
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	<0.03	0.21	0.19	<0.03	<0.03	0.28	0.29	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	0.04	<0.03	0.04	<0.03	0.04	0.04	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	5	4	4	4	20	10	9	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	<3	64	72	<3	<3	183	188	<3
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	<5	289	203	15	8	150	177	17
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1046	0.0991	0.098	0.1028	0.102	0.1005	0.1012	0.1023
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	<20	<20	<20	50	<20	<20	<20	<20
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.39	8.33	8.48	8.46	8.33	8.74	8.67	8.46
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	580	1190	920	790	840	970	1300	630
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/14108 TP33 25.56 1.00-2.00 **24.56 to 23.56** 09/10/2020	20/14108 TP33 25.56 2.00-3.00 **23.56 to 22.56** 09/10/2020	20/14108 TP33 25.56 3.00-3.20 **22.56 to 22.36** 09/10/2020	20/14108 TP28 25.75 1.00-2.00 **24.75 to 23.75** 09/10/2020	20/14108 TP28 25.75 2.00-3.00 **23.75 to 22.75** 09/10/2020	20/14108 TP49 26.49 1.00-2.00 **25.49 to 24.49** 12/10/2020	20/14108 TP49 26.49 2.00-3.00 **24.49 to 23.49** 12/10/2020	20/14108 TP49 26.49 3.00-3.20 **23.49 to 23.29** 12/10/2020
HazWaste Assessment Result										Non Hazardous	Hazardous	Non Hazardous	Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	D - Hazardous	C1 - Non Haz Criteria	D - Hazardous	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits
Solid Waste Analysis																		
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.44	0.57	0.67	0.38	0.69	0.52	0.68	0.72
Loss On Ignition	<1.0	%						-	-	1.7	1.8	1.4	1.5	2	1.9	2.2	2	1.7
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	0.689	0.192	0.048	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	<0.22	<0.22	<0.22	<0.22	0.38	<0.22	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	5.34	2.44	1.44	<0.64	<0.64	1.04	<0.64	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	1499	511	844	<30	<30	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	0.03	0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	1.05	0.72	1.03	0.07	0.17	<0.03	0.04	0.08
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.23	0.14	0.14	0.36	0.22	0.11	0.29	0.32
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	<0.03	0.23	0.18	<0.03	<0.03	<0.03	<0.03	0.15
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	<3	<3	4	<3	4	<3	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	6	34	52	<3	55	<3	7	59
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	12	54	149	73	223	18	28	114
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.1024	0.0996	0.0991	0.105	0.1009	0.1038	0.1009	0.1014
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	30	<20	20	<20	<20	<20	20	<20
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	7.97	8.13	8.21	8.3	8.31	8.65	8.7	8.55
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	860	960	1031	650	1040	570	580	800
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

While waste soil is classified based on the EU Council Decision 2003/33/EC, waste acceptance criteria may vary at each potential Waste Receiver site and further assessment and consultation may be required with the proposed Waste Receiver to confirm suitability for disposal. In terms of permitted sites, further assessment in terms of potential impact to the environment may be required or inert waste comprising made ground may not be acceptable.

Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733	20/14108	20/14108	20/14178	20/14178	20/14178	20/14178	20/14178
										WS05	TP50	TP51	TP 37	TP 37	TP 37	TP 40	TP 40
										24.25	26.26	26.06	26.03	26.03	26.03	26.69	26.69
										0.075-1.00	2.00-2.70	1.70-3.00	1.00-2.00	2.00-3.00	3.00-3.20	2.40-3.00	3.00-3.20
										24.17 to 23.25	**24.26 to 23.56**	**24.36 to 23.06**	**25.03 to 24.03**	**24.03 to 23.03**	**23.03 to 22.83**	**24.29 to 23.69**	**23.69 to 23.49**
										16/09/2020	12/10/2020	12/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Hazardous	Non Hazardous	Non Hazardous	Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	B1 - e.g. IMS Landfill	B1 - e.g. IMS Landfill	D - Hazardous	C1 - Non Haz Criteria	B1 - e.g. IMS Landfill	D - Hazardous
Solid Waste Analysis																	
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.72	0.47	0.34	0.56	0.55	1.35	1.09
Loss On Ignition	<1.0	%						-	-	1.7	1.2	1.4	1.5	1.8	1.9	3.8	3
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	<0.025	0.111	0.025	0.006	0.086
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	1.01
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	<30	<30	704	526	439	1467
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	0.08
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.18	0.07	0.06	2.95	0.64	0.08	0.26
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.22	0.25	0.13	0.16	0.18	0.49	0.82
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	0.06
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	0.26	0.1	<0.03	<0.03	<0.03	<0.03	<0.03
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	0.0004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	<3	<3	<3	<3	3	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	114	82	<3	16	28	13	4
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	241	218	37	54	52	54	73
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.0984	0.0973	0.1056	0.099	0.0976	0.1078	0.1122
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	<20	<20	<20	<20	20	30	40
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.41	8.45	8.67	8.16	8.26	8.16	7.99
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	1100	930	490	880	830	1090	1330
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
Hazardous classes subject to confirmation with waste facility
NAD = no asbestos detected
N/A = not analysed

HWOL = HazWasteOnline. HazWasteOnline accessed through http://www.hazwasteonline.com. Application developed by One Touch Data Limited based on Regulation (EC) No. 1272/2008: the classification, labelling and packaging of substances and mixtures (CLP) and the latest UK Environment Agency guidance, WM3 v1. The EPA have stated that the HazWasteOnline tool is acceptable for the classification of wastes in Ireland and they have a licence for the application to review results if required.

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Analyte	LOD/LOR	Unit	A - Waste Permitted or Recovery Sites	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non-Haz Criteria	C2 - Non-Haz Criteria but with Trace Asbestos	D - Hazardous	D - Hazardous with >0.1% Asbestos	20/12733 WS05 24.25 0.075-1.00 **24.17 to 23.25** 16/09/2020	20/14172 BH03 24.13 3.00-3.40 **21.13 to 20.73** 09/10/2020	20/14656 BH04 23.73 3.00-3.40 **20.73 to 20.33** 07/10/2020	20/14656 BH07 25.44 3.00-3.40 **22.44 to 22.04** 12/10/2020	20/14656 BH08 24.90 1.00-2.00 **23.90 to 22.90** 12/10/2020	20/14656 BH08 24.90 3.00-3.40 **21.90 to 21.50** 12/10/2020	20/14656 BH12 25.71 1.85-3.00 **23.86 to 22.71** 14/10/2020	20/14656 BH12 25.71 3.00-3.40 **22.71 to 22.31** 14/10/2020
HazWaste Assessment Result										Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous	Non Hazardous
Overall Assessment Result										B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	C1 - Non Haz Criteria	B2 - e.g. IMS Landfill Inert Inc. Limits	B1 - e.g. IMS Landfill	B2 - e.g. IMS Landfill Inert Inc. Limits	B2 - e.g. IMS Landfill Inert Inc. Limits	B2 - e.g. IMS Landfill Inert Inc. Limits
Solid Waste Analysis																	
Total Organic Carbon #	<0.02	%		3	6	-	-	-	-	0.42	0.79	0.76	0.74	0.13	0.52	0.76	0.8
Loss On Ignition	<1.0	%						-	-	1.7	2.2	2.1	1.9	<1.0	1.2	2.5	2.6
Sum of BTEX	<0.025	mg/kg		6	6	see HWOL	see HWOL	see HWOL	see HWOL	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Sum of 7 PCBs #	<0.035	mg/kg		1	1	see HWOL	see HWOL	see HWOL	see HWOL	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
PAH Sum of 6 #	<0.22	mg/kg		-	-	see HWOL	see HWOL	see HWOL	see HWOL	0.29	<0.22	<0.22	<0.22	0.39	<0.22	<0.22	<0.22
PAH Sum of 17	<0.64	mg/kg		100	100	see HWOL	see HWOL	see HWOL	see HWOL	<0.64	<0.64	<0.64	<0.64	0.78	<0.64	<0.64	<0.64
Mineral Oil Calculation	<30	mg/kg		500	500	see HWOL	see HWOL	see HWOL	see HWOL	<30	<30	<30	<30	66	<30	<30	<30
Dissolved Antimony	<0.02	mg/kg		0.06	0.18	0.7	0.7	5	5	0.04	<0.02	0.03	<0.02	<0.02	0.09	0.07	0.07
Dissolved Arsenic	<0.025	mg/kg		0.5	1.5	2	2	25	25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Dissolved Barium	<0.03	mg/kg		20	20	100	100	300	300	0.05	0.16	0.28	0.19	0.03	0.14	0.07	0.08
Dissolved Cadmium	<0.005	mg/kg		0.04	0.04	1	1	5	5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dissolved Chromium	<0.015	mg/kg		0.5	0.5	10	10	70	70	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Dissolved Copper	<0.07	mg/kg		2	2	50	50	100	100	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Dissolved Lead	<0.05	mg/kg		0.5	0.5	10	10	50	50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Molybdenum	<0.02	mg/kg		0.5	1.5	10	10	30	30	0.06	0.23	0.26	0.23	<0.02	0.05	0.04	0.07
Dissolved Nickel	<0.02	mg/kg		0.4	0.4	10	10	40	40	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	0.02	<0.02
Dissolved Selenium	<0.03	mg/kg		0.1	0.3	0.5	0.5	7	7	<0.03	0.23	0.41	0.23	<0.03	0.19	0.12	0.08
Dissolved Zinc	<0.03	mg/kg		4	4	50	50	200	200	<0.03	<0.03	<0.03	<0.03	0.06	<0.03	<0.03	<0.03
Mercury Dissolved by CVAF	<0.0001	mg/kg		0.01	0.01	0.2	0.2	2	2	<0.0001	0.0005	0.0012	0.0003	<0.0001	<0.0001	<0.0001	<0.0001
Phenol	<0.1	mg/kg		1	-	-	-	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoride	<3	mg/kg		10	10	150	150	500	500	7	<3	<3	<3	<3	<3	<3	<3
Chloride	<3	mg/kg		800	2400	15000	15000	25000	25000	<3	130	105	62	<3	69	53	56
Sulphate	<5	mg/kg		1000	3000	20000	20000	50000	50000	28	377	404	221	<5	116	180	208
Mass of raw test portion	-	kg		-	-	-	-	-	-	0.1047	0.0993	0.0978	0.1018	0.0958	0.0975	0.1014	0.1004
Dissolved Organic Carbon	<20	mg/kg		500	500	800	800	1000	1000	<20	30	40	30	30	<20	20	<20
pH	<0.01	pH units		-	-	-	-	11.5	11.5	8.68	8.09	8.22	8.38	9.15	8.18	8.49	8.47
Total Dissolved Solids	<350	mg/kg		4000	12000	60000	60000	100000	100000	<350	1160	1330	890	<350	680	580	760
Asbestos Result										**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

NOTES:
Categories explained in OCSC Waste Categories Table
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NAD = no asbestos detected
N/A = not analysed

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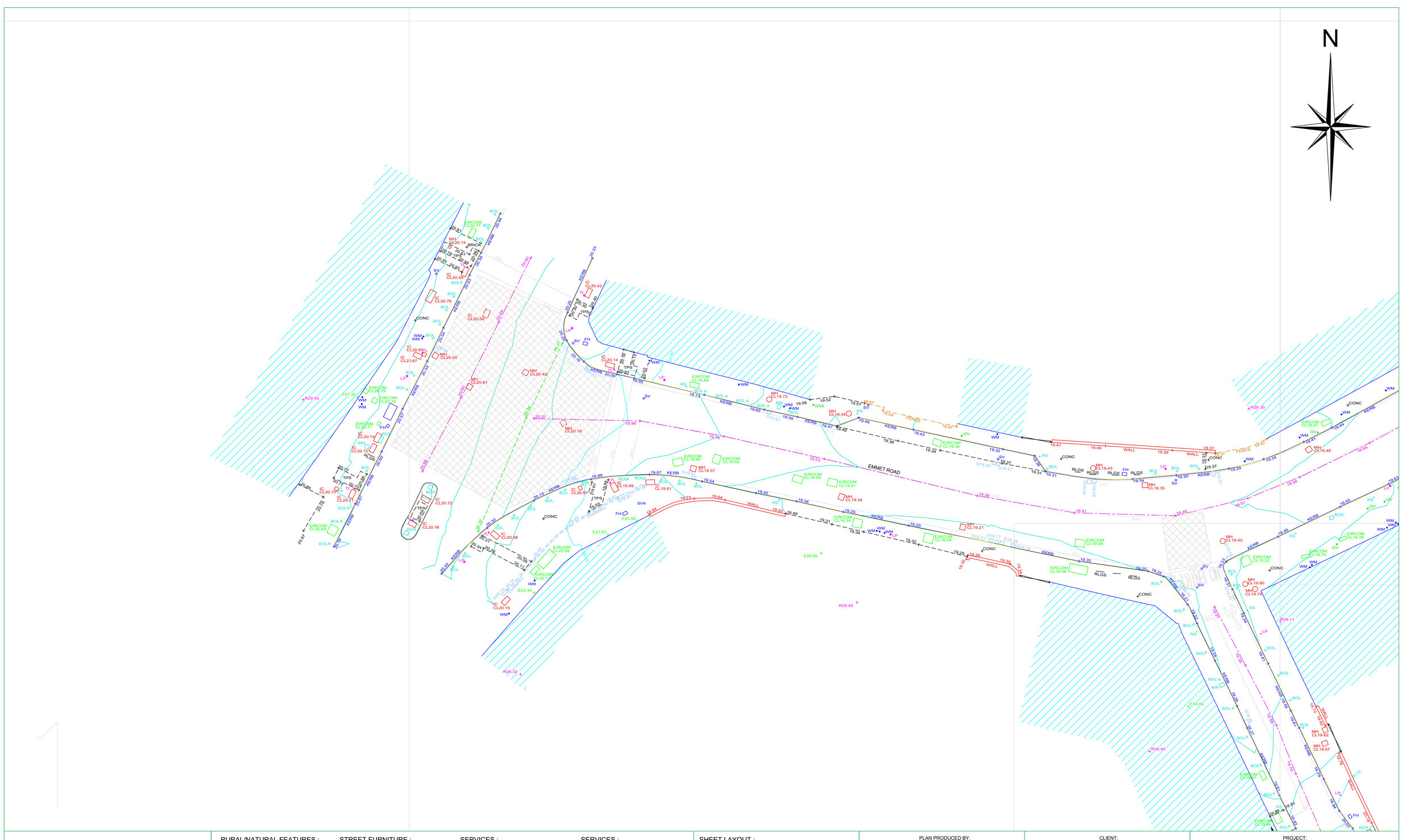
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OCSC
O'CONNOR | SUTTON | CRONIN
Multidisciplinary
Consulting Engineers

Appendix A
Proposed Development Plans

OCSC
O'CONNOR | SUTTON | CRONIN
Multidisciplinary
Consulting Engineers

Appendix B
Topography



DRAWING ON SCREEN

APEX SURVEYS

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RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH
CATTLE GRID

LINEWORK:

EMBANKEMENT TOP
DRAIN
BREAKLINE
BUILDING
KERB BOTTOM
WALL
PATH/CHANGE SURFACE
O/HEAD ELECTRICITY
O/HEAD TELECOM

STREET FURNITURE :

BOLLARDS
BORE HOLE
BUS STOP
CRASH BARRIER
ELECTRICITY POLE
EARTHING ROD
GATE
GROUND LIGHT
ILLUMINATED BOLLARD
LAMP POST
MARKER POST
POST
POST BOX
ROADSIGN
SIGN POST
TELEPHONE BOX
TELEPHONE POLE
TRAFFIC LIGHT
TRIAL PIT

SERVICES :

AIR VALVE
ARMSTRONG JUNCTION
CABLE TV IC
COVER LEVEL
EIRCOM COVER
EIRCOM JUNCTION BOX
ELECTRICAL CABLE PIT
ESAT COVER
ESB COVER
ESB JUNCTION BOX
FIRE HYDRANT
GAS VALVE
GULLY
INSPECTION COVER
MANHOLE
SEPTIC TANK
SLUICE VALVE
STOPCOCK

SERVICES :

SERVICE BOX (UNKNOWN)
TRAFFIC COVER
VENT
WATER METER
UNABLE TO LIFT

LEVELS :

BED LEVEL
EAVE LEVEL
FLOOR LEVEL
INVERT LEVEL
ROAD LEVEL
RIDGE LEVEL
SOFFIT LEVEL
SPOT LEVEL
TOP OF FENCE LEVEL
TOP OF WALL LEVEL
WATER LEVEL
SURVEY CONTROL STATION

SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

CONTACT INFORMATION:

Apex Surveys
Unit 78 Dunboyne Business Park
Dunboyne, Co. Meath, Ireland
www.apexsurveys.ie
info@apexsurveys.ie
00353 1 691 0156

CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

Emmet Road, Inchicore

GRID SYSTEM: Irish Transverse Mercator
DATUM: Malin Head (OSGM15)
NOTES: Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	27/07/20	Original Drawing
002	24/09/20	Additional Information Added

SCALE : 1/200 A1

DATE : 28/07/2020

DRG No: 4413

SHEET: 1 of 16

DESCRIPTION : 2D Topographical
SURVEYED BY : AH & NM
PROCESSED BY : Peter Walsh
CHECKED BY : Alan Brady

N

EMMET ROAD

DENSE VEGETATION
REQUIRES CLEARANCE

RAMP

BRICK

CONC

TARMAC

OVERGROWN

CCTV

GAS

CHANNEL

KERB

WALL

RAMP

TOW25.40

TOW26.51

TOW27.62

TOW27.61

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BUSH
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LINEWORK:

EMBANKEMENT TOP	101.50
DRAIN	101.50
BREAKLINE	101.50
BUILDING	101.50
KERB BOTTOM	101.50
WALL	101.50
PATH/CHANGE SURFACE	101.50
O/HEAD ELECTRICITY	OE
O/HEAD TELECOM	OT

STREET FURNITURE :

BOLLARDS	BD
BORE HOLE	BH+
BUS STOP	BS
CRASH BARRIER	CB
ELECTRICITY POLE	EP
EARTHING ROD	ER +
GATE	
GROUND LIGHT	LT
ILLUMINATED BOLLARD	BOL
LAMP POST	LP
MARKER POST	MKR
POST	POST
POST BOX	POST BOX +
ROADSIGN	RS RS
SIGN POST	SIGN
TELEPHONE BOX	TB
TELEPHONE POLE	TP
TRAFFIC LIGHT	TL
TRIAL PIT	TPIT +

SERVICES :

AIR VALVE	AV+
ARMSTRONG JUNCTION	AJ
CABLE TV IC	CATV
COVER LEVEL	CL
EIRCOM COVER	EIRCOM
EIRCOM JUNCTION BOX	EIRCOM BOX
ELECTRICAL CABLE PIT	ECP
ESAT COVER	ESAT
ESB COVER	ESB
ESB JUNCTION BOX	ESB BOX
FIRE HYDRANT	FH+
GAS VALVE	GV
GULLY	G
INSPECTION COVER	IC
MANHOLE	MH
SEPTIC TANK	SEPTIC
SLUICE VALVE	SV
STOPCOCK	ST

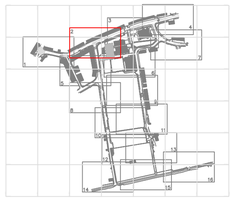
SERVICES :

SERVICE BOX (UNKNOWN)	BOX
TRAFFIC COVER	TLIC
VENT	VENT
WATER METER	WM+
UNABLE TO LIFT	UTO

LEVELS :

BED LEVEL	+ BED101.50
EAVE LEVEL	+ E101.50
FLOOR LEVEL	+ FL101.50
INVERT LEVEL	+ IL101.50
ROAD LEVEL	+ 101.50
RIDGE LEVEL	+ R101.50
SOFFIT LEVEL	+ SL101.50
SPOT LEVEL	+ 101.50
TOP OF FENCE LEVEL	+ TOF101.50
TOP OF WALL LEVEL	+ TOW101.50
WATER LEVEL	+ WL101.50
SURVEY CONTROL STATION	

SHEET LAYOUT :



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No.	Date	Description
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002	24/09/20	Additional Information Added

SCALE : 1/200 A1

DRG No: 4413

SHEET: 2 of 16

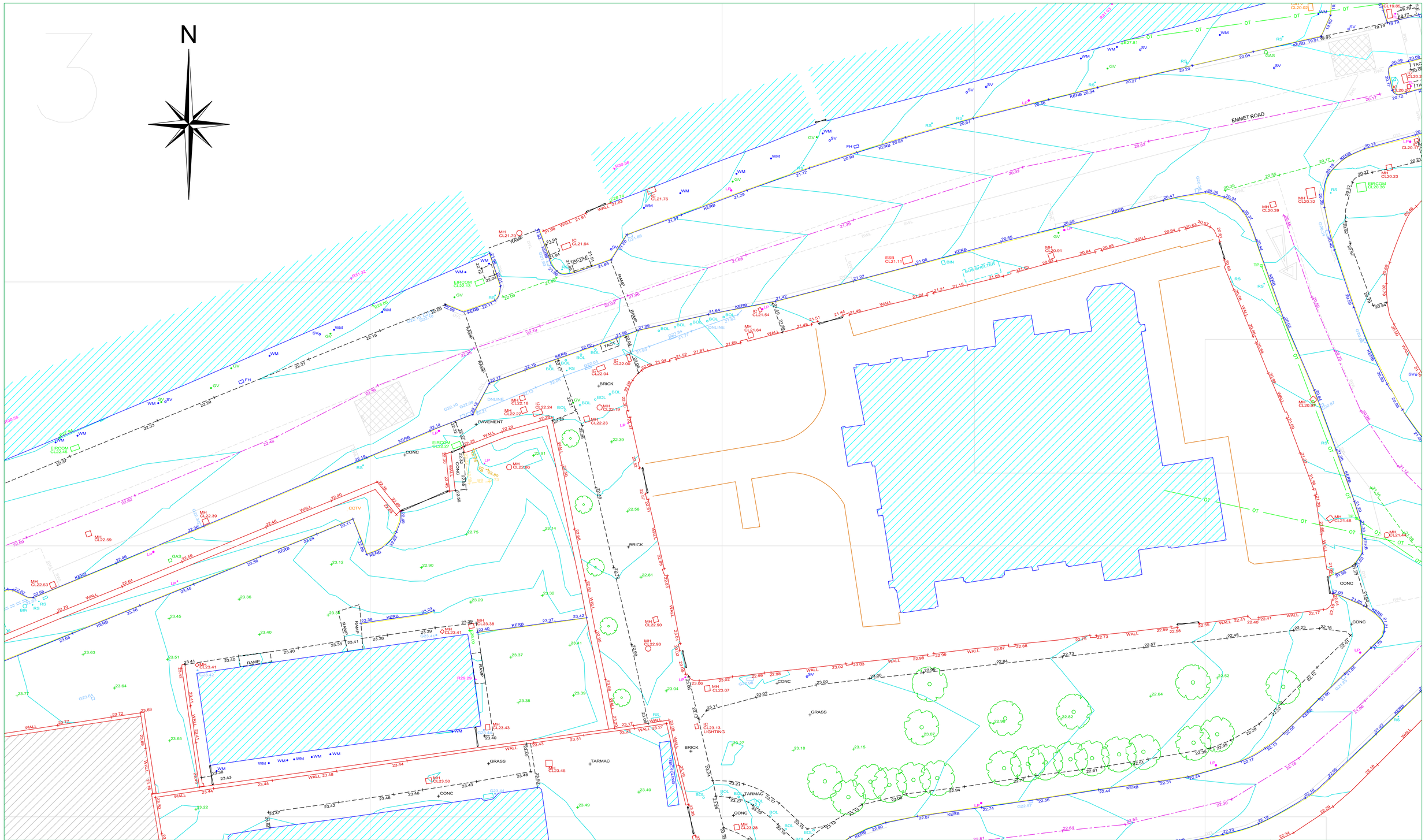
DATE : 28/07/2020

DESCRIPTION : 2D Topographical

SURVEYED BY : AH & NM

PROCESSED BY : Peter Walsh

CHECKED BY : Alan Brady



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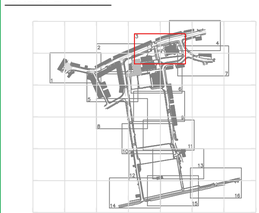
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UNABLE TO LIFT

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NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
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SCALE :	1/200 A1
DRG No:	4413
SHEET:	3 of 16
DATE :	28/07/2020
DESCRIPTION :	2D Topographical
SURVEYED BY :	AH & NM
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CHECKED BY :	Alan Brady



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PROJECT:

Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	27/07/20	Original Drawing
002	24/09/20	Additional Information Added

SCALE : 1/200 A1

DATE : 28/07/2020

DRG No: 4413

SHEET: 4 of 16

DESCRIPTION : 2D Topographical

SURVEYED BY : AH & NM

PROCESSED BY : Peter Walsh

CHECKED BY : Alan Brady



N

5

APEX SURVEYS

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info@apexsurveys.ie
00353 1 691 0156

RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH
CATTLE GRID

LINEWORK:

EMBANKEMENT TOP
DRAIN
BREAKLINE
BUILDING
KERB BOTTOM
WALL
PATH/CHANGE SURFACE
O/HEAD ELECTRICITY
O/HEAD TELECOM

STREET FURNITURE :

BOLLARDS
BORE HOLE
BUS STOP
CRASH BARRIER
ELECTRICITY POLE
EARTHING ROD
GATE
GROUND LIGHT
ILLUMINATED BOLLARD
LAMP POST
MARKER POST
POST
POST BOX
ROADSIGN
SIGN POST
TELEPHONE BOX
TELEPHONE POLE
TRAFFIC LIGHT
TRIAL PIT

SERVICES :

AIR VALVE
ARMSTRONG JUNCTION
CABLE TV IC
COVER LEVEL
EIRCOM COVER
EIRCOM JUNCTION BOX
ELECTRICAL CABLE PIT
ESAT COVER
ESB COVER
ESB JUNCTION BOX
FIRE HYDRANT
GAS VALVE
GULLY
INSPECTION COVER
MANHOLE
SEPTIC TANK
SLUICE VALVE
STOPCOCK

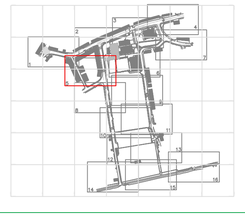
SERVICES :

SERVICE BOX (UNKNOWN)
TRAFFIC COVER
VENT
WATER METER
UNABLE TO LIFT

LEVELS :

BED LEVEL
EAVE LEVEL
FLOOR LEVEL
INVERT LEVEL
ROAD LEVEL
RIDGE LEVEL
SOFFIT LEVEL
SPOT LEVEL
TOP OF FENCE LEVEL
TOP OF WALL LEVEL
WATER LEVEL
SURVEY CONTROL STATION

SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

CONTACT INFORMATION:

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Dunboyne, Co. Meath, Ireland
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00353 1 691 0156

CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

Emmet Road, Inchicore

GRID SYSTEM: Irish Transverse Mercator
DATUM: Malin Head (OSGM15)
NOTES: Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	27/07/20	Original Drawing
002	24/09/20	Additional Information Added

SCALE : 1/200 A1

DATE : 28/07/2020

DRG No: 4413

SHEET: 5 of 16

DESCRIPTION : 2D Topographical
SURVEYED BY : AH & NM
PROCESSED BY : Peter Walsh
CHECKED BY : Alan Brady

DENSE VEGETATION
REQUIRES CLEARANCE

OVERGROWN

PAVEMENT

TARMAC

RAMP

ST. MICHEALS ESTATE

STOP

N

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RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH
CATTLE GRID

LINEWORK:

EMBANKEMENT TOP
DRAIN
BREAKLINE
BUILDING
KERB BOTTOM
WALL
PATH/CHANGE SURFACE
O/HEAD ELECTRICITY
O/HEAD TELECOM

STREET FURNITURE :

BOLLARDS
BORE HOLE
BUS STOP
CRASH BARRIER
ELECTRICITY POLE
EARTHING ROD
GATE
GROUND LIGHT
ILLUMINATED BOLLARD
LAMP POST
MARKER POST
POST
POST BOX
ROADSIGN
SIGN POST
TELEPHONE BOX
TELEPHONE POLE
TRAFFIC LIGHT
TRIAL PIT

SERVICES :

AIR VALVE
ARMSTRONG JUNCTION
CABLE TV IC
COVER LEVEL
EIRCOM COVER
EIRCOM JUNCTION BOX
ELECTRICAL CABLE PIT
ESAT COVER
ESB COVER
ESB JUNCTION BOX
FIRE HYDRANT
GAS VALVE
GULLY
INSPECTION COVER
MANHOLE
SEPTIC TANK
SLUICE VALVE
STOPCOCK

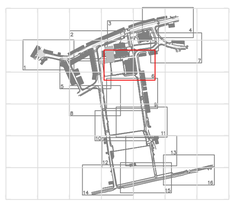
SERVICES :

SERVICE BOX (UNKNOWN)
TRAFFIC COVER
VENT
WATER METER
UNABLE TO LIFT

LEVELS :

BED LEVEL
EAVE LEVEL
FLOOR LEVEL
INVERT LEVEL
ROAD LEVEL
RIDGE LEVEL
SOFFIT LEVEL
SPOT LEVEL
TOP OF FENCE LEVEL
TOP OF WALL LEVEL
WATER LEVEL
SURVEY CONTROL STATION

SHEET LAYOUT :



PLAN PRODUCED BY:

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CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

Emmet Road, Inchicore

GRID SYSTEM: Irish Transverse Mercator
DATUM: Malin Head (OSGM15)
NOTES: Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	27/07/20	Original Drawing
002	24/09/20	Additional Information Added

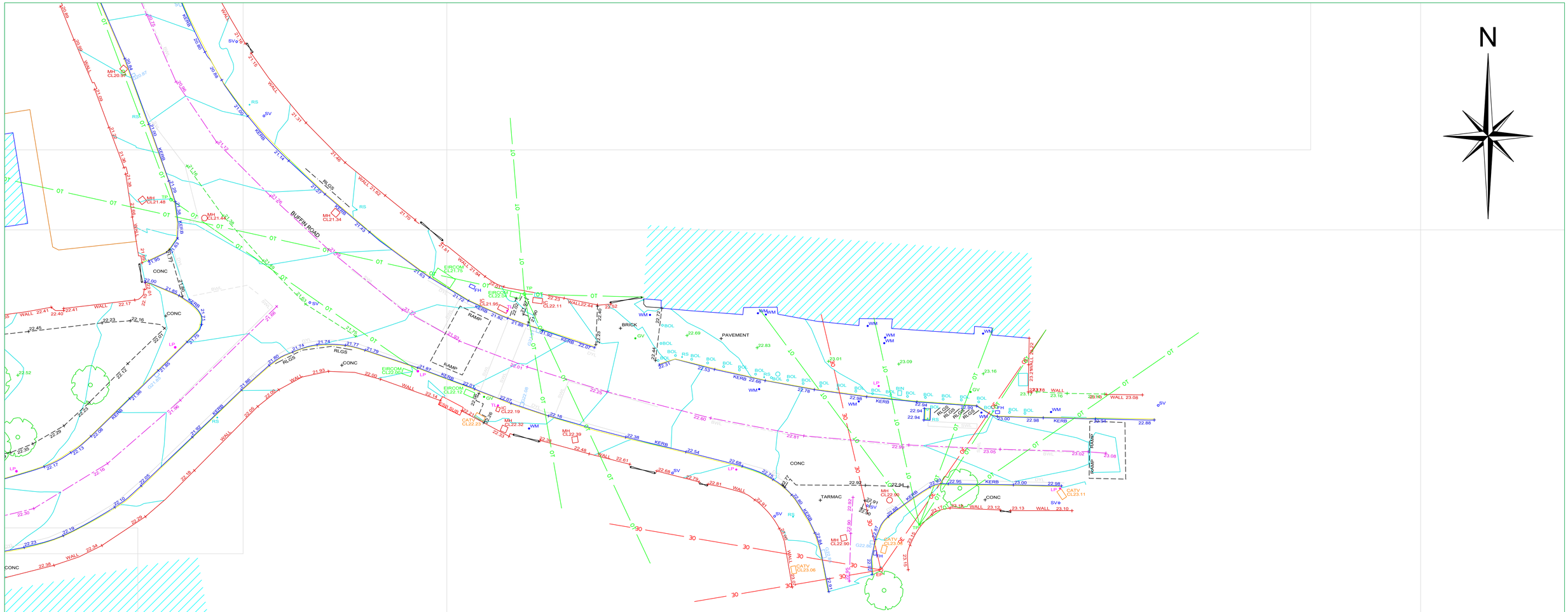
SCALE : 1/200 A1

DATE : 28/07/2020

DRG No: 4413

SHEET: 6 of 16

DESCRIPTION : 2D Topographical
SURVEYED BY : AH & NM
PROCESSED BY : Peter Walsh
CHECKED BY : Alan Brady



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RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH
CATTLE GRID

LINEWORK:

EMBANKEMENT TOP
DRAIN
BREAKLINE
BUILDING
KERB BOTTOM
WALL
PATH/CHANGE SURFACE
O/HEAD ELECTRICITY
O/HEAD TELECOM

STREET FURNITURE :

BOLLARDS
BORE HOLE
BUS STOP
CRASH BARRIER
ELECTRICITY POLE
EARTHING ROD
GATE
GROUND LIGHT
ILLUMINATED BOLLARD
LAMP POST
MARKER POST
POST
POST BOX
ROADSIGN
SIGN POST
TELEPHONE BOX
TELEPHONE POLE
TRAFFIC LIGHT
TRIAL PIT

SERVICES :

AIR VALVE
ARMSTRONG JUNCTION
CABLE TV IC
COVER LEVEL
EIRCOM COVER
EIRCOM JUNCTION BOX
ELECTRICAL CABLE PIT
ESAT COVER
ESB COVER
ESB JUNCTION BOX
FIRE HYDRANT
GAS VALVE
GULLY
INSPECTION COVER
MANHOLE
SEPTIC TANK
SLUICE VALVE
STOPCOCK

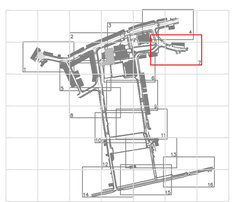
SERVICES :

SERVICE BOX (UNKNOWN)
TRAFFIC COVER
VENT
WATER METER
UNABLE TO LIFT

LEVELS :

BED LEVEL
EAVE LEVEL
FLOOR LEVEL
INVERT LEVEL
ROAD LEVEL
RIDGE LEVEL
SOFFIT LEVEL
SPOT LEVEL
TOP OF FENCE LEVEL
TOP OF WALL LEVEL
WATER LEVEL
SURVEY CONTROL STATION

SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

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CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	27/07/20	Original Drawing
002	24/09/20	Additional Information Added

SCALE : 1/200 A1

DATE : 28/07/2020

DRG No: 4413


SHEET: 7 of 16

DESCRIPTION : 2D Topographical

SURVEYED BY : AH & NM

PROCESSED BY : Peter Walsh

CHECKED BY : Alan Brady



RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH — TR
CATTLE GRID — GRID

LINEWORK:

EMBANKEMENT TOP — 101.50
DRAIN — 101.50
BREAKLINE — 101.50
BUILDING — 101.50
KERB BOTTOM — 101.50
WALL — 101.50
PATH/CHANGE SURFACE — 101.50
O/HEAD ELECTRICITY — OE
O/HEAD TELECOM — OT

STREET FURNITURE :

BOLLARDS — BD
BORE HOLE — BH
BUS STOP — BS
CRASH BARRIER — CB
ELECTRICITY POLE — EP
EARTHING ROD — ER
GATE
GROUND LIGHT — LT
ILLUMINATED BOLLARD — BOL
LAMP POST — LP
MARKER POST — MKR
POST — POST
POST BOX — POST BOX
ROADSIGN — RS RS
SIGN POST — SIGN
TELEPHONE BOX — TB
TELEPHONE POLE — TP
TRAFFIC LIGHT — TL
TRIAL PIT — TPIT

SERVICES :

AIR VALVE — AV
ARMSTRONG JUNCTION — AJ
CABLE TV IC — CATV
COVER LEVEL — CL
EIRCOM COVER — EIRCOM
EIRCOM JUNCTION BOX — EIRCOM BOX
ELECTRICAL CABLE PIT — ECP
ESAT COVER — ESAT
ESB COVER — ESB
ESB JUNCTION BOX — ESB BOX
FIRE HYDRANT — FH
GAS VALVE — GV
GULLY — G
INSPECTION COVER — IC
MANHOLE — MH
SEPTIC TANK — SEPTIC
SLUICE VALVE — SV
STOPCOCK — ST

SERVICES :

SERVICE BOX (UNKNOWN) — BOX
TRAFFIC COVER — TLIC
VENT — VENT
WATER METER — WM
UNABLE TO LIFT — UTO

LEVELS :

BED LEVEL — BED101.50
EAVE LEVEL — E101.50
FLOOR LEVEL — FL101.50
INVERT LEVEL — IL101.50
ROAD LEVEL — 101.50
RIDGE LEVEL — R101.50
SOFFIT LEVEL — SL101.50
SPOT LEVEL — 101.50
TOP OF FENCE LEVEL — TOF101.50
TOP OF WALL LEVEL — TOW101.50
WATER LEVEL — WL101.50
SURVEY CONTROL STATION

SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

CONTACT INFORMATION:

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CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

Emmet Road, Inchicore

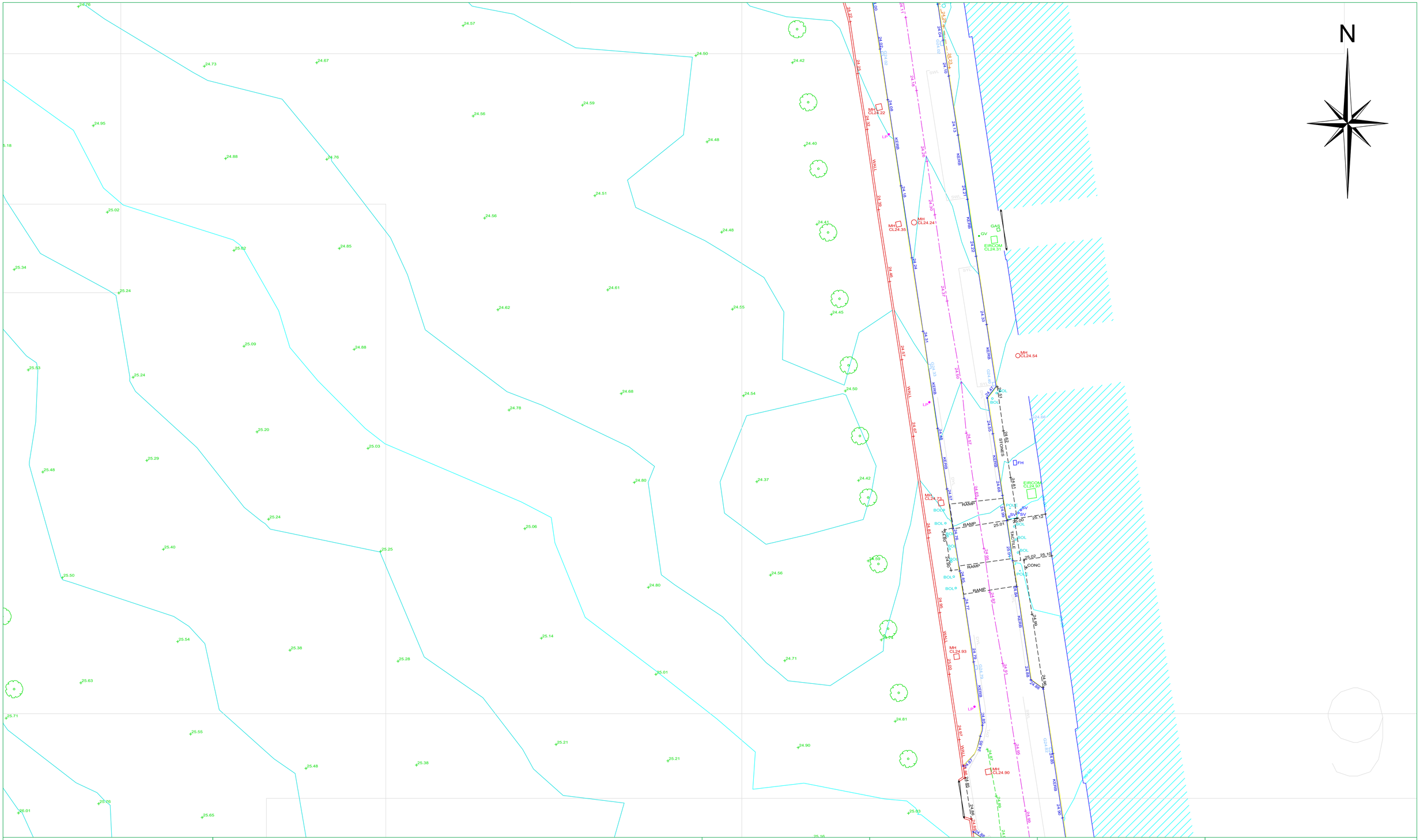
GRID SYSTEM: Irish Transverse Mercator
DATUM: Malin Head (OSGM15)
NOTES: Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	27/07/20	Original Drawing
002	24/09/20	Additional Information Added

SCALE :	1/200 A1
DATE :	28/07/2020
DRG No:	4413
DESCRIPTION :	2D Topographical
SURVEYED BY :	AH & NM
PROCESSED BY :	Peter Walsh
SHEET:	8 of 16
CHECKED BY :	Alan Brady

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RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH
CATTLE GRID

LINEWORK:

EMBANKEMENT TOP 101.50
DRAIN 101.50
BREAKLINE 101.50
BUILDING 101.50
KERB BOTTOM 101.50
WALL 101.50
PATH/CHANGE SURFACE 101.50
O/HEAD ELECTRICITY OE
O/HEAD TELECOM OT

STREET FURNITURE :

BOLLARDS	BD
BORE HOLE	BH
BUS STOP	BS
CRASH BARRIER	CB
ELECTRICITY POLE	EP
EARTHING ROD	ER
GATE	
GROUND LIGHT	LT
ILLUMINATED BOLLARD	BOL
LAMP POST	LP
MARKER POST	MKR
POST	POST
POST BOX	POST BOX
ROADSIGN	RS RS
SIGN POST	SIGN
TELEPHONE BOX	TB
TELEPHONE POLE	TP
TRAFFIC LIGHT	TL
TRIAL PIT	TPIT

SERVICES :

AIR VALVE	AV
ARMSTRONG JUNCTION	AJ
CABLE TV IC	CATV
COVER LEVEL	CL
EIRCOM COVER	EIRCOM
EIRCOM JUNCTION BOX	EIRCOM BOX
ELECTRICAL CABLE PIT	ECP
ESAT COVER	ESAT
ESB COVER	ESB
ESB JUNCTION BOX	ESB BOX
FIRE HYDRANT	FH
GAS VALVE	GV
GULLY	G
INSPECTION COVER	IC
MANHOLE	MH
SEPTIC TANK	SEPTIC
SLUICE VALVE	SV
STOPCOCK	ST

SERVICES :

SERVICE BOX (UNKNOWN)	BOX
TRAFFIC COVER	TLIC
VENT	VENT
WATER METER	WM
UNABLE TO LIFT	UTO

LEVELS :

BED LEVEL	BED101.50
EAVE LEVEL	E101.50
FLOOR LEVEL	FL101.50
INVERT LEVEL	IL101.50
ROAD LEVEL	101.50
RIDGE LEVEL	R101.50
SOFFIT LEVEL	SL101.50
SPOT LEVEL	101.50
TOP OF FENCE LEVEL	TOF101.50
TOP OF WALL LEVEL	TOW101.50
WATER LEVEL	WL101.50
SURVEY CONTROL STATION	

SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

CONTACT INFORMATION:

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CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

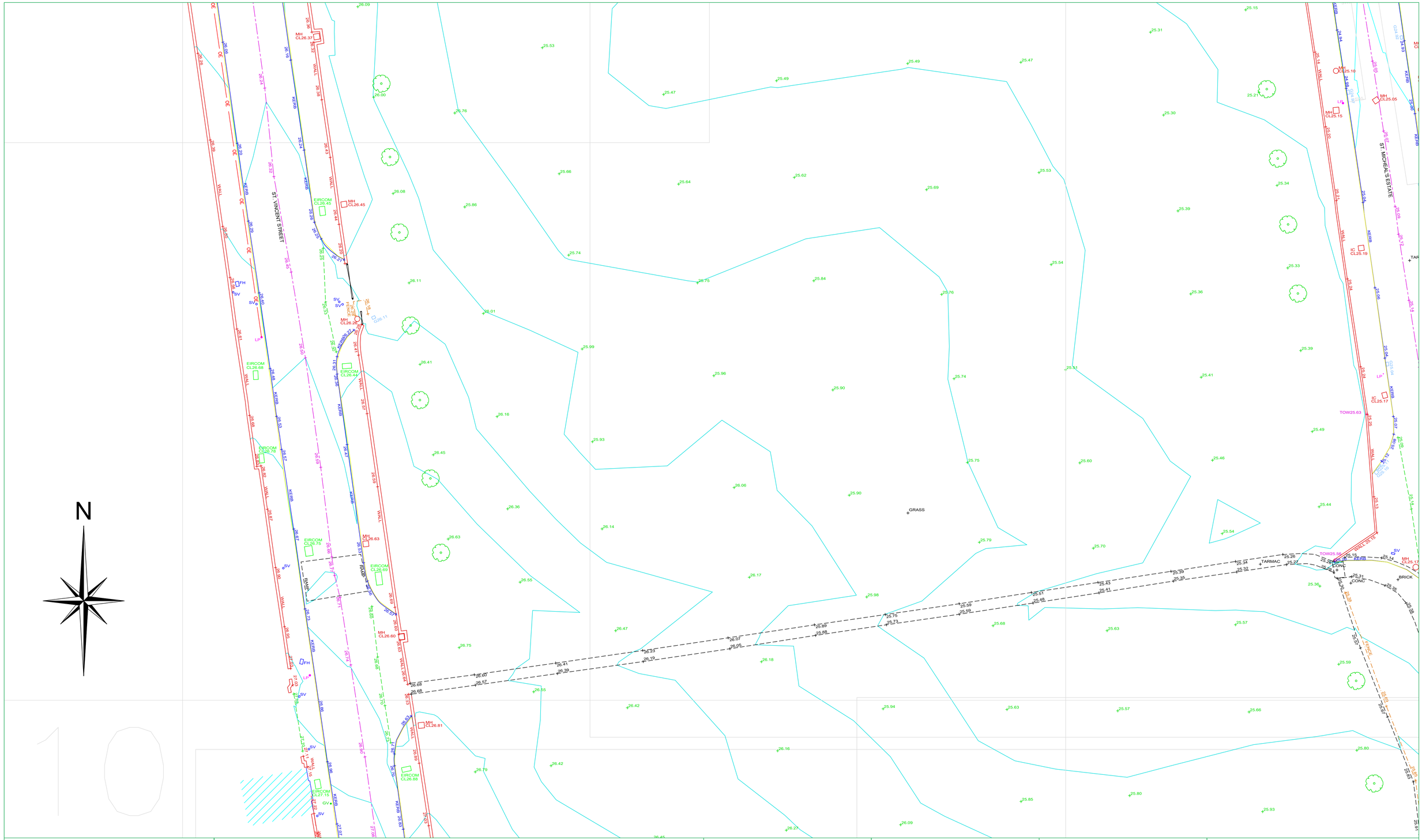
Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	27/07/20	Original Drawing
002	24/09/20	Additional Information Added

SCALE :	1/200 A1	DATE :	28/07/2020
DRG No:	4413	DESCRIPTION :	2D Topographical
		SURVEYED BY :	AH & NM
SHEET:	9 of 16	PROCESSED BY :	Peter Walsh
		CHECKED BY :	Alan Brady



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RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH
CATTLE GRID

LINEWORK:

EMBANKEMENT TOP 101.50
DRAIN 101.50
BREAKLINE 101.50
BUILDING 101.50
KERB BOTTOM 101.50
WALL 101.50
PATH/CHANGE SURFACE 101.50
O/HEAD ELECTRICITY OE
O/HEAD TELECOM OT

STREET FURNITURE :

BOLLARDS BD *
BORE HOLE BH +
BUS STOP BS *
CRASH BARRIER CB
ELECTRICITY POLE ED *
EARTHING ROD ER +
GATE
GROUND LIGHT LT *
ILLUMINATED BOLLARD BOL
LAMP POST LP *
MARKER POST MKR
POST POST *
POST BOX POST BOX +
ROADSIGN RS * RS
SIGN POST SIGN
TELEPHONE BOX TB
TELEPHONE POLE TP *
TRAFFIC LIGHT TL *
TRIAL PIT TPIT +

SERVICES :

AIR VALVE AV +
ARMSTRONG JUNCTION AJ
CABLE TV IC CATV
COVER LEVEL CL
EIRCOM COVER EIRCOM
EIRCOM JUNCTION BOX EIRCOM BOX
ELECTRICAL CABLE PIT ECP
ESAT COVER ESAT
ESB COVER ESB
ESB JUNCTION BOX ESB BOX
FIRE HYDRANT FH *
GAS VALVE GV
GULLY G
INSPECTION COVER IC
MANHOLE MH
SEPTIC TANK SEPTIC
SLUICE VALVE SV *
STOPCOCK ST *

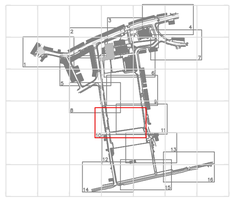
SERVICES :

SERVICE BOX (UNKNOWN) BOX
TRAFFIC COVER TLIG
VENT VENT *
WATER METER WM +
UNABLE TO LIFT UTO

LEVELS :

BED LEVEL + BED101.50
EAVE LEVEL + E101.50
FLOOR LEVEL + FL101.50
INVERT LEVEL + IL101.50
ROAD LEVEL + 101.50
RIDGE LEVEL + R101.50
SOFFIT LEVEL + SL101.50
SPOT LEVEL + 101.50
TOP OF FENCE LEVEL + TOF101.50
TOP OF WALL LEVEL + TOW101.50
WATER LEVEL + WL101.50
SURVEY CONTROL STATION

SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

CONTACT INFORMATION:

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CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

Emmet Road, Inchicore

GRID SYSTEM: Irish Transverse Mercator
DATUM: Malin Head (OSGM15)
NOTES: Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	27/07/20	Original Drawing
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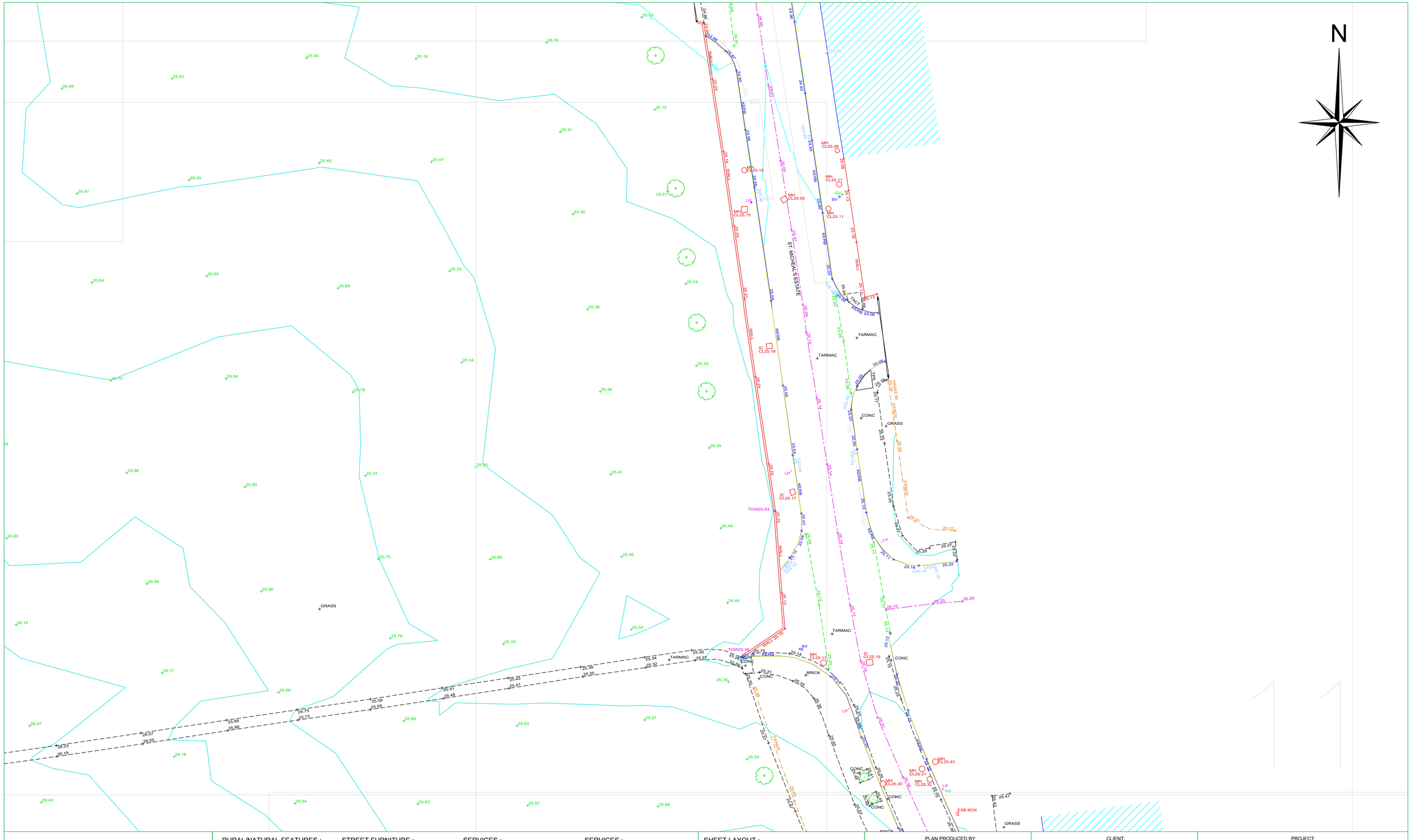
SCALE : 1/200 A1

DATE : 28/07/2020

DRG No: 4413

SHEET: 10 of 16

DESCRIPTION : 2D Topographical
SURVEYED BY : AH & NM
PROCESSED BY : Peter Walsh
CHECKED BY : Alan Brady



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RURAL/NATURAL FEATURES :

- BUSH
- SAPLING
- TREE
- HEDGE
- TROUGH
- CATTLE GRID

LINEWORK:

EMBANKEMENT TOP	101.50
DRAIN	101.50
BREAKLINE	101.50
BUILDING	101.50
KERB BOTTOM	101.50
WALL	101.50
PATH/CHANGE SURFACE	101.50
O/HEAD ELECTRICITY	OE
O/HEAD TELECOM	OT

STREET FURNITURE :

BOLLARDS	BD
BORE HOLE	BH +
BUS STOP	BS
CRASH BARRIER	CB
ELECTRICITY POLE	EP
EARTHING ROD	ER +
GATE	
GROUND LIGHT	LT
ILLUMINATED BOLLARD	BOL
LAMP POST	LP
MARKER POST	MKR
POST	POST
POST BOX	POST BOX +
ROADSIGN	RS RS
SIGN POST	SIGN
TELEPHONE BOX	TB
TELEPHONE POLE	TP
TRAFFIC LIGHT	TL
TRIAL PIT	TPIT +

SERVICES :

AIR VALVE	AV +
ARMSTRONG JUNCTION	AJ
CABLE TV IC	CATV
COVER LEVEL	CL
EIRCOM COVER	EIRCOM
EIRCOM JUNCTION BOX	EIRCOM BOX
ELECTRICAL CABLE PIT	ECP
ESAT COVER	ESAT
ESB COVER	ESB
ESB JUNCTION BOX	ESB BOX
FIRE HYDRANT	FH +
GAS VALVE	GV
GULLY	G
INSPECTION COVER	IC
MANHOLE	MH
SEPTIC TANK	SEPTIC
SLUICE VALVE	SV
STOPCOCK	ST

SERVICES :

SERVICE BOX (UNKNOWN)	BOX
TRAFFIC COVER	TLIC
VENT	VENT
WATER METER	WM +
UNABLE TO LIFT	UTO

LEVELS :

BED LEVEL	+ BED101.50
EAVE LEVEL	+ E101.50
FLOOR LEVEL	+ FL101.50
INVERT LEVEL	+ IL101.50
ROAD LEVEL	+ 101.50
RIDGE LEVEL	+ R101.50
SOFFIT LEVEL	+ SL101.50
SPOT LEVEL	+ 101.50
TOP OF FENCE LEVEL	+ TOF101.50
TOP OF WALL LEVEL	+ TOW101.50
WATER LEVEL	+ WL101.50
SURVEY CONTROL STATION	

SHEET LAYOUT :



PLAN PRODUCED BY:

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CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
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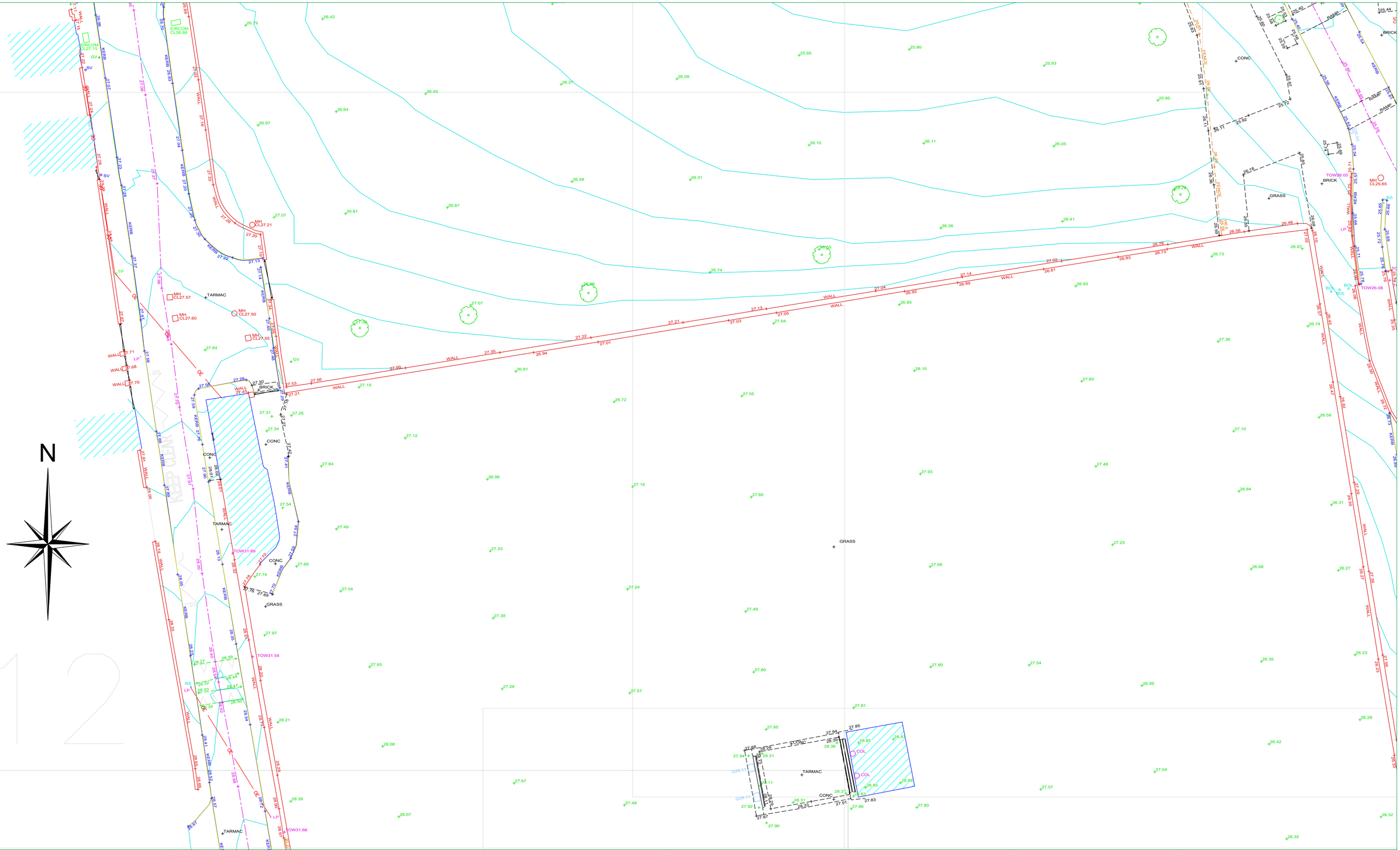
SCALE : 1/200 A1

DATE : 28/07/2020

DRG No: 4413

SHEET: 11 of 16

DESCRIPTION :	2D Topographical
SURVEYED BY :	AH & NM
PROCESSED BY :	Peter Walsh
CHECKED BY :	Alan Brady



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RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH
CATTLE GRID

LINEWORK:

EMBANKEMENT TOP	101.50
DRAIN	101.50
BREAKLINE	101.50
BUILDING	101.50
KERB BOTTOM	101.50
WALL	101.50
PATH/CHANGE SURFACE	101.50
O/HEAD ELECTRICITY	OE
O/HEAD TELECOM	OT

STREET FURNITURE :

BOLLARDS	BD *
BORE HOLE	BH +
BUS STOP	BS *
CRASH BARRIER	CB
ELECTRICITY POLE	EP *
EARTHING ROD	ER +
GATE	TR
GROUND LIGHT	LT *
ILLUMINATED BOLLARD	BOL
LAMP POST	LP *
MARKER POST	MKR
POST	POST *
POST BOX	POST BOX +
ROADSIGN	RS * RS +
SIGN POST	SIGN +
TELEPHONE BOX	TB
TELEPHONE POLE	TP *
TRAFFIC LIGHT	TL *
TRIAL PIT	TPIT +

SERVICES :

AIR VALVE	AV +
ARMSTRONG JUNCTION	AJ
CABLE TV IC	CATV
COVER LEVEL	CL
EIRCOM COVER	EIRCOM
EIRCOM JUNCTION BOX	EIRCOM BOX
ELECTRICAL CABLE PIT	ECP
ESAT COVER	ESAT
ESB COVER	ESB
ESB JUNCTION BOX	ESB BOX
FIRE HYDRANT	FH *
GAS VALVE	GV
GULLY	G
INSPECTION COVER	IC
MANHOLE	MH
SEPTIC TANK	SEPTIC
SLUICE VALVE	SV *
STOPCOCK	ST *

SERVICES :

SERVICE BOX (UNKNOWN)	BOX
TRAFFIC COVER	TLIC
VENT	VENT *
WATER METER	WM +
UNABLE TO LIFT	UTO

LEVELS :

BED LEVEL	+ BED101.50
EAVE LEVEL	+ E101.50
FLOOR LEVEL	+ FL101.50
INVERT LEVEL	+ IL101.50
ROAD LEVEL	+ 101.50
RIDGE LEVEL	+ R101.50
SOFFIT LEVEL	+ SL101.50
SPOT LEVEL	+ 101.50
TOP OF FENCE LEVEL	+ TOF101.50
TOP OF WALL LEVEL	+ TOW101.50
WATER LEVEL	+ WL101.50
SURVEY CONTROL STATION	

SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

CONTACT INFORMATION:

Apex Surveys
Unit 78 Dunboyne Business Park
Dunboyne, Co. Meath, Ireland
www.apexsurveys.ie
info@apexsurveys.ie
00353 1 691 0156

CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

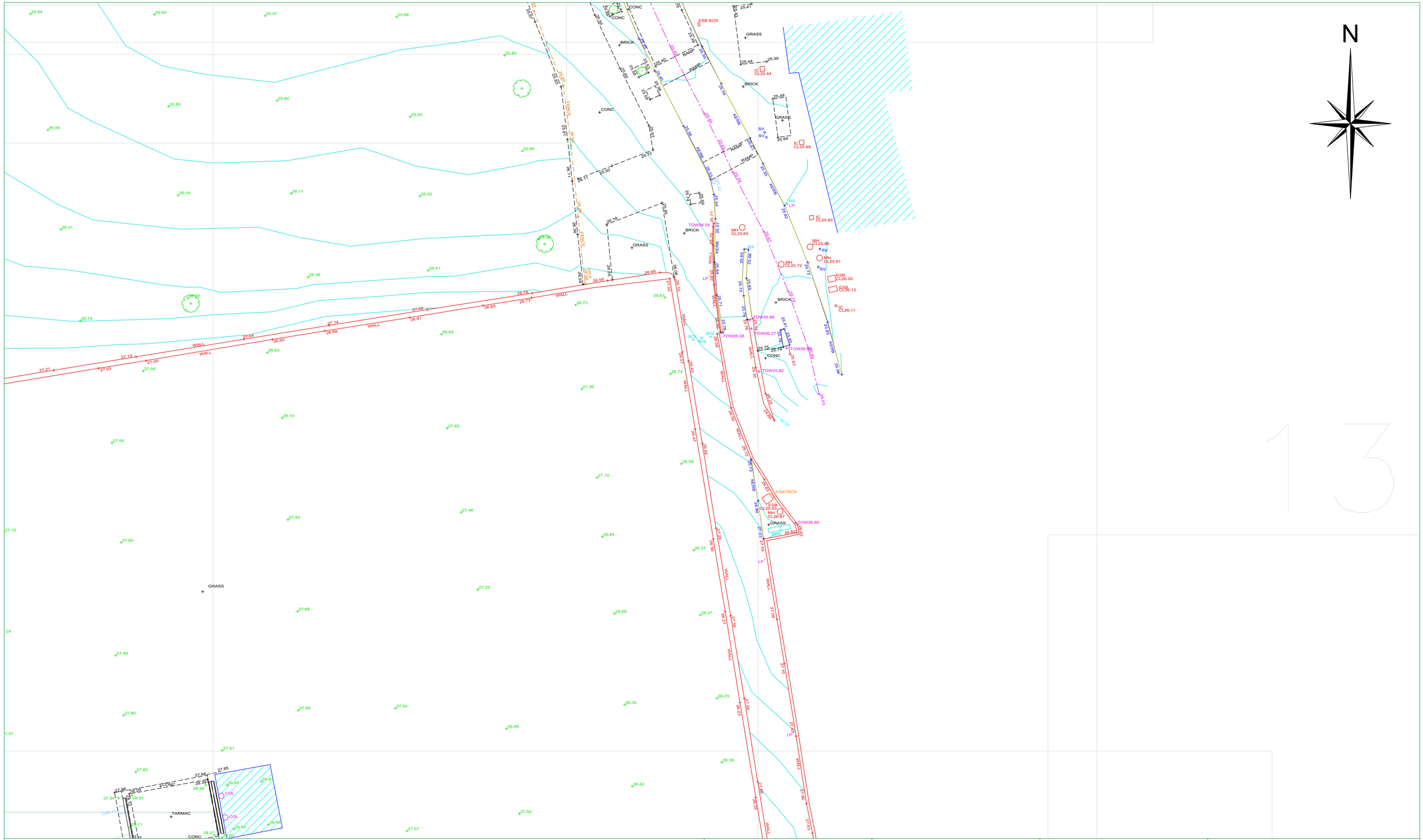
Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	27/07/20	Original Drawing
002	24/09/20	Additional Information Added

SCALE :	1/200 A1	DATE :	28/07/2020
DRG No:	4413	DESCRIPTION :	2D Topographical
		SURVEYED BY :	AH & NM
SHEET:	12 of 16	PROCESSED BY :	Peter Walsh
		CHECKED BY :	Alan Brady



APEX SURVEYS

www.apexsurveys.ie
info@apexsurveys.ie
00353 1 691 0156

RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH
CATTLE GRID

LINEWORK:

EMBANKEMENT TOP 101.50
DRAIN 101.50
BREAKLINE 101.50
BUILDING 101.50
KERB BOTTOM 101.50
WALL 101.50
PATH/CHANGE SURFACE 101.50
O/HEAD ELECTRICITY OE
O/HEAD TELECOM OT

STREET FURNITURE :

BOLLARDS BD
BORE HOLE BH
BUS STOP BS
CRASH BARRIER CB
ELECTRICITY POLE EP
EARTHING ROD ER
GATE
GROUND LIGHT LT
ILLUMINATED BOLLARD BOL
LAMP POST LP
MARKER POST MKR
POST POST
POST BOX POST BOX
ROADSIGN RS RS
SIGN POST SIGN
TELEPHONE BOX TB
TELEPHONE POLE TP
TRAFFIC LIGHT TL
TRIAL PIT TPIT

SERVICES :

AIR VALVE AV
ARMSTRONG JUNCTION AJ
CABLE TV IC CATV
COVER LEVEL CL
EIRCOM COVER EIRCOM
EIRCOM JUNCTION BOX EIRCOM BOX
ELECTRICAL CABLE PIT ECP
ESAT COVER ESAT
ESB COVER ESB
ESB JUNCTION BOX ESB BOX
FIRE HYDRANT FH
GAS VALVE GV
GULLY G
INSPECTION COVER IC
MANHOLE MH
SEPTIC TANK SEPTIC
SLUICE VALVE SV
STOPCOCK ST

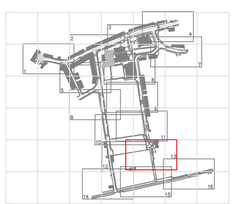
SERVICES :

SERVICE BOX (UNKNOWN) BOX
TRAFFIC COVER TLIC
VENT VENT
WATER METER WM
UNABLE TO LIFT UTO

LEVELS :

BED LEVEL + BED101.50
EAVE LEVEL + E101.50
FLOOR LEVEL + FL101.50
INVERT LEVEL + IL101.50
ROAD LEVEL + 101.50
RIDGE LEVEL + R101.50
SOFFIT LEVEL + SL101.50
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TOP OF FENCE LEVEL + TOF101.50
TOP OF WALL LEVEL + TOW101.50
WATER LEVEL + WL101.50
SURVEY CONTROL STATION

SHEET LAYOUT :



PLAN PRODUCED BY:

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00353 1 691 0156

CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

Emmet Road, Inchicore

GRID SYSTEM: Irish Transverse Mercator
DATUM: Malin Head (OSGM15)
NOTES: Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	27/07/20	Original Drawing
002	24/09/20	Additional Information Added

SCALE : 1/200 A1
DATE : 28/07/2020
DRG No: 4413
SHEET: 13 of 16

DESCRIPTION : 2D Topographical
SURVEYED BY : AH & NM
PROCESSED BY : Peter Walsh
CHECKED BY : Alan Brady

N

712000mE

712100mE

GRAND CANAL

14

APEX SURVEYS

www.apexsurveys.ie
info@apexsurveys.ie
00353 1 691 0156

RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH
CATTLE GRID

LINEWORK:

EMBANKEMENT TOP 101.50
DRAIN 101.50
BREAKLINE 101.50
BUILDING 101.50
KERB BOTTOM 101.50
WALL 101.50
PATH/CHANGE SURFACE 101.50
O/HEAD ELECTRICITY OE
O/HEAD TELECOM OT

STREET FURNITURE :

BOLLARDS	BD *
BORE HOLE	BH +
BUS STOP	BS *
CRASH BARRIER	CB
ELECTRICITY POLE	EP *
EARTHING ROD	ER +
GATE	
GROUND LIGHT	LT *
ILLUMINATED BOLLARD	BOL
LAMP POST	LP *
MARKER POST	MKR
POST	POST *
POST BOX	POST BOX +
ROADSIGN	RS * RS
SIGN POST	SIGN
TELEPHONE BOX	TB
TELEPHONE POLE	TP *
TRAFFIC LIGHT	TL *
TRIAL PIT	TPIT +

SERVICES :

AIR VALVE	AV +
ARMSTRONG JUNCTION	AJ
CABLE TV IC	CATV
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EIRCOM COVER	EIRCOM
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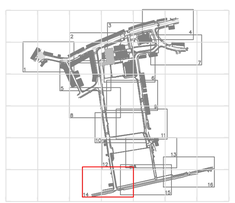
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UNABLE TO LIFT	UTO

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SURVEY CONTROL STATION	

SHEET LAYOUT :



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CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	27/07/20	Original Drawing
002	24/09/20	Additional Information Added

SCALE : 1/200 A1

DATE : 28/07/2020

DRG No: 4413

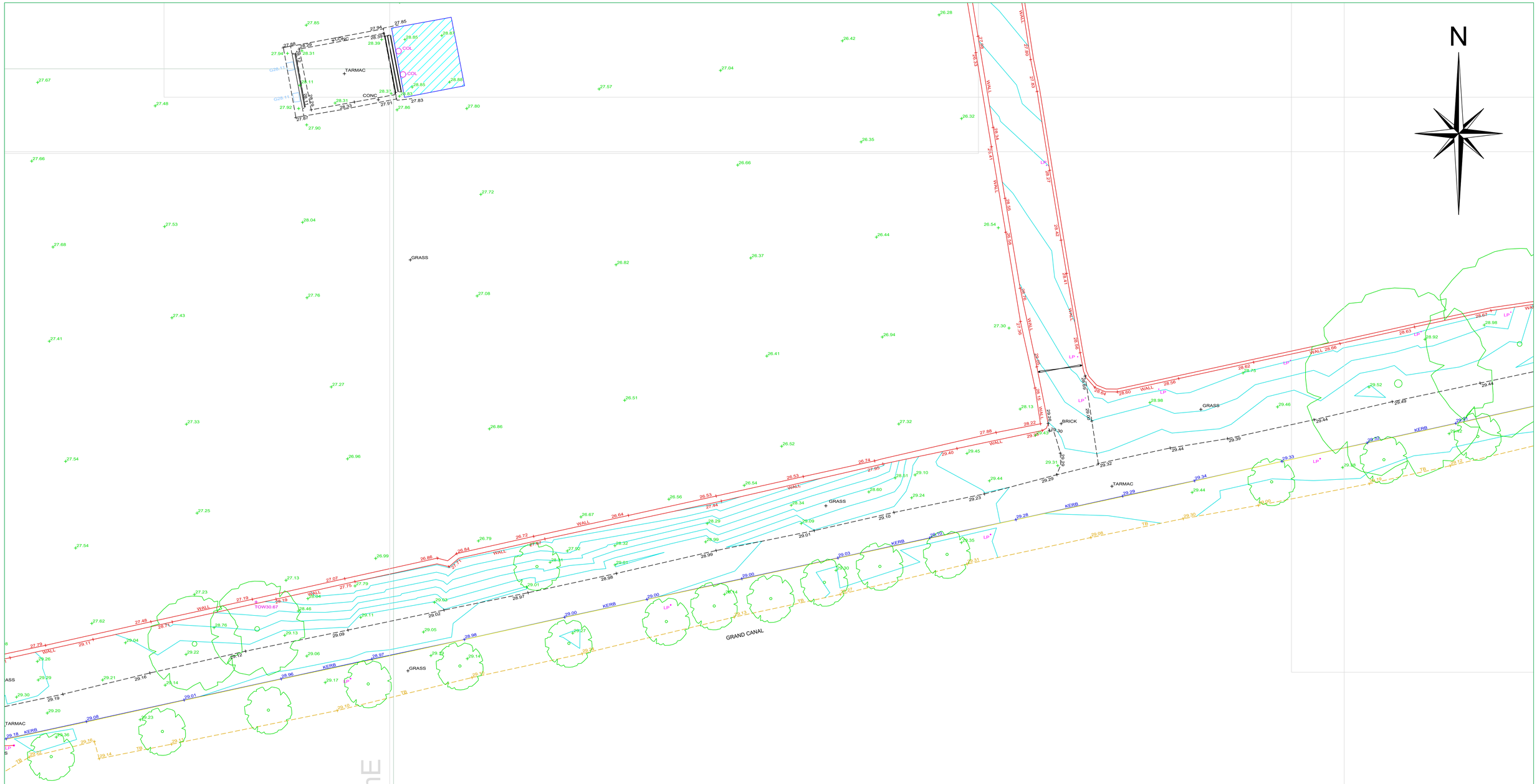
SHEET: 14 of 16

DESCRIPTION : 2D Topographical

SURVEYED BY : AH & NM

PROCESSED BY : Peter Walsh

CHECKED BY : Alan Brady



15

APEX SURVEYS

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RURAL/NATURAL FEATURES :

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GULLY G
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MANHOLE MH
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SPOT LEVEL +101.50
TOP OF FENCE LEVEL +TOF101.50
TOP OF WALL LEVEL +TOW101.50
WATER LEVEL +WL101.50
SURVEY CONTROL STATION

SHEET LAYOUT :



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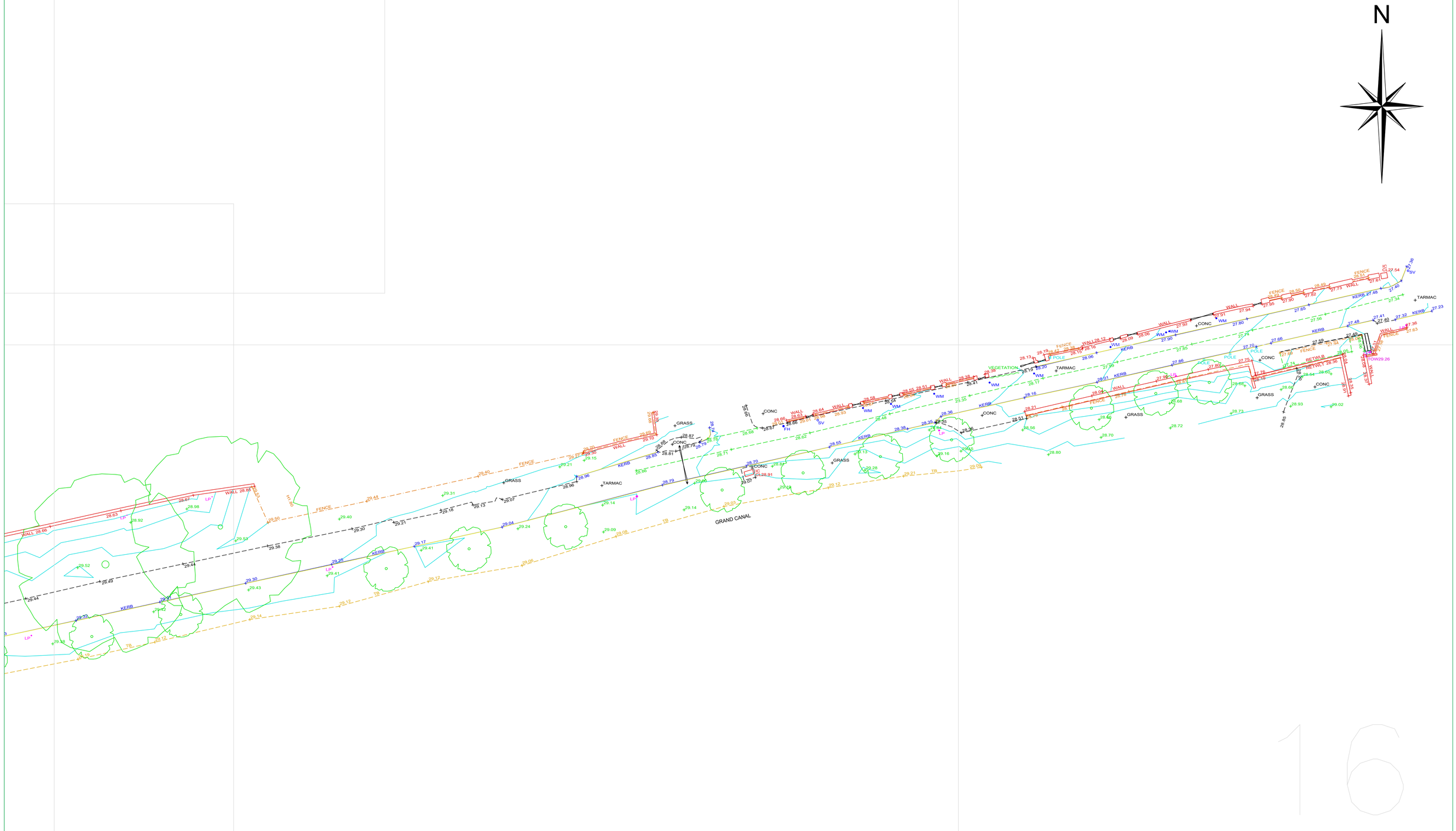
Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	27/07/20	Original Drawing
002	24/09/20	Additional Information Added

SCALE :	1/200 A1
DRG No:	4413
SHEET:	15 of 16
DATE :	28/07/2020
DESCRIPTION :	2D Topographical
SURVEYED BY :	AH & NM
PROCESSED BY :	Peter Walsh
CHECKED BY :	Alan Brady



16

APEX SURVEYS

www.apexsurveys.ie
info@apexsurveys.ie
00353 1 691 0156

RURAL/NATURAL FEATURES :

BUSH
SAPLING
TREE
HEDGE
TROUGH
CATTLE GRID

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CRASH BARRIER	CB
ELECTRICITY POLE	EP *
EARTHING ROD	ER +
GATE	
GROUND LIGHT	LT *
ILLUMINATED BOLLARD	BOL
LAMP POST	LP *
MARKER POST	MKR
POST	POST *
POST BOX	POST BOX +
ROADSIGN	RS * RS
SIGN POST	SIGN
TELEPHONE BOX	TB
TELEPHONE POLE	TP *
TRAFFIC LIGHT	TL *
TRIAL PIT	TPIT +

SERVICES :

AIR VALVE	AV +
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EIRCOM COVER	EIRCOM
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ELECTRICAL CABLE PIT	ECP
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SOFFIT LEVEL	+ SL101.50
SPOT LEVEL	+ 101.50
TOP OF FENCE LEVEL	+ TOF101.50
TOP OF WALL LEVEL	+ TOW101.50
WATER LEVEL	+ WL101.50
SURVEY CONTROL STATION	

SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

CONTACT INFORMATION:

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Dunboyne, Co. Meath, Ireland
www.apexsurveys.ie
info@apexsurveys.ie
00353 1 691 0156

CLIENT:

O'Connor - Sutton - Cronin

PROJECT:

Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	27/07/20	Original Drawing
002	24/09/20	Additional Information Added

SCALE : 1/200 A1

DATE : 28/07/2020

DRG No: 4413

SHEET: 16 of 16

DESCRIPTION : 2D Topographical
SURVEYED BY : AH & NM
PROCESSED BY : Peter Walsh
CHECKED BY : Alan Brady

OCSC
O'CONNOR | SUTTON | CRONIN
Multidisciplinary
Consulting Engineers

Appendix C
Photographic Log

PHOTOGRAPHIC LOG

PROJECT NO. & LOCATION: B967 - Emmet Road, Dublin	**CLIENT:** Dublin City Council	**DATE**: December 2020

Photo 1:
Window Sampling at WS01 location, adjacent to the Pigeon Club building, looking north.



Photo 2:
Material collected from Window Sampling at WS05 location.



PHOTOGRAPHIC LOG

PROJECT NO. & LOCATION: B967 - Emmet Road, Dublin	**CLIENT:** Dublin City Council	**DATE:** December 2020

Photo 3:
Material collected from Window Sampling at WS04 location.



Photo 4:
Material collected from Window Sampling at WS07 location.



PHOTOGRAPHIC LOG

PROJECT NO. & LOCATION: B967 - Emmet Road, Dublin	**CLIENT:** Dublin City Council	**DATE**: December 2020

Photo 5:
Material from TP40 location.



Photo 6:
Material collected from Trial Pit at TP27 location.



PHOTOGRAPHIC LOG

PROJECT NO. & LOCATION: B967 - Emmet Road, Dublin	**CLIENT:** Dublin City Council	**DATE**: December 2020

Photo 7:
Window Sampling adjacent to the Inchicore Community Sports Centre., looking west.



Photo 8:
Burned material in the southeast corner of the site, looking north.



PHOTOGRAPHIC LOG

PROJECT NO. & LOCATION: B967 - Emmet Road, Dublin	**CLIENT:** Dublin City Council	**DATE**: December 2020

Photo 9:
Trial Pit location at TP49, where two intact brick building structures were encountered.



Photo 10:
Trial Pit locations at TP40, where a brick building structure was encountered.



PHOTOGRAPHIC LOG

PROJECT NO. & LOCATION: B967 - Emmet Road, Dublin	**CLIENT:** Dublin City Council	**DATE**: December 2020

Photo 11:
Excavated material from Trial Pit at TP35 location, looking east.



Photo 12:
Pigeon Club building being demolished in November 2020.



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O'CONNOR | SUTTON | CRONIN
Multidisciplinary
Consulting Engineers

Appendix D
Laboratory Analysis Certificates

Element Materials Technology
Unit 3 Deeside Point
Zone 3
Deeside Industrial Park
Deeside
CH5 2UA

P: +44 (0) 1244 833780
F: +44 (0) 1244 833781
W: www.element.com

O'Connor Sutton Cronin & Assoc. Ltd
9 Prussia Street
Dublin 7
Ireland

Attention :	Richard Thompson
Date :	29th September, 2020
Your reference :	B967
Our reference :	Test Report 20/12733 Batch 1
Location :	Emmet Road
Date samples received :	18th September, 2020
Status :	Final report
Issue :	2

Sixteen samples were received for analysis on 18th September, 2020 of which sixteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Phil Sommerton BSc
Senior Project Manager

Please include all sections of this report if it is reproduced

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12733

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS05	WS05	WS05	WS05	WS01	WS01	WS01	WS01	WS09	WS09			
Depth	0.075-1.00	1.00-2.00	2.00-2.90	2.70-2.90	0.02-1.00	1.00-2.00	2.00-2.70	2.50-2.70	0.00-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020			
Antimony	3	3	2	2	3	3	2	3	4	2	<1	mg/kg	TM30/PM15
Arsenic #	9.5	11.4	11.2	11.3	14.2	12.7	11.0	11.9	15.5	10.4	<0.5	mg/kg	TM30/PM15
Barium #	80	90	76	89	91	76	87	168	165	65	<1	mg/kg	TM30/PM15
Cadmium #	1.7	2.2	2.7	2.6	1.5	2.7	2.5	2.4	2.6	2.3	<0.1	mg/kg	TM30/PM15
Chromium #	30.4	49.1	47.4	30.0	55.4	37.4	36.0	29.9	61.4	29.5	<0.5	mg/kg	TM30/PM15
Copper #	35	36	36	35	55	43	38	37	52	29	<1	mg/kg	TM30/PM15
Lead #	82	15	15	17	84	20	17	19	137	13	<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	2.9	6.1	5.8	4.8	6.7	5.2	5.9	5.3	6.5	4.0	<0.1	mg/kg	TM30/PM15
Nickel #	28.9	43.1	36.8	43.2	35.8	55.1	45.6	49.4	47.6	35.1	<0.7	mg/kg	TM30/PM15
Selenium #	1	2	5	3	1	1	5	10	1	1	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	606	284	308	375	523	238	213	239	1067	257	<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.5	0.9	0.7	0.4	1.0	0.4	0.3	0.4	1.2	0.4	<0.1	mg/kg	TM74/PM32
Zinc #	92	81	87	90	102	115	87	106	218	83	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	0.07	<0.03	<0.03	<0.03	0.07	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	<0.03	<0.03	0.07	0.27	<0.03	<0.03	<0.03	0.49	<0.03	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	0.09	<0.04	<0.04	<0.04	0.15	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.05	<0.03	<0.03	<0.03	0.52	<0.03	<0.03	<0.03	1.17	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	0.05	<0.03	<0.03	<0.03	0.70	<0.03	<0.03	<0.03	1.06	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	<0.06	<0.06	0.42	<0.06	<0.06	<0.06	0.66	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	0.05	<0.02	<0.02	0.03	0.49	<0.02	<0.02	<0.02	0.69	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	0.11	<0.07	<0.07	<0.07	1.25	<0.07	<0.07	<0.07	1.31	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.06	<0.04	<0.04	<0.04	0.78	<0.04	<0.04	<0.04	0.70	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04	<0.04	<0.04	0.57	<0.04	<0.04	<0.04	0.43	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.07	<0.04	<0.04	<0.04	0.61	<0.04	<0.04	<0.04	0.48	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	0.29	<0.22	<0.22	<0.22	3.73	<0.22	<0.22	<0.22	4.09	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	5.98	<0.64	<0.64	<0.64	7.34	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.08	<0.05	<0.05	<0.05	0.90	<0.05	<0.05	<0.05	0.94	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.03	<0.02	<0.02	<0.02	0.35	<0.02	<0.02	<0.02	0.37	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	95	88	94	97	97	91	93	90	93	95	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	<30	<30	<30	<30	48	<30	<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12733

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS05	WS05	WS05	WS05	WS01	WS01	WS01	WS01	WS09	WS09			
Depth	0.075-1.00	1.00-2.00	2.00-2.90	2.70-2.90	0.02-1.00	1.00-2.00	2.00-2.70	2.50-2.70	0.00-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020			
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	16	<7	<7	<7	<7	<7	<7	<7	48	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	48	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	<10	<10	<10	<10	14	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	15	<10	<10	<10	<10	<10	<10	<10	36	<10	<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	<4	<4	7	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	13	<7	<7	<7	23	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	71	<7	<7	<7	113	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	12	<7	<7	<7	15	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26	<26	<26	96	<26	<26	<26	158	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	96	<52	<52	<52	206	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	28	<10	<10	<10	64	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10	<10	<10	49	<10	<10	<10	87	<10	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced

All solid results are expressed on a dry weight basis unless stated otherwise.

Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12733

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS05	WS05	WS05	WS05	WS01	WS01	WS01	WS01	WS09	WS09			
Depth	0.075-1.00	1.00-2.00	2.00-2.90	2.70-2.90	0.02-1.00	1.00-2.00	2.00-2.70	2.50-2.70	0.00-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020			
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	14.5	13.6	10.5	9.6	16.0	14.4	10.6	10.0	17.0	12.2	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	12.7	12.0	9.5	8.8	13.8	12.6	9.6	9.1	14.6	10.8	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	30.4	49.1	47.4	30.0	55.4	37.4	36.0	29.9	61.4	29.5	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.42	0.40	0.56	0.74	2.39	0.37	0.55	0.65	2.46	0.44	<0.02	%	TM21/PM24
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Elemental Sulphur	3	1	2	1	23	<1	<1	<1	<1	1	<1	mg/kg	TM108/PM114
Loss on Ignition #	1.7	2.0	2.1	2.0	4.3	2.0	2.1	2.8	5.3	2.1	<1.0	%	TM22/PM0
pH #	8.68	8.62	8.44	8.64	8.29	8.42	8.38	8.42	8.40	8.61	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1047	0.1047	0.098	0.0997	0.104	0.1019	0.101	0.0998	0.1043	0.0999		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12733

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48					LOD/LOR	Units	Method No.
Sample ID	WS09	WS09	WS02	WS02	WS02	WS02							
Depth	2.00-3.00	3.00-3.30	0.085-1.00	1.00-2.00	2.00-2.75	2.50-2.75							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020							
Antimony	3	2	3	2	2	3					<1	mg/kg	TM30/PM15
Arsenic #	12.2	9.8	10.1	11.4	13.6	11.8					<0.5	mg/kg	TM30/PM15
Barium #	105	84	89	52	86	102					<1	mg/kg	TM30/PM15
Cadmium #	2.6	1.8	1.9	2.3	2.0	2.8					<0.1	mg/kg	TM30/PM15
Chromium #	55.2	58.1	37.4	33.6	39.4	32.6					<0.5	mg/kg	TM30/PM15
Copper #	39	35	35	38	36	37					<1	mg/kg	TM30/PM15
Lead #	16	16	69	16	15	17					<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					<0.1	mg/kg	TM30/PM15
Molybdenum #	7.0	5.9	3.9	4.5	4.8	5.4					<0.1	mg/kg	TM30/PM15
Nickel #	48.2	41.1	32.7	37.9	45.6	47.5					<0.7	mg/kg	TM30/PM15
Selenium #	6	5	2	2	4	9					<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	234	462	696	350	283	387					<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.8	0.6	0.5	0.5	0.4	0.4					<0.1	mg/kg	TM74/PM32
Zinc #	93	82	108	90	86	93					<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	0.03	<0.03	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	0.07	0.27	<0.03	<0.03	0.07					<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	0.06	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	<0.03	0.54	<0.03	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03	0.48	<0.03	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	0.31	<0.06	<0.06	<0.06					<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	0.04	0.33	<0.02	<0.02	0.04					<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07	0.59	<0.07	<0.07	<0.07					<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04	0.31	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04	0.19	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	0.21	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	<0.22	1.84	<0.22	<0.22	<0.22					<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	3.32	<0.64	<0.64	<0.64					<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	0.42	<0.05	<0.05	<0.05					<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	0.17	<0.02	<0.02	<0.02					<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1					<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	89	96	99	89	91	95					<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	<30	<30					<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12733

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48					LOD/LOR	Units	Method No.
Sample ID	WS09	WS09	WS02	WS02	WS02	WS02							
Depth	2.00-3.00	3.00-3.30	0.085-1.00	1.00-2.00	2.00-2.75	2.50-2.75							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020							
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2					<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4					<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	<7	<7					<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	25	<7					<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7					<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26					<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	<10	<10					<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	<10	<10	23	<10					<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2					<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4					<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	21	<7					<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	208	<7					<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	17	<7					<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26	<26	<26	246	<26					<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	246	<52					<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	94	<10					<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10	<10	<10	126	<10					<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV					<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV					<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV					<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV					<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV					<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV					<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035					<0.035	mg/kg	TM17/PM8

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12733

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48					LOD/LOR	Units	Method No.
Sample ID	WS09	WS09	WS02	WS02	WS02	WS02							
Depth	2.00-3.00	3.00-3.30	0.085-1.00	1.00-2.00	2.00-2.75	2.50-2.75							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020							
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					<0.01	mg/kg	TM26/PM21
Natural Moisture Content	10.3	12.0	11.5	12.5	10.7	9.5					<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	9.3	10.7	10.3	11.1	9.7	8.7					<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3					<0.3	mg/kg	TM38/PM20
Chromium III	55.2	58.1	37.4	33.6	39.4	32.6					<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5					<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.56	0.67	0.81	0.42	0.57	0.72					<0.02	%	TM21/PM24
Sulphide	<10	<10	<10	<10	<10	<10					<10	mg/kg	TM107/PM45
Elemental Sulphur	<1	3	<1	<1	<1	1					<1	mg/kg	TM108/PM114
Loss on Ignition #	2.6	2.1	2.3	1.9	2.2	2.3					<1.0	%	TM22/PM0
pH #	8.59	8.41	8.44	8.53	8.66	8.60					<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1005	0.0996	0.1035	0.1039	0.0992	0.0981						kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09						kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12733

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS05	WS05	WS05	WS05	WS01	WS01	WS01	WS01	WS09	WS09			
Depth	0.075-1.00	1.00-2.00	2.00-2.90	2.70-2.90	0.02-1.00	1.00-2.00	2.00-2.70	2.50-2.70	0.00-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020			
Dissolved Antimony #	0.004	<0.002	<0.002	<0.002	0.004	<0.002	<0.002	<0.002	0.004	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.04	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	0.0044	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	0.044	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.005	<0.003	0.004	<0.003	0.004	<0.003	<0.003	<0.003	0.011	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.05	<0.03	0.04	<0.03	0.04	<0.03	<0.03	<0.03	0.11	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	0.0020	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.020	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.006	0.012	0.032	0.041	0.027	0.012	0.032	0.032	0.009	0.008	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.06	0.12	0.32	0.41	0.27	0.12	0.32	0.32	0.09	0.08	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003	<0.003	<0.003	0.003	<0.003	<0.003	<0.003	0.004	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	<0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	0.7	<0.3	0.3	0.4	0.6	0.3	<0.3	0.3	0.4	<0.3	<0.3	mg/l	TM173/PM0
Fluoride	7	<3	3	4	6	3	<3	3	4	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	2.8	1.5	2.5	4.4	3.9	1.6	1.6	1.7	0.6	<0.5	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	28	15	25	44	39	16	16	17	6	<5	<5	mg/kg	TM38/PM0
Chloride #	<0.3	<0.3	<0.3	<0.3	1.3	0.4	0.4	0.4	<0.3	<0.3	<0.3	mg/l	TM38/PM0
Chloride #	<3	<3	<3	<3	13	4	4	4	<3	<3	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	<0.03	<0.03	0.03	0.04	<0.03	<0.03	0.04	0.05	0.04	0.05	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	<0.3	<0.3	0.3	0.4	<0.3	<0.3	0.4	0.5	0.4	0.5	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	<2	4	3	2	3	3	3	3	5	2	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	<20	40	30	20	30	30	30	30	50	20	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	<35	<35	<35	69	56	67	43	49	68	43	<35	mg/l	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Total Dissolved Solids #	<350	<350	<350	390	580	370	430	430	680	430	<350	mg/kg	TM20/PM0

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12733

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48					LOD/LOR	Units	Method No.
Sample ID	WS09	WS09	WS02	WS02	WS02	WS02							
Depth	2.00-3.00	3.00-3.30	0.085-1.00	1.00-2.00	2.00-2.75	2.50-2.75							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020							
Dissolved Antimony #	<0.002	0.002	0.003	0.003	<0.002	0.003					<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	0.03	0.03	<0.02	0.03					<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025					<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025					<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.003	0.005	<0.003	<0.003	<0.003	<0.003					<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.03	0.05	<0.03	<0.03	<0.03	<0.03					<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012					<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12					<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005					<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015					<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015					<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007					<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07					<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.024	0.034	0.009	0.014	0.022	0.035					<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.24	0.34	0.09	0.14	0.22	0.35					<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002					<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02					<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	0.017	<0.003	<0.003	<0.003	0.007					<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	0.17	<0.03	<0.03	<0.03	0.07					<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003					<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03					<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001					<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001					<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	0.3	0.4	0.4	0.3	0.4					<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	4	4	3	4					<3	mg/kg	TM173/PM0
Sulphate as SO4 #	1.4	7.0	<0.5	<0.5	1.3	1.9					<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	14	70	<5	<5	13	19					<5	mg/kg	TM38/PM0
Chloride #	<0.3	2.5	<0.3	<0.3	<0.3	<0.3					<0.3	mg/l	TM38/PM0
Chloride #	<3	25	<3	<3	<3	<3					<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.05	0.05	<0.03	<0.03	<0.03	<0.03					<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.5	0.5	<0.3	<0.3	<0.3	<0.3					<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	3	3	<2	3	2	<2					<2	mg/l	TM60/PM0
Dissolved Organic Carbon	30	30	<20	30	20	<20					<20	mg/kg	TM60/PM0
Total Dissolved Solids #	42	58	<35	<35	<35	<35					<35	mg/l	TM20/PM0

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Total Dissolved Solids #	420	580	<350	<350	<350	<350					<350	mg/kg	TM20/PM0

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**3**			
Client Sample No	**WS05**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.075-1.00**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.42	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.29	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.05	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.06	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.04	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	7	10	150	500
Sulphate as SO4	28	1000	20000	50000
Total Dissolved Solids	<350	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/12733	Landfill Waste Acceptance Criteria Limits		
Sample No	6			
Client Sample No	WS05	Inert	Stable Non-reactive	Hazardous
Depth/Other	1.00-2.00			
Sample Date	16/09/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	0.40	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	10:1 concn leached A10 mg/kg	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg mg/kg		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.12	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	15	1000	20000	50000
Total Dissolved Solids	<350	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**9**			
Client Sample No	**WS05**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-2.90**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.56	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.32	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	25	1000	20000	50000
Total Dissolved Solids	<350	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**12**			
Client Sample No	**WS05**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.70-2.90**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.74	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.41	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	44	1000	20000	50000
Total Dissolved Solids	390	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**15**			
Client Sample No	**WS01**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.02-1.00**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	2.39	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	3.73	-	-	-
PAH Sum of 17 (mg/kg)	5.98	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.044	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.27	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.04	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	13	800	15000	25000
Fluoride	6	10	150	500
Sulphate as SO4	39	1000	20000	50000
Total Dissolved Solids	580	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**18**			
Client Sample No	**WS01**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.37	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.12	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	4	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	16	1000	20000	50000
Total Dissolved Solids	370	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**21**			
Client Sample No	**WS01**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-2.70**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.55	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.32	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	4	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	16	1000	20000	50000
Total Dissolved Solids	430	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**24**			
Client Sample No	**WS01**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.50-2.70**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.65	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.32	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	4	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	17	1000	20000	50000
Total Dissolved Solids	430	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**27**			
Client Sample No	**WS09**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	2.46	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	48	500	-	-
PAH Sum of 6 (mg/kg)	4.09	-	-	-
PAH Sum of 17 (mg/kg)	7.34	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.11	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	0.020	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.09	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.04	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	6	1000	20000	50000
Total Dissolved Solids	680	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**30**			
Client Sample No	**WS09**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.44	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.08	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	430	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**33**			
Client Sample No	**WS09**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.56	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.24	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	14	1000	20000	50000
Total Dissolved Solids	420	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**36**			
Client Sample No	**WS09**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.30**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.67	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.05	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.34	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.17	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	25	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	70	1000	20000	50000
Total Dissolved Solids	580	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**39**			
Client Sample No	**WS02**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.085-1.00**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.81	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	1.84	-	-	-
PAH Sum of 17 (mg/kg)	3.32	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.09	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	<350	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**42**			
Client Sample No	**WS02**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.42	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.14	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	<350	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**45**			
Client Sample No	**WS02**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-2.75**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.57	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.22	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	13	1000	20000	50000
Total Dissolved Solids	<350	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12733**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**48**			
Client Sample No	**WS02**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.50-2.75**			
Sample Date	**16/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.72	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.35	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	0.07	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	19	1000	20000	50000
Total Dissolved Solids	<350	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/12733	1	WS05	0.075-1.00	1-3	Trace of possible lubricating oil
20/12733	1	WS05	1.00-2.00	4-6	No interpretation possible
20/12733	1	WS05	2.00-2.90	7-9	No interpretation possible
20/12733	1	WS05	2.70-2.90	10-12	No interpretation possible
20/12733	1	WS01	0.02-1.00	13-15	Possible PAH's
20/12733	1	WS01	1.00-2.00	16-18	No interpretation possible
20/12733	1	WS01	2.00-2.70	19-21	No interpretation possible
20/12733	1	WS01	2.50-2.70	22-24	No interpretation possible
20/12733	1	WS09	0.00-1.00	25-27	PAH's & Trace of possible lubricating oil
20/12733	1	WS09	1.00-2.00	28-30	No interpretation possible
20/12733	1	WS09	2.00-3.00	31-33	No interpretation possible
20/12733	1	WS09	3.00-3.30	34-36	No interpretation possible
20/12733	1	WS02	0.085-1.00	37-39	No interpretation possible
20/12733	1	WS02	1.00-2.00	40-42	No interpretation possible
20/12733	1	WS02	2.00-2.75	43-45	Naturally occurring compounds
20/12733	1	WS02	2.50-2.75	46-48	No interpretation possible

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967
Location: Emmet Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 20/12733						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.

Please include all sections of this report if it is reproduced

Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/12733

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/12733

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes

TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/12733

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21	As received solid samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes

TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes

EMT Job No: 20/12733

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes

NONE	No Method Code	NONE	No Method Code			AD	Yes

EMT Job No: 20/12733

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

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O'Connor Sutton Cronin & Assoc. Ltd
9 Prussia Street
Dublin 7
Ireland

Attention :	Richard Thompson
Date :	1st October, 2020
Your reference :	B967/1
Our reference :	Test Report 20/12904 Batch 1
Location :	Emmet Road
Date samples received :	22nd September, 2020
Status :	Final report
Issue :	2

Twenty six samples were received for analysis on 22nd September, 2020 of which twenty six were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Phil Sommerton BSc
Senior Project Manager

Please include all sections of this report if it is reproduced

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12904

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS13	WS13	WS10	WS10	WS10	WS10	WS14	WS14	WS14	WS14			
Depth	0.00-1.00	1.00-2.00	0.09-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.13-1.00	1.00-2.00	2.00-3.00	3.00-3.40			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
Antimony	-	-	3	2	2	2	2	2	2	2	<1	mg/kg	TM30/PM15
Arsenic #	-	-	9.0	10.2	12.2	11.6	8.0	9.4	13.8	12.2	<0.5	mg/kg	TM30/PM15
Barium #	-	-	98	84	75	83	94	49	187	80	<1	mg/kg	TM30/PM15
Cadmium #	-	-	1.6	2.3	2.8	2.6	1.9	2.1	3.0	2.3	<0.1	mg/kg	TM30/PM15
Chromium #	-	-	76.7	54.2	57.7	60.9	76.0	59.2	54.7	52.4	<0.5	mg/kg	TM30/PM15
Copper #	-	-	35	32	43	41	26	33	44	38	<1	mg/kg	TM30/PM15
Lead #	-	-	64	14	20	17	76	13	18	17	<5	mg/kg	TM30/PM15
Mercury #	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	-	-	6.1	5.6	6.7	7.5	6.7	6.1	7.0	6.6	<0.1	mg/kg	TM30/PM15
Nickel #	-	-	36.0	38.8	49.0	45.5	31.4	34.8	59.6	45.1	<0.7	mg/kg	TM30/PM15
Selenium #	-	-	1	2	4	3	<1	1	5	3	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	-	-	1099	602	3032	3092	583	358	1375	2373	<50	mg/kg	TM50/PM29
Water Soluble Boron #	-	-	1.2	0.5	0.5	0.4	0.7	0.4	0.5	0.5	<0.1	mg/kg	TM74/PM32
Zinc #	-	-	124	94	106	90	109	70	116	86	<5	mg/kg	TM30/PM15
Antimony	4	1	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Arsenic	15.0	8.7	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Barium	206	127	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Cadmium	2.5	1.7	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Chromium	25.5	17.2	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Copper	75	41	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Lead	213	136	-	-	-	-	-	-	-	-	<5	mg/kg	TM30/PM62
Mercury	0.2	0.5	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Molybdenum	3.2	1.5	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Nickel	47.4	36.0	-	-	-	-	-	-	-	-	<0.7	mg/kg	TM30/PM62
Selenium	2	<1	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Total Sulphate as SO4	1127	978	-	-	-	-	-	-	-	-	<50	mg/kg	TM50/PM129
Water Soluble Boron	1.8	0.8	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM74/PM61
Zinc	281	265	-	-	-	-	-	-	-	-	<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12904

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

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Sample ID	WS13	WS13	WS10	WS10	WS10	WS10	WS14	WS14	WS14	WS14			
Depth	0.00-1.00	1.00-2.00	0.09-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.13-1.00	1.00-2.00	2.00-3.00	3.00-3.40			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
PAH MS													
Naphthalene #	0.06	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.37	0.10	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	0.18	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	1.58	0.57	0.13	0.06	0.07	0.07	0.09	<0.03	<0.03	0.05	<0.03	mg/kg	TM4/PM8
Anthracene #	1.03	0.23	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	4.43	1.36	0.28	<0.03	<0.03	<0.03	0.21	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	3.88	1.28	0.27	<0.03	<0.03	<0.03	0.20	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	2.43	0.78	0.22	<0.06	<0.06	<0.06	0.14	<0.06	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	2.57	0.84	0.18	<0.02	0.04	0.03	0.14	<0.02	<0.02	0.03	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	4.54	1.38	0.32	<0.07	<0.07	<0.07	0.26	<0.07	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	2.60	0.79	0.18	<0.04	<0.04	<0.04	0.13	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	1.45	0.44	0.11	<0.04	<0.04	<0.04	0.09	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.34	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	1.63	0.46	0.12	<0.04	<0.04	<0.04	0.10	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	0.25	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	14.65	4.43	1.01	<0.22	<0.22	<0.22	0.79	<0.22	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	27.43	8.45	1.81	<0.64	<0.64	<0.64	1.36	<0.64	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	3.27	0.99	0.23	<0.05	<0.05	<0.05	0.19	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	1.27	0.39	0.09	<0.02	<0.02	<0.02	0.07	<0.02	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	102	99	107	100	99	104	96	99	74	84	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	63	<30	<30	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	10	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	49	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	63	<26	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	41	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	<10	<10	32	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

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All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12904

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS13	WS13	WS10	WS10	WS10	WS10	WS14	WS14	WS14	WS14			
Depth	0.00-1.00	1.00-2.00	0.09-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.13-1.00	1.00-2.00	2.00-3.00	3.00-3.40			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
TPH CWG													
Aromatics													
>C5-EC7#	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC7-EC8#	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC8-EC10#	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC12#	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16#	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21#	16	19	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35#	78	73	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	13	8	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	107	100	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	107	100	<52	<52	63	<52	<52	<52	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10#	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC25	40	38	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	61	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE#	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Benzene#	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Toluene#	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Ethylbenzene#	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
m/p-Xylene#	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
o-Xylene#	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
PCB 28#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs#	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8
Phenol#	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	17.0	21.2	17.4	11.6	9.0	10.1	11.5	11.7	16.9	8.7	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	14.5	17.5	14.8	10.4	8.2	9.2	10.3	10.5	14.5	8.0	<0.1	%	PM4/PM0
Hexavalent Chromium#	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	-	-	76.7	54.2	57.7	60.9	76.0	59.2	54.7	52.4	<0.5	mg/kg	NONE/NONE
Chromium III	25.5	17.2	-	-	-	-	-	-	-	-	<0.5	mg/kg	NONE/NONE
Total Cyanide#	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon#	NDP	NDP	0.93	0.33	0.74	0.74	1.70	0.34	0.75	0.69	<0.02	%	TM21/PM24

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COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
Total Organic Carbon	1.88	1.06	-	-	-	-	-	-	-	-	<0.02	%	TM21/PM89
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Elemental Sulphur	-	-	7	<1	4	2	9	<1	2	2	<1	mg/kg	TM108/PM114
Elemental Sulphur	<1	<1	-	-	-	-	-	-	-	-	<1	mg/kg	TM108/PM8
Loss on Ignition #	NDP	NDP	2.5	1.6	1.8	1.9	3.3	1.5	1.8	1.7	<1.0	%	TM22/PM0
Loss on Ignition	2.7	1.7	-	-	-	-	-	-	-	-	<1.0	%	TM22/PM0
pH #	8.47	8.30	8.32	8.60	8.33	8.39	8.26	8.45	8.49	8.45	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1086	0.1087	0.1097	0.1009	0.0964	0.1007	0.102	0.1024	0.0984	0.0991		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12904

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	LOD/LOR	Units	Method No.
Sample ID	WS04	WS04	WS04	WS04	WS15	WS15	WS15	WS15	WS18	WS18			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.03-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	17/09/2020	17/09/2020	17/09/2020	17/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
Antimony	2	2	1	2	2	2	2	2	2	1	<1	mg/kg	TM30/PM15
Arsenic #	11.1	8.3	6.3	11.8	68.3	11.6	13.4	10.7	20.7	8.0	<0.5	mg/kg	TM30/PM15
Barium #	98	46	59	136	170	130	142	61	128	70	<1	mg/kg	TM30/PM15
Cadmium #	1.3	1.8	1.8	3.2	0.9	2.6	2.7	3.0	3.5	1.6	<0.1	mg/kg	TM30/PM15
Chromium #	68.9	54.1	70.0	57.2	72.1	59.4	58.4	55.3	70.8	56.5	<0.5	mg/kg	TM30/PM15
Copper #	42	26	21	40	33	37	40	34	32	21	<1	mg/kg	TM30/PM15
Lead #	97	13	11	17	29	16	16	15	41	8	<5	mg/kg	TM30/PM15
Mercury #	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	5.1	4.7	5.8	6.8	4.9	6.7	6.5	6.0	5.9	5.8	<0.1	mg/kg	TM30/PM15
Nickel #	30.1	32.6	25.0	46.0	28.0	46.2	45.2	37.9	37.6	27.7	<0.7	mg/kg	TM30/PM15
Selenium #	1	<1	<1	1	1	1	4	3	1	1	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	579	239	235	280	647	309	857	2511	633	408	<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.9	0.6	0.5	0.6	1.0	0.6	0.5	0.6	1.0	0.6	<0.1	mg/kg	TM74/PM32
Zinc #	128	68	49	92	111	91	112	82	107	59	<5	mg/kg	TM30/PM15
Antimony	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Arsenic	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Barium	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Cadmium	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Chromium	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Copper	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Lead	-	-	-	-	-	-	-	-	-	-	<5	mg/kg	TM30/PM62
Mercury	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Molybdenum	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Nickel	-	-	-	-	-	-	-	-	-	-	<0.7	mg/kg	TM30/PM62
Selenium	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Total Sulphate as SO4	-	-	-	-	-	-	-	-	-	-	<50	mg/kg	TM50/PM129
Water Soluble Boron	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM74/PM61
Zinc	-	-	-	-	-	-	-	-	-	-	<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12904

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	LOD/LOR	Units	Method No.
Sample ID	WS04	WS04	WS04	WS04	WS15	WS15	WS15	WS15	WS18	WS18			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.03-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	17/09/2020	17/09/2020	17/09/2020	17/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
PAH MS													
Naphthalene #	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.13	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.76	<0.03	<0.03	<0.03	0.06	<0.03	<0.03	0.04	0.05	<0.03	<0.03	mg/kg	TM4/PM8
Anthracene #	0.21	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	1.50	0.03	<0.03	<0.03	0.11	<0.03	<0.03	<0.03	0.08	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	1.45	<0.03	<0.03	<0.03	0.11	<0.03	<0.03	<0.03	0.08	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	1.03	<0.06	<0.06	<0.06	0.11	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	1.00	0.03	<0.02	<0.02	0.08	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	1.77	<0.07	<0.07	<0.07	0.15	<0.07	<0.07	<0.07	0.10	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	1.02	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	0.60	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.13	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.65	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	0.11	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	5.54	<0.22	<0.22	<0.22	0.45	<0.22	<0.22	<0.22	0.24	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	10.56	<0.64	<0.64	<0.64	0.81	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	1.27	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.50	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	100	109	80	85	97	94	90	89	106	109	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	<30	<30	<30	<30	83	<30	<30	mg/kg	TM5/PM8/PM16
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	<7	<7	<7	<7	10	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	<7	<7	<7	<7	73	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	83	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	<10	<10	<10	<10	25	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	<10	<10	<10	<10	<10	<10	56	<10	<10	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12904

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	LOD/LOR	Units	Method No.
Sample ID	WS04	WS04	WS04	WS04	WS15	WS15	WS15	WS15	WS18	WS18			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.03-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	17/09/2020	17/09/2020	17/09/2020	17/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
TPH CWG													
Aromatics													
>C5-EC7#	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8#	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10#	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12#	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16#	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21#	23	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35#	131	<7	<7	<7	55	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	21	<7	<7	<7	21	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	175	<26	<26	<26	76	<26	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	175	<52	<52	<52	76	<52	<52	<52	83	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10#	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25	60	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	96	<10	<10	<10	55	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
Benzene#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
Toluene#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
Ethylbenzene#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
m/p-Xylene#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
o-Xylene#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
PCB 28#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs#	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8
Phenol#	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	14.7	15.1	18.0	10.3	19.1	15.2	11.7	10.0	14.6	10.2	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	12.8	13.1	15.2	9.3	16.0	13.2	10.4	9.1	12.7	9.3	<0.1	%	PM4/PM0
Hexavalent Chromium#	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	68.9	54.1	70.0	57.2	72.1	59.4	58.4	55.3	70.8	56.5	<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	NONE/NONE
Total Cyanide#	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon#	1.40	0.35	0.21	0.54	1.57	0.38	0.64	0.77	0.86	0.32	<0.02	%	TM21/PM24

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12904

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	LOD/LOR	Units	Method No.
Sample ID	WS04	WS04	WS04	WS04	WS15	WS15	WS15	WS15	WS18	WS18			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.03-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	17/09/2020	17/09/2020	17/09/2020	17/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
Total Organic Carbon	-	-	-	-	-	-	-	-	-	-	<0.02	%	TM21/PM89
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Elemental Sulphur	2	<1	1	<1	13	3	3	2	3	<1	<1	mg/kg	TM108/PM114
Elemental Sulphur	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM108/PM8
Loss on Ignition #	3.4	2.0	1.1	2.3	5.4	2.3	2.1	1.8	2.9	1.3	<1.0	%	TM22/PM0
Loss on Ignition	-	-	-	-	-	-	-	-	-	-	<1.0	%	TM22/PM0
pH #	8.40	8.45	8.55	8.58	8.12	8.39	8.26	8.39	8.43	8.62	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1049	0.1061	0.1101	0.1005	0.1085	0.104	0.0999	0.1012	0.1024	0.0984		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12904

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	61-63	64-66	67-69	70-72	73-75	76-78					LOD/LOR	Units	Method No.
Sample ID	WS18	WS18	WS17	WS17	WS17	WS17							
Depth	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020							
Antimony	2	2	2	1	3	3					<1	mg/kg	TM30/PM15
Arsenic #	9.8	9.6	9.5	2.4	10.5	11.9					<0.5	mg/kg	TM30/PM15
Barium #	51	63	65	36	110	105					<1	mg/kg	TM30/PM15
Cadmium #	2.1	2.4	2.0	2.2	5.8	3.1					<0.1	mg/kg	TM30/PM15
Chromium #	52.1	49.7	75.3	96.4	55.6	56.4					<0.5	mg/kg	TM30/PM15
Copper #	31	42	30	16	35	46					<1	mg/kg	TM30/PM15
Lead #	13	18	18	7	17	19					<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					<0.1	mg/kg	TM30/PM15
Molybdenum #	5.2	5.5	6.0	7.3	6.4	6.7					<0.1	mg/kg	TM30/PM15
Nickel #	36.0	40.9	38.6	20.9	41.1	50.6					<0.7	mg/kg	TM30/PM15
Selenium #	3	3	<1	<1	3	4					<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	336	2777	401	274	762	3687					<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.7	0.8	0.6	0.5	0.5	0.5					<0.1	mg/kg	TM74/PM32
Zinc #	83	93	89	54	221	99					<5	mg/kg	TM30/PM15
Antimony	-	-	-	-	-	-					<1	mg/kg	TM30/PM62
Arsenic	-	-	-	-	-	-					<0.5	mg/kg	TM30/PM62
Barium	-	-	-	-	-	-					<1	mg/kg	TM30/PM62
Cadmium	-	-	-	-	-	-					<0.1	mg/kg	TM30/PM62
Chromium	-	-	-	-	-	-					<0.5	mg/kg	TM30/PM62
Copper	-	-	-	-	-	-					<1	mg/kg	TM30/PM62
Lead	-	-	-	-	-	-					<5	mg/kg	TM30/PM62
Mercury	-	-	-	-	-	-					<0.1	mg/kg	TM30/PM62
Molybdenum	-	-	-	-	-	-					<0.1	mg/kg	TM30/PM62
Nickel	-	-	-	-	-	-					<0.7	mg/kg	TM30/PM62
Selenium	-	-	-	-	-	-					<1	mg/kg	TM30/PM62
Total Sulphate as SO4	-	-	-	-	-	-					<50	mg/kg	TM50/PM129
Water Soluble Boron	-	-	-	-	-	-					<0.1	mg/kg	TM74/PM61
Zinc	-	-	-	-	-	-					<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12904

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	61-63	64-66	67-69	70-72	73-75	76-78	LOD/LOR	Units	Method No.
Sample ID	WS18	WS18	WS17	WS17	WS17	WS17			
Depth	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40			
COC No / misc									
Containers	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1			
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
PAH MS									
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	0.06	<0.03	<0.03	<0.03	0.09	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	0.03	<0.02	<0.02	<0.02	0.04	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	107	109	110	110	101	113	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	59	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16
TPH CWG									
Aliphatics									
>C5-C6 #	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1 SV	<0.1 SV	<0.1	0.1	0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	9	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	39	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	11	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	59	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1 SV	<0.1 SV	<0.1	0.1	0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	31	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	40	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12904

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	61-63	64-66	67-69	70-72	73-75	76-78	LOD/LOR	Units	Method No.
Sample ID	WS18	WS18	WS17	WS17	WS17	WS17			
Depth	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40			
COC No / misc									
Containers	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1			
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
TPH CWG									
Aromatics									
>C5-EC7#	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC7-EC8#	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC8-EC10#	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC12#	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16#	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21#	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35#	<7	<7	63	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	34	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26	97	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52	156	<52	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10#	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10	66	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE#	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Benzene#	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Toluene#	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Ethylbenzene#	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
m/p-Xylene#	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
o-Xylene#	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
PCB 28#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180#	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs#	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8
Phenol#	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	10.8	11.1	10.2	9.2	13.6	9.5	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	9.8	10.0	9.3	8.4	11.9	8.7	<0.1	%	PM4/PM0
Hexavalent Chromium#	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	52.1	49.7	75.3	96.4	55.6	56.4	<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	-	-	-	<0.5	mg/kg	NONE/NONE
Total Cyanide#	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon#	0.50	0.65	0.44	0.26	0.58	0.85	<0.02	%	TM21/PM24

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12904

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	61-63	64-66	67-69	70-72	73-75	76-78					LOD/LOR	Units	Method No.
Sample ID	WS18	WS18	WS17	WS17	WS17	WS17							
Depth	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020							
Total Organic Carbon	-	-	-	-	-	-					<0.02	%	TM21/PM89
Sulphide	<10	<10	<10	<10	<10	<10					<10	mg/kg	TM107/PM45
Elemental Sulphur	1	4	1	3	3	3					<1	mg/kg	TM108/PM114
Elemental Sulphur	-	-	-	-	-	-					<1	mg/kg	TM108/PM8
Loss on Ignition #	1.9	1.9	1.9	<1.0	1.8	1.9					<1.0	%	TM22/PM0
Loss on Ignition	-	-	-	-	-	-					<1.0	%	TM22/PM0
pH #	8.50	8.19	8.67	8.57	8.44	8.32					<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1016	0.0995	0.1015	0.0999	0.1046	0.0975						kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09						kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12904

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS13	WS13	WS10	WS10	WS10	WS10	WS14	WS14	WS14	WS14			
Depth	0.00-1.00	1.00-2.00	0.09-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.13-1.00	1.00-2.00	2.00-3.00	3.00-3.40			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
Dissolved Antimony #	0.005	0.003	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.05	0.03	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	0.0038	0.0056	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	0.038	0.056	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.005	<0.003	0.004	<0.003	0.017	0.037	0.007	<0.003	0.005	0.035	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.05	<0.03	0.04	<0.03	0.17	0.37	0.07	<0.03	0.05	0.35	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	0.012	0.014	0.015	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	0.014	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	0.12	0.14	0.15	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	0.14	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.005	0.005	0.008	0.011	0.022	0.023	0.018	0.007	0.034	0.032	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.05	0.05	0.08	0.11	0.22	0.23	0.18	0.07	0.34	0.32	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	<0.003	0.027	0.044	<0.003	<0.003	0.020	0.042	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	<0.03	0.27	0.44	<0.03	<0.03	0.20	0.42	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	0.006	0.004	0.004	0.004	0.005	0.004	0.004	0.005	0.005	0.004	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	0.06	0.04	0.04	0.04	0.05	0.04	0.04	0.05	0.05	0.04	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	0.00004	<0.00001	<0.00001	<0.00001	0.00004	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0004	<0.0001	<0.0001	<0.0001	0.0004	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	0.5	0.4	<0.3	<0.3	<0.3	0.5	<0.3	0.3	0.4	<0.3	mg/l	TM173/PM0
Fluoride	<3	5	4	<3	<3	<3	5	<3	3	4	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	1.7	1.9	20.0	<0.5	22.0	26.8	16.9	1.6	14.9	33.3	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	17	19	200	<5	220	268	169	16	149	333	<5	mg/kg	TM38/PM0
Chloride #	0.4	<0.3	<0.3	<0.3	8.3	12.2	1.0	<0.3	5.8	12.3	<0.3	mg/l	TM38/PM0
Chloride #	4	<3	<3	<3	83	122	10	<3	58	123	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.04	0.04	0.03	0.04	0.05	0.08	0.04	0.05	0.06	0.06	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.4	0.4	0.3	0.4	0.5	0.8	0.4	0.5	0.6	0.6	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	6	4	3	3	4	5	2	3	5	3	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	60	40	30	30	40	50	<20	30	50	30	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	70	65	73	<35	145	107	83	47	78	118	<35	mg/l	TM20/PM0
Total Dissolved Solids #	700	650	730	<350	1451	1070	830	470	780	1181	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12904

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	LOD/LOR	Units	Method No.
Sample ID	WS04	WS04	WS04	WS04	WS15	WS15	WS15	WS15	WS18	WS18			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.03-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	17/09/2020	17/09/2020	17/09/2020	17/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
Dissolved Antimony #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	0.004	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	0.04	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.008	<0.003	<0.003	<0.003	<0.003	<0.003	0.014	0.024	0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.08	<0.03	<0.03	<0.03	<0.03	<0.03	0.14	0.24	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	0.013	0.015	<0.012	0.015	<0.012	<0.012	<0.012	0.018	0.015	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	0.13	0.15	<0.12	0.15	<0.12	<0.12	<0.12	0.18	0.15	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.006	0.006	0.010	0.013	0.007	0.018	0.020	0.019	0.011	0.019	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.06	0.06	0.10	0.13	0.07	0.18	0.20	0.19	0.11	0.19	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.025	0.039	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.25	0.39	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	0.005	0.004	0.003	<0.003	0.004	0.004	0.003	0.004	0.004	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	0.05	0.04	<0.03	<0.03	0.04	0.04	0.03	0.04	0.04	<0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00004	<0.00001	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0004	<0.0001	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	0.3	0.4	<0.3	<0.3	0.4	0.4	<0.3	<0.3	<0.3	<0.3	<0.3	mg/l	TM173/PM0
Fluoride	3	4	<3	<3	4	4	<3	<3	<3	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	1.2	<0.5	1.5	1.5	3.7	1.5	21.7	28.8	9.7	7.8	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	12	<5	15	15	37	15	217	288	97	78	<5	mg/kg	TM38/PM0
Chloride #	<0.3	<0.3	0.4	<0.3	<0.3	<0.3	6.5	10.5	<0.3	<0.3	<0.3	mg/l	TM38/PM0
Chloride #	<3	<3	4	<3	<3	<3	65	105	<3	<3	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	<0.03	<0.03	<0.03	0.03	<0.03	<0.03	0.03	0.05	<0.03	<0.03	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	<0.3	<0.3	<0.3	0.3	<0.3	<0.3	0.3	0.5	<0.3	<0.3	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	4	3	2	<2	4	<2	<2	3	4	<2	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	40	30	<20	<20	40	<20	<20	30	40	<20	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	66	58	42	44	66	47	84	95	72	41	<35	mg/l	TM20/PM0
Total Dissolved Solids #	660	580	420	440	660	470	840	950	720	410	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12904

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	61-63	64-66	67-69	70-72	73-75	76-78					LOD/LOR	Units	Method No.
Sample ID	WS18	WS18	WS17	WS17	WS17	WS17							
Depth	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020							
Dissolved Antimony #	<0.002	0.002	<0.002	<0.002	<0.002	<0.002					<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	0.02	<0.02	<0.02	<0.02	<0.02					<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025					<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025					<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.006	0.025	<0.003	<0.003	0.008	0.048					<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.06	0.25	<0.03	<0.03	0.08	0.48					<0.03	mg/kg	TM30/PM17
Dissolved Boron #	0.020	0.023	<0.012	<0.012	<0.012	<0.012					<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	0.20	0.23	<0.12	<0.12	<0.12	<0.12					<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005					<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015					<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015					<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007					<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07					<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.016	0.013	0.007	0.010	0.020	0.021					<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.16	0.13	0.07	0.10	0.20	0.21					<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002					<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02					<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	0.027	<0.003	<0.003	<0.003	0.041					<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	0.27	<0.03	<0.03	<0.03	0.41					<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	0.003	0.003	<0.003	<0.003	<0.003	<0.003					<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	0.03	0.03	<0.03	<0.03	<0.03	<0.03					<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	0.00007					<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	0.0007					<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3	<0.3	<0.3	0.3	<0.3					<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	<3	<3	3	<3					<3	mg/kg	TM173/PM0
Sulphate as SO4 #	11.2	28.7	1.3	1.0	3.7	23.7					<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	112	287	13	10	37	237					<5	mg/kg	TM38/PM0
Chloride #	<0.3	7.8	1.3	<0.3	0.5	10.6					<0.3	mg/l	TM38/PM0
Chloride #	<3	78	13	<3	5	106					<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	<0.03	0.05	<0.03	<0.03	<0.03	0.06					<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	<0.3	0.5	<0.3	<0.3	<0.3	0.6					<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	2	3	3	<2	<2	3					<2	mg/l	TM60/PM0
Dissolved Organic Carbon	20	30	30	<20	<20	30					<20	mg/kg	TM60/PM0
Total Dissolved Solids #	68	165	124	36	50	88					<35	mg/l	TM20/PM0
Total Dissolved Solids #	680	1650	1241	360	500	880					<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	82.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**3**			
Client Sample No	**WS13**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**17/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.88	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	14.65	-	-	-
PAH Sum of 17 (mg/kg)	27.43	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.038	0.5	2	25
Barium	0.05	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.05	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.06	4	50	200
Chloride	4	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	17	1000	20000	50000
Total Dissolved Solids	700	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	60	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	82.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**6**			
Client Sample No	**WS13**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**17/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.06	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	4.43	-	-	-
PAH Sum of 17 (mg/kg)	8.45	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.056	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	5	10	150	500
Sulphate as SO4	19	1000	20000	50000
Total Dissolved Solids	650	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	81.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**9**			
Client Sample No	**WS10**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.09-1.00**			
Sample Date	**17/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.93	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	1.01	-	-	-
PAH Sum of 17 (mg/kg)	1.81	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.08	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	200	1000	20000	50000
Total Dissolved Solids	730	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**12**			
Client Sample No	**WS10**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**17/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.33	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.11	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	<350	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	93.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**15**			
Client Sample No	**WS10**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**17/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.74	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	63	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.17	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0001	0.01	0.2	2
Molybdenum	0.22	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.27	0.1	0.5	7
Zinc	0.05	4	50	200
Chloride	83	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	220	1000	20000	50000
Total Dissolved Solids	1451	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**18**			
Client Sample No	**WS10**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.40**			
Sample Date	**17/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.74	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.37	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0004	0.01	0.2	2
Molybdenum	0.23	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	0.44	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	122	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	268	1000	20000	50000
Total Dissolved Solids	1070	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**21**			
Client Sample No	**WS14**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.13-1.00**			
Sample Date	**17/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.70	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.79	-	-	-
PAH Sum of 17 (mg/kg)	1.36	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.07	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.18	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	10	800	15000	25000
Fluoride	5	10	150	500
Sulphate as SO4	169	1000	20000	50000
Total Dissolved Solids	830	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**24**			
Client Sample No	**WS14**			
Depth/Other	**1.00-2.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**17/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.34	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.07	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.05	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	16	1000	20000	50000
Total Dissolved Solids	470	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**27**			
Client Sample No	**WS14**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**17/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.75	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.05	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.34	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.20	0.1	0.5	7
Zinc	0.05	4	50	200
Chloride	58	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	149	1000	20000	50000
Total Dissolved Solids	780	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**30**			
Client Sample No	**WS14**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.40**			
Sample Date	**17/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.69	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.35	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0004	0.01	0.2	2
Molybdenum	0.32	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.42	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	123	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	333	1000	20000	50000
Total Dissolved Solids	1181	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**33**			
Client Sample No	**WS04**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**17/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.40	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	5.54	-	-	-
PAH Sum of 17 (mg/kg)	10.56	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.08	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.06	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.05	4	50	200
Chloride	<3	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	12	1000	20000	50000
Total Dissolved Solids	660	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**36**			
Client Sample No	**WS04**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**17/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.35	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.06	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	580	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	82.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**39**			
Client Sample No	**WS04**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**17/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.21	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.10	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	4	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	15	1000	20000	50000
Total Dissolved Solids	420	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**42**			
Client Sample No	**WS04**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.40**			
Sample Date	**17/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.54	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.13	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	15	1000	20000	50000
Total Dissolved Solids	440	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	82.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**45**			
Client Sample No	**WS15**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.03-1.00**			
Sample Date	**18/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.57	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.45	-	-	-
PAH Sum of 17 (mg/kg)	0.81	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.07	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	37	1000	20000	50000
Total Dissolved Solids	660	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**48**			
Client Sample No	**WS15**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**18/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.38	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.18	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	15	1000	20000	50000
Total Dissolved Solids	470	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**51**			
Client Sample No	**WS15**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**18/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.64	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.14	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.20	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	0.25	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	65	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	217	1000	20000	50000
Total Dissolved Solids	840	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**54**			
Client Sample No	**WS15**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.40**			
Sample Date	**18/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.77	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.24	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0004	0.01	0.2	2
Molybdenum	0.19	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.04	0.06	0.7	5
Selenium	0.39	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	105	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	288	1000	20000	50000
Total Dissolved Solids	950	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**57**			
Client Sample No	**WS18**			
Depth/Other	**0.00-1.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**18/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.86	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	83	500	-	-
PAH Sum of 6 (mg/kg)	0.24	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.11	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	97	1000	20000	50000
Total Dissolved Solids	720	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**60**			
Client Sample No	**WS18**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**18/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.32	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.19	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	78	1000	20000	50000
Total Dissolved Solids	410	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**63**			
Client Sample No	**WS18**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**18/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.50	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.06	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.16	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	112	1000	20000	50000
Total Dissolved Solids	680	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**66**			
Client Sample No	**WS18**			
Depth/Other	**3.00-3.40**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**18/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.65	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.25	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0001	0.01	0.2	2
Molybdenum	0.13	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.02	0.06	0.7	5
Selenium	0.27	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	78	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	287	1000	20000	50000
Total Dissolved Solids	1650	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**69**			
Client Sample No	**WS17**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**18/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.44	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	59	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.07	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	13	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	13	1000	20000	50000
Total Dissolved Solids	1241	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**72**			
Client Sample No	**WS17**			
Depth/Other	**1.00-2.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**18/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.26	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.10	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	10	1000	20000	50000
Total Dissolved Solids	360	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.3
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**75**			
Client Sample No	**WS17**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**18/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.58	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.08	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.20	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	5	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	37	1000	20000	50000
Total Dissolved Solids	500	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	92.3
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12904**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**78**			
Client Sample No	**WS17**			
Depth/Other	**3.00-3.40**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**18/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.85	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.48	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0007	0.01	0.2	2
Molybdenum	0.21	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.41	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	106	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	237	1000	20000	50000
Total Dissolved Solids	880	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/12904	1	WS13	0.00-1.00	1-3	PAH's
20/12904	1	WS13	1.00-2.00	4-6	PAH's
20/12904	1	WS10	0.09-1.00	7-9	No interpretation possible
20/12904	1	WS10	1.00-2.00	10-12	No interpretation possible
20/12904	1	WS10	2.00-3.00	13-15	Trace of possible degraded diesel
20/12904	1	WS10	3.00-3.40	16-18	No interpretation possible
20/12904	1	WS14	0.13-1.00	19-21	No interpretation possible
20/12904	1	WS14	1.00-2.00	22-24	No interpretation possible
20/12904	1	WS14	2.00-3.00	25-27	No interpretation possible
20/12904	1	WS14	3.00-3.40	28-30	No interpretation possible
20/12904	1	WS04	0.00-1.00	31-33	PAH's
20/12904	1	WS04	1.00-2.00	34-36	No interpretation possible
20/12904	1	WS04	2.00-3.00	37-39	No interpretation possible
20/12904	1	WS04	3.00-3.40	40-42	No interpretation possible
20/12904	1	WS15	0.03-1.00	43-45	Possible trace of PAH's
20/12904	1	WS15	1.00-2.00	46-48	No interpretation possible
20/12904	1	WS15	2.00-3.00	49-51	No interpretation possible
20/12904	1	WS15	3.00-3.40	52-54	No interpretation possible
20/12904	1	WS18	0.00-1.00	55-57	Lubricating oil
20/12904	1	WS18	1.00-2.00	58-60	No interpretation possible
20/12904	1	WS18	2.00-3.00	61-63	No interpretation possible
20/12904	1	WS18	3.00-3.40	64-66	No interpretation possible
20/12904	1	WS17	0.00-1.00	67-69	Possible tarmac/bitumen
20/12904	1	WS17	1.00-2.00	70-72	No interpretation possible
20/12904	1	WS17	2.00-3.00	73-75	No interpretation possible
20/12904	1	WS17	3.00-3.40	76-78	No interpretation possible

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
20/12904	1	WS13	0.00-1.00	1-3	TM21/PM24	Asbestos detected in sample
20/12904	1	WS13	0.00-1.00	1-3	TM22/PM0	Asbestos detected in sample
20/12904	1	WS13	1.00-2.00	4-6	TM21/PM24	Asbestos detected in sample
20/12904	1	WS13	1.00-2.00	4-6	TM22/PM0	Asbestos detected in sample

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 20/12904						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/12904

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/12904

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/12904

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM89	Preparation of positive asbestos samples for Eltra analysis			AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.			AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21	As received solid samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

EMT Job No: 20/12904

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM129	A hot hydrochloric acid digest is performed on an as received sample, and the resulting liquor is analysed.			AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM61	As received solid samples are extracted with hot water in a 20:1 ratio of water to soil ready for analysis by ICP.			AR	Yes

EMT Job No: 20/12904

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

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O'Connor Sutton Cronin & Assoc. Ltd
9 Prussia Street
Dublin 7
Ireland

Attention :	Richard Thompson
Date :	6th October, 2020
Your reference :	B96711
Our reference :	Test Report 20/12992 Batch 1
Location :	Emmet Road
Date samples received :	23rd September, 2020
Status :	Final report
Issue :	1

Seventeen samples were received for analysis on 23rd September, 2020 of which sixteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Bruce Leslie
Project Manager

Please include all sections of this report if it is reproduced

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96711
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12992

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	13-15	16-18	19-21	22-24	25-27	28-30	31-33	LOD/LOR	Units	Method No.
Sample ID	WS 16	WS 16	WS 16	WS 20	WS 20	WS 20	WS 20	WS 21	WS 21	WS 21			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.30	0.00-1.00	1.00-2.00	2.00-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020			
Antimony	2	2	2	1	<1	3	2	<1	2	3	<1	mg/kg	TM30/PM15
Arsenic #	73.3	12.4	12.2	84.7	13.0	14.4	11.0	12.7	11.9	11.6	<0.5	mg/kg	TM30/PM15
Barium #	90	74	83	65	65	70	63	50	143	72	<1	mg/kg	TM30/PM15
Cadmium #	1.4	2.7	2.6	1.1	1.3	2.7	3.0	0.9	2.5	2.6	<0.1	mg/kg	TM30/PM15
Chromium #	59.7	38.5	55.1	68.5	85.8	53.9	49.5	58.8	47.5	46.5	<0.5	mg/kg	TM30/PM15
Copper #	33	44	43	31	22	42	37	23	35	37	<1	mg/kg	TM30/PM15
Lead #	60	17	20	24	12	20	19	24	15	16	<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	4.6	4.8	7.0	4.5	6.0	6.6	5.6	4.4	6.5	6.7	<0.1	mg/kg	TM30/PM15
Nickel #	33.0	48.8	48.3	40.2	32.1	42.8	40.6	20.0	44.0	42.5	<0.7	mg/kg	TM30/PM15
Selenium #	2	2	7	1	<1	4	4	1	2	4	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	971	275	2364	350	324	318	593	402	285	2191	<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.7	0.8	0.6	0.5	0.4	0.6	0.6	0.5	0.6	0.6	<0.1	mg/kg	TM74/PM32
Zinc #	102	121	109	95	67	97	116	58	93	87	<5	mg/kg	TM30/PM15
Antimony	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Arsenic	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Barium	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Cadmium	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Chromium	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Copper	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Lead	-	-	-	-	-	-	-	-	-	-	<5	mg/kg	TM30/PM62
Mercury	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Molybdenum	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Nickel	-	-	-	-	-	-	-	-	-	-	<0.7	mg/kg	TM30/PM62
Selenium	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Total Sulphate as SO4	-	-	-	-	-	-	-	-	-	-	<50	mg/kg	TM50/PM129
Water Soluble Boron	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM74/PM61
Zinc	-	-	-	-	-	-	-	-	-	-	<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96711
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12992

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	13-15	16-18	19-21	22-24	25-27	28-30	31-33	LOD/LOR	Units	Method No.
Sample ID	WS 16	WS 16	WS 16	WS 20	WS 20	WS 20	WS 20	WS 21	WS 21	WS 21			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.30	0.00-1.00	1.00-2.00	2.00-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020			
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	0.45	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.15	<0.03	0.08	0.09	0.50	<0.03	<0.03	0.09	<0.03	0.04	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	0.75	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.19	<0.03	<0.03	0.13	3.02	<0.03	<0.03	0.10	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	0.19	<0.03	<0.03	0.12	4.65	<0.03	<0.03	0.09	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.14	<0.06	<0.06	0.11	3.56	<0.06	<0.06	0.07	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	0.14	<0.02	0.04	0.09	3.48	<0.02	<0.02	0.07	<0.02	0.03	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	0.20	<0.07	<0.07	0.13	3.90	<0.07	<0.07	0.10	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.11	<0.04	<0.04	0.07	2.41	<0.04	<0.04	0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	0.06	<0.04	<0.04	<0.04	1.10	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	0.29	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.08	<0.04	<0.04	0.04	1.30	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	0.15	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	0.64	<0.22	<0.22	0.37	11.73	<0.22	<0.22	0.24	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	1.26	<0.64	<0.64	0.78	25.63	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.14	<0.05	<0.05	0.09	2.81	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.06	<0.02	<0.02	0.04	1.09	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	93	98	94	92	84	86	93	95	93	83	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	0.2	<0.1 SV	<0.1	<0.1	0.1	0.2 SV	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	<7	<7	<7	17	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	<7	<7	<7	11	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	<26	28	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	0.2	<0.1 SV	<0.1	<0.1	0.1	0.2 SV	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	<10	<10	<10	18	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96711
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12992

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	13-15	16-18	19-21	22-24	25-27	28-30	31-33	LOD/LOR	Units	Method No.
Sample ID	WS 16	WS 16	WS 16	WS 20	WS 20	WS 20	WS 20	WS 21	WS 21	WS 21			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.30	0.00-1.00	1.00-2.00	2.00-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020			
TPH CWG													
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	13.6	10.9	9.4	9.6	10.2	13.2	12.7	12.4	11.0	10.0	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	12.0	9.8	8.6	8.8	9.2	11.6	11.3	11.0	9.9	9.1	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	59.7	38.5	55.1	68.5	85.8	53.9	49.5	58.8	47.5	46.5	<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.63	0.41	0.78	0.43	0.14	0.51	0.62	0.44	0.44	0.83	<0.02	%	TM21/PM24

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Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96711
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12992

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	13-15	16-18	19-21	22-24	25-27	28-30	31-33	LOD/LOR	Units	Method No.
Sample ID	WS 16	WS 16	WS 16	WS 20	WS 20	WS 20	WS 20	WS 21	WS 21	WS 21			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.30	0.00-1.00	1.00-2.00	2.00-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020			
Total Organic Carbon	-	-	-	-	-	-	-	-	-	-	<0.02	%	TM21/PM89
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Elemental Sulphur	<1	<1	3	5	1	1	3	2	<1	4	<1	mg/kg	TM108/PM114
Elemental Sulphur	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM108/PM8
Loss on Ignition #	2.6	2.0	1.5	1.9	1.1	2.5	1.5	1.4	2.2	2.3	<1.0	%	TM22/PM0
Loss on Ignition	-	-	-	-	-	-	-	-	-	-	<1.0	%	TM22/PM0
pH #	9.67	8.78	8.42	8.66	8.68	8.57	8.61	8.61	8.57	8.53	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1002	0.1007	0.0977	0.0993	0.0974	0.1012	0.1029	0.1007	0.0962	0.0977		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96711
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12992

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	34-36	37-39	40-42	43-45	46-47						LOD/LOR	Units	Method No.
Sample ID	WS 21	WS 22	WS 22	WS 22	WS 22								
Depth	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40								
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J								
Sample Date	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020								
Sample Type	Soil	Soil	Soil	Soil	Soil								
Batch Number	1	1	1	1	1								
Date of Receipt	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020								
Antimony	2	-	-	2	2						<1	mg/kg	TM30/PM15
Arsenic #	12.1	-	-	10.9	10.2						<0.5	mg/kg	TM30/PM15
Barium #	78	-	-	51	64						<1	mg/kg	TM30/PM15
Cadmium #	2.2	-	-	1.9	2.1						<0.1	mg/kg	TM30/PM15
Chromium #	42.1	-	-	48.2	51.5						<0.5	mg/kg	TM30/PM15
Copper #	28	-	-	27	36						<1	mg/kg	TM30/PM15
Lead #	16	-	-	17	16						<5	mg/kg	TM30/PM15
Mercury #	<0.1	-	-	<0.1	<0.1						<0.1	mg/kg	TM30/PM15
Molybdenum #	5.5	-	-	5.8	5.2						<0.1	mg/kg	TM30/PM15
Nickel #	31.7	-	-	30.0	39.8						<0.7	mg/kg	TM30/PM15
Selenium #	3	-	-	5	3						<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	2459	-	-	1534	2224						<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.6	-	-	1.2	0.8						<0.1	mg/kg	TM74/PM32
Zinc #	66	-	-	70	86						<5	mg/kg	TM30/PM15
Antimony	-	2	4	-	-						<1	mg/kg	TM30/PM62
Arsenic	-	24.5	19.2	-	-						<0.5	mg/kg	TM30/PM62
Barium	-	105	80	-	-						<1	mg/kg	TM30/PM62
Cadmium	-	1.4	0.9	-	-						<0.1	mg/kg	TM30/PM62
Chromium	-	19.5	21.4	-	-						<0.5	mg/kg	TM30/PM62
Copper	-	46	33	-	-						<1	mg/kg	TM30/PM62
Lead	-	108	97	-	-						<5	mg/kg	TM30/PM62
Mercury	-	<0.1	<0.1	-	-						<0.1	mg/kg	TM30/PM62
Molybdenum	-	2.5	1.5	-	-						<0.1	mg/kg	TM30/PM62
Nickel	-	34.9	31.5	-	-						<0.7	mg/kg	TM30/PM62
Selenium	-	2	<1	-	-						<1	mg/kg	TM30/PM62
Total Sulphate as SO4	-	12073	11058	-	-						<50	mg/kg	TM50/PM129
Water Soluble Boron	-	1.0	3.6	-	-						<0.1	mg/kg	TM74/PM61
Zinc	-	174	139	-	-						<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96711
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12992

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	34-36	37-39	40-42	43-45	46-47						LOD/LOR	Units	Method No.
Sample ID	WS 21	WS 22	WS 22	WS 22	WS 22								
Depth	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40								
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J								
Sample Date	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020								
Sample Type	Soil	Soil	Soil	Soil	Soil								
Batch Number	1	1	1	1	1								
Date of Receipt	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020								
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04						<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03						<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05						<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	<0.04						<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.04	0.38	0.14	0.05	<0.03						<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	0.14	0.06	<0.04	<0.04						<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	0.88	0.32	<0.03	<0.03						<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	0.77	0.31	<0.03	<0.03						<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	0.51	0.18	<0.06	<0.06						<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	0.44	0.19	0.03	<0.02						<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	0.83	0.36	<0.07	<0.07						<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	0.41	0.18	<0.04	<0.04						<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	0.26	0.11	<0.04	<0.04						<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04						<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	0.30	0.14	<0.04	<0.04						<0.04	mg/kg	TM4/PM8
Coronene	<0.04	0.05	<0.04	<0.04	<0.04						<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	2.68	1.11	<0.22	<0.22						<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	4.97	1.99	<0.64	<0.64						<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	0.60	0.26	<0.05	<0.05						<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	0.23	0.10	<0.02	<0.02						<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1						<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	93	95	93	93	95						<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	107	99	<30	<30						<30	mg/kg	TM5/PM8/PM16
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1 SV	<0.1	<0.1 SV	<0.1 SV	<0.1 SV						<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1 SV	<0.1	<0.1 SV	<0.1 SV	<0.1 SV						<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1 SV	<0.1	<0.1 SV	<0.1 SV	<0.1 SV						<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2						<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4						<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	13	<7	<7	<7						<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	76	85	<7	<7						<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	18	14	<7	<7						<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	107	99	<26	<26						<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1 SV	<0.1	<0.1 SV	<0.1 SV	<0.1 SV						<0.1	mg/kg	TM36/PM12
>C10-C25	<10	18	23	<10	<10						<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	60	89	<10	<10						<10	mg/kg	TM5/PM8/PM16

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Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96711
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12992

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	34-36	37-39	40-42	43-45	46-47						LOD/LOR	Units	Method No.
Sample ID	WS 21	WS 22	WS 22	WS 22	WS 22								
Depth	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40								
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J								
Sample Date	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020								
Sample Type	Soil	Soil	Soil	Soil	Soil								
Batch Number	1	1	1	1	1								
Date of Receipt	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020								
TPH CWG													
Aromatics													
>C5-EC7 #	<0.1 SV	<0.1	<0.1 SV	<0.1 SV	<0.1 SV						<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1 SV	<0.1	<0.1 SV	<0.1 SV	<0.1 SV						<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1 SV	<0.1	<0.1 SV	<0.1 SV	<0.1 SV						<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2						<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4						<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7						<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	107	87	<7	<7						<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	44	23	<7	<7						<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	151	110	<26	<26						<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	258	209	<52	<52						<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1 SV	<0.1	<0.1 SV	<0.1 SV	<0.1 SV						<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	15	<10	<10	<10						<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	97	85	<10	<10						<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005 SV	<0.005	<0.005 SV	<0.005 SV	<0.005 SV						<0.005	mg/kg	TM36/PM12
Benzene #	<0.005 SV	<0.005	<0.005 SV	<0.005 SV	<0.005 SV						<0.005	mg/kg	TM36/PM12
Toluene #	<0.005 SV	<0.005	<0.005 SV	<0.005 SV	<0.005 SV						<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005 SV	<0.005	<0.005 SV	<0.005 SV	<0.005 SV						<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005 SV	<0.005	<0.005 SV	<0.005 SV	<0.005 SV						<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005 SV	<0.005	<0.005 SV	<0.005 SV	<0.005 SV						<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035						<0.035	mg/kg	TM17/PM8
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01						<0.01	mg/kg	TM26/PM21
Natural Moisture Content	10.1	15.2	27.4	13.2	10.1						<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	9.2	13.2	21.5	11.7	9.1						<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3						<0.3	mg/kg	TM38/PM20
Chromium III	42.1	-	-	48.2	51.5						<0.5	mg/kg	NONE/NONE
Chromium III	-	19.5	21.4	-	-						<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5						<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.60	NDP	NDP	0.72	0.69						<0.02	%	TM21/PM24

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Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96711
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12992

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	34-36	37-39	40-42	43-45	46-47						LOD/LOR	Units	Method No.
Sample ID	WS 21	WS 22	WS 22	WS 22	WS 22								
Depth	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40								
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J								
Sample Date	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020								
Sample Type	Soil	Soil	Soil	Soil	Soil								
Batch Number	1	1	1	1	1								
Date of Receipt	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020								
Total Organic Carbon	-	NDP	1.86	-	-						<0.02	%	TM21/PM89
Sulphide	<10	<10	101	<10	<10						<10	mg/kg	TM107/PM45
Elemental Sulphur	2	-	-	46	16						<1	mg/kg	TM108/PM114
Elemental Sulphur	-	<1	215	-	-						<1	mg/kg	TM108/PM8
Loss on Ignition #	1.5	NDP	NDP	1.6	1.2						<1.0	%	TM22/PM0
Loss on Ignition	-	NDP	4.5	-	-						<1.0	%	TM22/PM0
pH #	8.54	7.67	7.73	8.10	8.45						<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1017	0.1026	0.11	0.1019	0.098							kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09							kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

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Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96711
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12992

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	13-15	16-18	19-21	22-24	25-27	28-30	31-33	LOD/LOR	Units	Method No.
Sample ID	WS 16	WS 16	WS 16	WS 20	WS 20	WS 20	WS 20	WS 21	WS 21	WS 21			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.30	0.00-1.00	1.00-2.00	2.00-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020			
Dissolved Antimony #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	0.0381	<0.0025	<0.0025	0.0253	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	0.381	<0.025	<0.025	0.253	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.004	0.005	0.016	0.004	<0.003	0.005	0.010	0.006	0.008	0.015	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.04	0.05	0.16	0.04	<0.03	0.05	0.10	0.06	0.08	0.15	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	0.020	0.013	<0.012	<0.012	0.013	<0.012	<0.012	<0.012	<0.012	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	0.20	0.13	<0.12	<0.12	0.13	<0.12	<0.12	<0.12	<0.12	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	0.0027	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	0.027	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.005	0.010	0.038	0.003	0.005	0.019	0.027	0.006	0.012	0.017	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.05	0.10	0.38	0.03	0.05	0.19	0.27	0.06	0.12	0.17	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	0.016	<0.003	<0.003	<0.003	0.007	<0.003	<0.003	0.021	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	0.16	<0.03	<0.03	<0.03	0.07	<0.03	<0.03	0.21	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	0.003	<0.003	0.003	<0.003	<0.003	0.003	0.004	0.005	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	0.03	<0.03	<0.03	<0.03	<0.03	0.03	0.04	0.05	<0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	7.0	3.0	18.6	<0.5	<0.5	5.2	9.1	3.8	2.9	13.4	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	70	30	186	<5	<5	52	91	38	29	134	<5	mg/kg	TM38/PM0
Chloride #	0.3	<0.3	6.3	<0.3	<0.3	<0.3	1.3	<0.3	<0.3	5.2	<0.3	mg/l	TM38/PM0
Chloride #	3	<3	63	<3	<3	<3	13	<3	<3	52	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.13	0.08	0.03	<0.03	0.05	<0.03	0.04	<0.03	0.05	0.03	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	1.3	0.8	<0.3	<0.3	0.5	<0.3	0.4	<0.3	0.5	0.3	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	4	<2	2	3	<2	<2	3	4	<2	3	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	40	<20	<20	30	<20	<20	30	40	<20	30	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	71	52	86	39	37	57	75	57	55	77	<35	mg/l	TM20/PM0
Total Dissolved Solids #	710	520	860	390	370	570	750	570	550	770	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96711
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/12992

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	34-36	37-39	40-42	43-45	46-47						LOD/LOR	Units	Method No.
Sample ID	WS 21	WS 22	WS 22	WS 22	WS 22								
Depth	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40								
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J								
Sample Date	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020								
Sample Type	Soil	Soil	Soil	Soil	Soil								
Batch Number	1	1	1	1	1								
Date of Receipt	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020								
Dissolved Antimony #	0.003	<0.002	<0.002	0.004	0.009						<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.03	<0.02	<0.02	0.04	0.09						<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025						<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025						<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.066	0.052	0.034	0.026	0.046						<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.66	0.52	0.34	0.26	0.46						<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	0.029	0.133	0.037	0.015						<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	0.29	1.33	0.37	0.15						<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005						<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015						<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015						<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007						<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07						<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05						<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.013	0.004	0.045	0.017	0.011						<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.13	0.04	0.45	0.17	0.11						<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	0.007	<0.002	0.003						<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	0.07	<0.02	0.03						<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	0.032	<0.003	<0.003	0.015	0.027						<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	0.32	<0.03	<0.03	0.15	0.27						<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	0.006	<0.003	0.004	<0.003	<0.003						<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	0.06	<0.03	0.04	<0.03	<0.03						<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	0.00008	<0.00001	<0.00001	<0.00001	<0.00001						<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	0.0008	<0.0001	<0.0001	<0.0001	<0.0001						<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01						<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1						<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3	<0.3	<0.3	<0.3						<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	<3	<3	<3						<3	mg/kg	TM173/PM0
Sulphate as SO4 #	18.7	1325.1	1360.8	65.7	31.0						<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	187	13245	13605	657	310						<5	mg/kg	TM38/PM0
Chloride #	7.6	<0.3	5.0	2.3	6.3						<0.3	mg/l	TM38/PM0
Chloride #	76	<3	50	23	63						<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.04	0.08	0.47	0.59	0.19						<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.4	0.8	4.7	5.9	1.9						<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	3	2	6	2	<2						<2	mg/l	TM60/PM0
Dissolved Organic Carbon	30	<20	60	20	<20						<20	mg/kg	TM60/PM0
Total Dissolved Solids #	77	2107	2156	133	117						<35	mg/l	TM20/PM0
Total Dissolved Solids #	770	21061	21555	1330	1171						<350	mg/kg	TM20/PM0

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**3**			
Client Sample No	**WS 16**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.63	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.64	-	-	-
PAH Sum of 17 (mg/kg)	1.26	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.381	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	0.027	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	70	1000	20000	50000
Total Dissolved Solids	710	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**6**			
Client Sample No	**WS 16**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.41	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.05	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.10	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	30	1000	20000	50000
Total Dissolved Solids	520	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**9**			
Client Sample No	**WS 16**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.78	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.16	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.38	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.16	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	63	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	186	1000	20000	50000
Total Dissolved Solids	860	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**15**			
Client Sample No	**WS 20**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.43	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.37	-	-	-
PAH Sum of 17 (mg/kg)	0.78	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.253	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.03	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	390	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	92.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**18**			
Client Sample No	**WS 20**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.14	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	11.73	-	-	-
PAH Sum of 17 (mg/kg)	25.63	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	370	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**21**			
Client Sample No	**WS 20**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.51	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.05	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.19	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	52	1000	20000	50000
Total Dissolved Solids	570	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**24**			
Client Sample No	**WS 20**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.30**			
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.62	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.10	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.27	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.07	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	13	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	91	1000	20000	50000
Total Dissolved Solids	750	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**27**			
Client Sample No	**WS 21**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.44	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.24	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.06	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.06	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	38	1000	20000	50000
Total Dissolved Solids	570	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	93.3
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**30**			
Client Sample No	**WS 21**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.44	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.08	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.12	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.05	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	29	1000	20000	50000
Total Dissolved Solids	550	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	92.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**33**			
Client Sample No	**WS 21**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.83	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.15	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0001	0.01	0.2	2
Molybdenum	0.17	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.21	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	52	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	134	1000	20000	50000
Total Dissolved Solids	770	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**36**			
Client Sample No	**WS 21**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.40**			
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.60	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.66	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0008	0.01	0.2	2
Molybdenum	0.13	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	0.32	0.1	0.5	7
Zinc	0.06	4	50	200
Chloride	76	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	187	1000	20000	50000
Total Dissolved Solids	770	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**39**			
Client Sample No	**WS 22**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	NDP	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	107	500	-	-
PAH Sum of 6 (mg/kg)	2.68	-	-	-
PAH Sum of 17 (mg/kg)	4.97	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.52	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.04	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	13245	1000	20000	50000
Total Dissolved Solids	21061	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	82.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**42**			
Client Sample No	**WS 22**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.86	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	99	500	-	-
PAH Sum of 6 (mg/kg)	1.11	-	-	-
PAH Sum of 17 (mg/kg)	1.99	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.34	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.45	0.5	10	30
Nickel	0.07	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	50	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	13605	1000	20000	50000
Total Dissolved Solids	21555	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	60	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**45**			
Client Sample No	**WS 22**			
Depth/Other	**2.00-3.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.72	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.26	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.17	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.04	0.06	0.7	5
Selenium	0.15	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	23	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	657	1000	20000	50000
Total Dissolved Solids	1330	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	92.3
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/12992**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**47**			
Client Sample No	**WS 22**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.40**			
Sample Date	**21/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.69	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.46	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.11	0.5	10	30
Nickel	0.03	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.09	0.06	0.7	5
Selenium	0.27	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	63	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	310	1000	20000	50000
Total Dissolved Solids	1171	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B96711

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/12992	1	WS 16	0.00-1.00	1-3	No interpretation possible
20/12992	1	WS 16	1.00-2.00	4-6	No interpretation possible
20/12992	1	WS 16	2.00-3.00	7-9	No interpretation possible
20/12992	1	WS 20	0.00-1.00	13-15	No interpretation possible
20/12992	1	WS 20	1.00-2.00	16-18	No interpretation possible
20/12992	1	WS 20	2.00-3.00	19-21	No interpretation possible
20/12992	1	WS 20	3.00-3.30	22-24	No interpretation possible
20/12992	1	WS 21	0.00-1.00	25-27	Possible degraded diesel
20/12992	1	WS 21	1.00-2.00	28-30	No interpretation possible
20/12992	1	WS 21	2.00-3.00	31-33	No interpretation possible
20/12992	1	WS 21	3.00-3.40	34-36	No interpretation possible
20/12992	1	WS 22	0.00-1.00	37-39	PAH's & Possible lubricating oil
20/12992	1	WS 22	1.00-2.00	40-42	Lubricating oil & Naturally occurring compounds
20/12992	1	WS 22	2.00-3.00	43-45	No interpretation possible
20/12992	1	WS 22	3.00-3.40	46-47	No interpretation possible

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96711
Location: Emmet Road
Contact: Richard Thompson

Note:

Asbestos Screen analysis is carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Detailed Gravimetric Quantification and PCOM Fibre Analysis is carried out in accordance with our documented in-house methods PM042 and TM131 and HSG 248 using Stereo and Polarised Light Microscopy and Phase Contrast Optical Microscopy (PCOM). Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions, including ACM type and Asbestos level less than 0.1%, lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Element Materials Technology consultant, Element Materials Technology cannot be responsible for inaccurate or unrepresentative sampling.

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
20/12992	1	WS 16	0.00-1.00	2	29/09/2020	**General Description (Bulk Analysis)**	soil-stones
					29/09/2020	**Asbestos Fibres**	NAD
					29/09/2020	**Asbestos ACM**	NAD
					29/09/2020	**Asbestos Type**	NAD
					29/09/2020	**Asbestos Level Screen**	NAD
20/12992	1	WS 16	1.00-2.00	5	29/09/2020	**General Description (Bulk Analysis)**	soil/stones
					29/09/2020	**Asbestos Fibres**	NAD
					29/09/2020	**Asbestos ACM**	NAD
					29/09/2020	**Asbestos Type**	NAD
					29/09/2020	**Asbestos Level Screen**	NAD
20/12992	1	WS 16	2.00-3.00	8	29/09/2020	**General Description (Bulk Analysis)**	soil/stones
					29/09/2020	**Asbestos Fibres**	NAD
					29/09/2020	**Asbestos ACM**	NAD
					29/09/2020	**Asbestos Type**	NAD
					29/09/2020	**Asbestos Level Screen**	NAD
20/12992	1	WS 20	0.00-1.00	14	29/09/2020	**General Description (Bulk Analysis)**	soil/stones
					29/09/2020	**Asbestos Fibres**	NAD
					29/09/2020	**Asbestos ACM**	NAD
					29/09/2020	**Asbestos Type**	NAD
					29/09/2020	**Asbestos Level Screen**	NAD
20/12992	1	WS 20	1.00-2.00	17	29/09/2020	**General Description (Bulk Analysis)**	soil/stones
					29/09/2020	**Asbestos Fibres**	NAD
					29/09/2020	**Asbestos ACM**	NAD
					29/09/2020	**Asbestos Type**	NAD
					29/09/2020	**Asbestos Level Screen**	NAD
20/12992	1	WS 20	2.00-3.00	20	29/09/2020	**General Description (Bulk Analysis)**	soil/stones
					29/09/2020	**Asbestos Fibres**	NAD
					29/09/2020	**Asbestos ACM**	NAD
					29/09/2020	**Asbestos Type**	NAD
					29/09/2020	**Asbestos Level Screen**	NAD
20/12992	1	WS 20	3.00-3.30	23	29/09/2020	**General Description (Bulk Analysis)**	soil/stones
					29/09/2020	**Asbestos Fibres**	NAD
					29/09/2020	**Asbestos ACM**	NAD

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96711
Location: Emmet Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
20/12992	1	WS 20	3.00-3.30	23	29/09/2020	**Asbestos Type**	NAD
					29/09/2020	**Asbestos Level Screen**	NAD
20/12992	1	WS 21	0.00-1.00	26	29/09/2020	**General Description (Bulk Analysis)**	soil/stones
					29/09/2020	**Asbestos Fibres**	NAD
					29/09/2020	**Asbestos ACM**	NAD
					29/09/2020	**Asbestos Type**	NAD
					29/09/2020	**Asbestos Level Screen**	NAD
20/12992	1	WS 21	1.00-2.00	29	01/10/2020	**General Description (Bulk Analysis)**	soil/stones
					01/10/2020	**Asbestos Fibres**	NAD
					01/10/2020	**Asbestos ACM**	NAD
					01/10/2020	**Asbestos Type**	NAD
					01/10/2020	**Asbestos Level Screen**	NAD
20/12992	1	WS 21	2.00-3.00	32	01/10/2020	**General Description (Bulk Analysis)**	soil/stones
					01/10/2020	**Asbestos Fibres**	NAD
					01/10/2020	**Asbestos ACM**	NAD
					01/10/2020	**Asbestos Type**	NAD
					01/10/2020	**Asbestos Level Screen**	NAD
20/12992	1	WS 21	3.00-3.40	35	01/10/2020	**General Description (Bulk Analysis)**	soil.stones
					01/10/2020	**Asbestos Fibres**	NAD
					01/10/2020	**Asbestos ACM**	NAD
					01/10/2020	**Asbestos Type**	NAD
					01/10/2020	**Asbestos Level Screen**	NAD
20/12992	1	WS 22	0.00-1.00	38	01/10/2020	**General Description (Bulk Analysis)**	Soil/Stones
					01/10/2020	**Asbestos Fibres**	Free Fibres
					01/10/2020	**Asbestos Fibres (2)**	Free Fibres
					01/10/2020	**Asbestos ACM**	Asbestos Insulating Board
					01/10/2020	**Asbestos ACM (2)**	Asbestos Insulating Board
					01/10/2020	**Asbestos Type**	Chrysotile
					01/10/2020	**Asbestos Type (2)**	Amosite
					01/10/2020	**Asbestos Level Screen**	Asbestos level cannot be determined from Screen. Quantification required.
20/12992	1	WS 22	1.00-2.00	41	02/10/2020	**General Description (Bulk Analysis)**	soil-stones
					02/10/2020	**Asbestos Fibres**	Fibre Bundles
					02/10/2020	**Asbestos ACM**	ACM Debris
					02/10/2020	**Asbestos Type**	Chrysotile
					02/10/2020	**Asbestos Level Screen**	Asbestos level cannot be determined from Screen. Quantification required.
20/12992	1	WS 22	2.00-3.00	44	02/10/2020	**General Description (Bulk Analysis)**	soil-stones
					02/10/2020	**Asbestos Fibres**	NAD
					02/10/2020	**Asbestos ACM**	NAD
					02/10/2020	**Asbestos Type**	NAD
					02/10/2020	**Asbestos Level Screen**	NAD
20/12992	1	WS 22	3.00-3.40	47	01/10/2020	**General Description (Bulk Analysis)**	soil/stones
					01/10/2020	**Asbestos Fibres**	NAD
					01/10/2020	**Asbestos ACM**	NAD
					01/10/2020	**Asbestos Type**	NAD
					01/10/2020	**Asbestos Level Screen**	NAD

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B96711

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
20/12992	1	WS 22	0.00-1.00	37-39	TM21/PM24	Asbestos detected in sample
20/12992	1	WS 22	0.00-1.00	37-39	TM21/PM89	Asbestos detected in sample
20/12992	1	WS 22	0.00-1.00	37-39	TM22/PM0	Asbestos detected in sample
20/12992	1	WS 22	1.00-2.00	40-42	TM21/PM24	Asbestos detected in sample
20/12992	1	WS 22	1.00-2.00	40-42	TM22/PM0	Asbestos detected in sample

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96711
Location: Emmet Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 20/12992						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/12992

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/12992

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/12992

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM89	Preparation of positive asbestos samples for Eltra analysis			AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.			AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21	As received solid samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

EMT Job No: 20/12992

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM129	A hot hydrochloric acid digest is performed on an as received sample, and the resulting liquor is analysed.			AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248 First edition (2006)	PM42	Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes

EMT Job No: 20/12992

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM61	As received solid samples are extracted with hot water in a 20:1 ratio of water to soil ready for analysis by ICP.			AR	Yes
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

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O'Connor Sutton Cronin & Assoc. Ltd
9 Prussia Street
Dublin 7
Ireland

Attention :	Richard Thompson
Date :	8th October, 2020
Your reference :	B96713
Our reference :	Test Report 20/13079 Batch 1
Location :	Emeret Road
Date samples received :	24th September, 2020
Status :	Final report
Issue :	2

Sixteen samples were received for analysis on 24th September, 2020 of which sixteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Phil Sommerton BSc
Senior Project Manager

Please include all sections of this report if it is reproduced

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96713
Location: Emeret Road
Contact: Richard Thompson
EMT Job No: 20/13079

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS23	WS23	WS23	WS23	WS08	WS08	WS08	WS08	WS06	WS06			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.15-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020			
Antimony	-	3	2	2	1	2	2	2	2	1	<1	mg/kg	TM30/PM15
Arsenic #	-	14.4	8.1	6.6	6.7	9.9	9.6	17.9	6.7	17.4	<0.5	mg/kg	TM30/PM15
Barium #	-	125	35	27	72	54	87	72	68	38	<1	mg/kg	TM30/PM15
Cadmium #	-	2.5	1.9	1.9	1.2	1.9	2.3	1.3	1.4	1.4	<0.1	mg/kg	TM30/PM15
Chromium #	-	67.0	46.8	49.1	62.7	44.1	50.6	45.1	80.3	33.1	<0.5	mg/kg	TM30/PM15
Copper #	-	43	31	23	24	31	29	20	27	15	<1	mg/kg	TM30/PM15
Lead #	-	85	14	14	33	15	16	12	37	11	<5	mg/kg	TM30/PM15
Mercury #	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	-	6.5	5.4	4.8	4.6	4.5	5.6	4.8	6.0	3.4	<0.1	mg/kg	TM30/PM15
Nickel #	-	46.4	30.2	31.4	26.9	33.4	37.9	24.7	27.5	20.9	<0.7	mg/kg	TM30/PM15
Selenium #	-	1	24	4	<1	<1	2	4	1	1	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	-	541	427	1215	621	881	294	422	317	1042	<50	mg/kg	TM50/PM29
Water Soluble Boron #	-	0.7	0.6	0.6	1.0	0.6	0.5	0.4	0.5	0.5	<0.1	mg/kg	TM74/PM32
Zinc #	-	124	74	66	74	75	91	66	82	48	<5	mg/kg	TM30/PM15
Antimony	2	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Arsenic	20.3	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Barium	106	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Cadmium	1.6	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Chromium	18.7	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Copper	46	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Lead	129	-	-	-	-	-	-	-	-	-	<5	mg/kg	TM30/PM62
Mercury	<0.1	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Molybdenum	3.0	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Nickel	42.8	-	-	-	-	-	-	-	-	-	<0.7	mg/kg	TM30/PM62
Selenium	<1	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Total Sulphate as SO4	561	-	-	-	-	-	-	-	-	-	<50	mg/kg	TM50/PM129
Water Soluble Boron	0.9	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM74/PM61
Zinc	164	-	-	-	-	-	-	-	-	-	<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96713
Location: Emeret Road
Contact: Richard Thompson
EMT Job No: 20/13079

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS23	WS23	WS23	WS23	WS08	WS08	WS08	WS08	WS06	WS06			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.15-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020			
PAH MS													
Naphthalene #	<0.04	<0.04	<0.40 AA	<0.04	0.35	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	0.07	0.35 AA	<0.03	0.11	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.50 AA	<0.05	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	0.18	0.73 AA	<0.04	0.27	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.11	0.32	1.46 AA	0.04	1.49	<0.03	<0.03	<0.03	<0.03	0.07	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.40 AA	<0.04	0.34	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.18	0.11	<0.30 AA	<0.03	1.66	<0.03	<0.03	<0.03	0.05	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	0.16	0.11	<0.30 AA	<0.03	1.61	<0.03	<0.03	<0.03	0.05	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.11	0.07	<0.60 AA	<0.06	0.66	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	0.12	0.08	<0.20 AA	<0.02	0.86	<0.02	<0.02	<0.02	0.04	0.03	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	0.19	0.11	<0.70 AA	<0.07	1.19	<0.07	<0.07	<0.07	0.09	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.09	0.05	<0.40 AA	<0.04	0.53	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	0.05	<0.04	<0.40 AA	<0.04	0.27	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.40 AA	<0.04	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.06	<0.04	<0.40 AA	<0.04	0.31	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.40 AA	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	0.57	0.27	<2.20 AA	<0.22	3.96	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	1.07	1.10	<6.40 AA	<0.64	9.92	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.14	0.08	<0.50 AA	<0.05	0.86	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.05	0.03	<0.20 AA	<0.02	0.33	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<10 AA	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	98	92	92 AA	99	99	100	101	99	93	93	<0	%	TM4/PM8
Mineral Oil (C10-C40)	125	655	1297	57	900	<30	<30	<30	102	<30	<30	mg/kg	TM5/PM8/PM16
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	0.3	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	1.7	5.1	<0.1 SV	0.6 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	0.3 SV	<0.1	mg/kg	TM36/PM12
>C10-C12 #	4.8	51.1	118.5	<0.2	74.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	35	234	473	10	353	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	51	246	501	19	346	<7	<7	<7	8	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	34	124	204	28	127	<7	<7	<7	79	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	15	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	125	657	1302	57	901	<26	<26	<26	102	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	1.7	5.4	<0.1 SV	0.6 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	0.3 SV	<0.1	mg/kg	TM36/PM12
>C10-C25	118	628	1258	42	891	<10	<10	<10	24	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	15	24	26	12	23	<10	<10	<10	67	<10	<10	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96713
Location: Emeret Road
Contact: Richard Thompson
EMT Job No: 20/13079

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS23	WS23	WS23	WS23	WS08	WS08	WS08	WS08	WS06	WS06			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.15-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020			
TPH CWG													
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	0.2	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	6.0	22.5	58.7	7.9	34.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	27	138	283	10	169	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	69	219	395	<7	250	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	98	162	178	<7	183	<7	<7	<7	37	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	18	17	<7	<7	25	<7	<7	<7	15	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	218	559	915	<26	661	<26	<26	<26	52	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	343	1216	2217	57	1562	<52	<52	<52	154	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1	0.2	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC25	159	484	887	21	566	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	61	63	46	<10	82	<10	<10	<10	38	<10	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	0.011	0.037	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	0.030	0.098	<0.005 SV	0.016 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	0.010	0.040	<0.005 SV	0.015 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	16.9	14.8	11.3	11.0	17.4	13.7	14.8	10.9	7.6	11.5	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	14.4	12.9	10.2	9.9	14.8	12.1	12.9	9.8	7.1	10.3	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	-	67.0	46.8	49.1	62.7	44.1	50.6	45.1	80.3	33.1	<0.5	mg/kg	NONE/NONE
Chromium III	18.7	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	NDP	0.83	0.68	0.54	1.44	0.31	0.36	0.47	0.45	0.32	<0.02	%	TM21/PM24

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96713
Location: Emeret Road
Contact: Richard Thompson
EMT Job No: 20/13079

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS23	WS23	WS23	WS23	WS08	WS08	WS08	WS08	WS06	WS06			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.15-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020			
Total Organic Carbon	1.77	-	-	-	-	-	-	-	-	-	<0.02	%	TM21/PM89
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	-	-	<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	-	-	<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	-	48	89	10	28	1	1	2	1	7	<1	mg/kg	TM108/PM114
Elemental Sulphur	<1	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM108/PM8
Loss on Ignition #	NDP	2.7	2.0	<1.0	1.7	2.1	1.4	1.1	1.4	<1.0	<1.0	%	TM22/PM0
Loss on Ignition	4.3	-	-	-	-	-	-	-	-	-	<1.0	%	TM22/PM0
pH #	8.33	8.18	8.27	8.33	8.32	8.55	8.77	8.82	8.75	8.55	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1024	0.1041	0.0987	0.1005	0.1052	0.1019	0.1001	0.1034	0.0972	0.1003		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96713
Location: Emeret Road
Contact: Richard Thompson
EMT Job No: 20/13079

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48					LOD/LOR	Units	Method No.
Sample ID	WS06	WS06	WS07	WS07	WS07	WS07							
Depth	2.00-3.00	2.70-3.00	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020							
Antimony	2	2	-	3	2	2					<1	mg/kg	TM30/PM15
Arsenic #	8.8	11.9	-	14.7	11.3	10.9					<0.5	mg/kg	TM30/PM15
Barium #	58	85	-	86	90	97					<1	mg/kg	TM30/PM15
Cadmium #	2.0	2.6	-	3.0	3.1	2.4					<0.1	mg/kg	TM30/PM15
Chromium #	46.3	42.8	-	54.6	44.1	45.4					<0.5	mg/kg	TM30/PM15
Copper #	27	43	-	46	36	37					<1	mg/kg	TM30/PM15
Lead #	14	20	-	21	18	17					<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	-	<0.1	<0.1	<0.1					<0.1	mg/kg	TM30/PM15
Molybdenum #	5.8	6.2	-	6.4	6.2	6.1					<0.1	mg/kg	TM30/PM15
Nickel #	34.0	49.9	-	53.7	46.8	45.8					<0.7	mg/kg	TM30/PM15
Selenium #	3	4	-	1	3	4					<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	1473	2120	-	251	2182	2348					<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.5	0.4	-	0.5	0.5	0.4					<0.1	mg/kg	TM74/PM32
Zinc #	69	97	-	111	87	92					<5	mg/kg	TM30/PM15
Antimony	-	-	<1	-	-	-					<1	mg/kg	TM30/PM62
Arsenic	-	-	7.2	-	-	-					<0.5	mg/kg	TM30/PM62
Barium	-	-	43	-	-	-					<1	mg/kg	TM30/PM62
Cadmium	-	-	1.8	-	-	-					<0.1	mg/kg	TM30/PM62
Chromium	-	-	9.0	-	-	-					<0.5	mg/kg	TM30/PM62
Copper	-	-	20	-	-	-					<1	mg/kg	TM30/PM62
Lead	-	-	25	-	-	-					<5	mg/kg	TM30/PM62
Mercury	-	-	<0.1	-	-	-					<0.1	mg/kg	TM30/PM62
Molybdenum	-	-	1.8	-	-	-					<0.1	mg/kg	TM30/PM62
Nickel	-	-	24.1	-	-	-					<0.7	mg/kg	TM30/PM62
Selenium	-	-	<1	-	-	-					<1	mg/kg	TM30/PM62
Total Sulphate as SO4	-	-	531	-	-	-					<50	mg/kg	TM50/PM129
Water Soluble Boron	-	-	0.3	-	-	-					<0.1	mg/kg	TM74/PM61
Zinc	-	-	75	-	-	-					<5	mg/kg	TM30/PM62

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96713
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EMT Job No: 20/13079

Report : Solid

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Please see attached notes for all abbreviations and acronyms

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	LOD/LOR	Units	Method No.
Sample ID	WS06	WS06	WS07	WS07	WS07	WS07			
Depth	2.00-3.00	2.70-3.00	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40			
COC No / misc									
Containers	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1			
Date of Receipt	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020			
PAH MS									
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	0.05	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.04	0.07	0.25	<0.03	0.08	0.07	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	<0.03	0.35	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03	0.30	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	0.19	<0.06	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	0.03	<0.02	0.21	<0.02	0.04	0.03	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07	0.36	<0.07	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04	0.19	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04	0.11	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	0.12	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	<0.22	1.13	<0.22	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	2.19	<0.64	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	0.26	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	0.10	<0.02	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	100	90	102	96	97	92	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16
TPH CWG									
Aliphatics									
>C5-C6 #	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96713
Location: Emeret Road
Contact: Richard Thompson
EMT Job No: 20/13079

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48					LOD/LOR	Units	Method No.
Sample ID	WS06	WS06	WS07	WS07	WS07	WS07							
Depth	2.00-3.00	2.70-3.00	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020							
TPH CWG													
Aromatics													
>C5-EC7 #	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2					<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4					<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7	<7					<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	<7	<7					<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	<7	<7					<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26	<26	<26	<26	<26					<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	<52	<52					<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	<10	<10					<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10	<10	<10	<10	<10					<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV					<0.005	mg/kg	TM36/PM12
Benzene #	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV					<0.005	mg/kg	TM36/PM12
Toluene #	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV					<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV					<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV					<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV					<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035					<0.035	mg/kg	TM17/PM8
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					<0.01	mg/kg	TM26/PM21
Natural Moisture Content	11.6	11.3	12.5	13.7	10.6	9.1					<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	10.4	10.2	11.1	12.0	9.6	8.3					<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3					<0.3	mg/kg	TM38/PM20
Chromium III	46.3	42.8	-	54.6	44.1	45.4					<0.5	mg/kg	NONE/NONE
Chromium III	-	-	9.0	-	-	-					<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5					<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.70	0.82	NDP	0.46	0.76	0.74					<0.02	%	TM21/PM24

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96713
Location: Emeret Road
Contact: Richard Thompson
EMT Job No: 20/13079

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48					LOD/LOR	Units	Method No.
Sample ID	WS06	WS06	WS07	WS07	WS07	WS07							
Depth	2.00-3.00	2.70-3.00	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020							
Total Organic Carbon	-	-	0.61	-	-	-					<0.02	%	TM21/PM89
Sulphide	<10	<10	<10	<10	<10	<10					<10	mg/kg	TM107/PM45
Acid Reserve	-	-	-	-	-	-					<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	-	-	-	-	-	-					<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	3	4	-	<1	12	5					<1	mg/kg	TM108/PM114
Elemental Sulphur	-	-	<1	-	-	-					<1	mg/kg	TM108/PM8
Loss on Ignition #	1.1	1.4	NDP	1.8	1.1	1.1					<1.0	%	TM22/PM0
Loss on Ignition	-	-	1.4	-	-	-					<1.0	%	TM22/PM0
pH #	8.47	8.40	9.70	8.66	8.35	8.28					<0.01	pH units	TM73/PM11
Mass of raw test portion	0.0995	0.0982	0.1018	0.1017	0.1004	0.0965						kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09						kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96713
Location: Emeret Road
Contact: Richard Thompson
EMT Job No: 20/13079

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS23	WS23	WS23	WS23	WS08	WS08	WS08	WS08	WS06	WS06			
Depth	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.15-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020			
Dissolved Antimony #	<0.002	<0.002	0.005	0.004	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	0.05	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.012	0.023	0.038	0.022	0.004	<0.003	<0.003	0.022	0.004	0.023	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.12	0.23	0.38	0.22	0.04	<0.03	<0.03	0.22	0.04	0.23	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	<0.012	0.015	<0.012	0.026	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	<0.12	0.15	<0.12	0.26	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.014	0.026	0.025	0.010	0.018	0.008	0.023	0.020	0.004	0.018	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.14	0.26	0.25	0.10	0.18	0.08	0.23	0.20	0.04	0.18	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	0.035	<0.003	<0.003	<0.003	0.035	<0.003	0.027	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	0.35	<0.03	<0.03	<0.03	0.35	<0.03	0.27	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003	<0.003	<0.003	0.004	0.005	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	<0.03	<0.03	0.04	0.05	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00006	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0006	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	0.4	0.3	<0.3	<0.3	0.4	<0.3	<0.3	0.3	<0.3	<0.3	<0.3	mg/l	TM173/PM0
Fluoride	4	3	<3	<3	4	<3	<3	3	<3	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	2.9	4.3	<0.5	6.0	12.6	2.3	1.2	8.2	0.6	16.0	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	29	43	<5	60	126	23	12	82	6	160	<5	mg/kg	TM38/PM0
Chloride #	0.3	0.5	0.8	2.3	0.4	<0.3	<0.3	5.4	<0.3	9.6	<0.3	mg/l	TM38/PM0
Chloride #	3	5	8	23	4	<3	<3	54	<3	96	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	<0.03	<0.03	0.07	0.12	<0.03	<0.03	0.08	0.05	<0.03	0.04	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	<0.3	<0.3	0.7	1.2	<0.3	<0.3	0.8	0.5	<0.3	0.4	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	2	3	2	<2	3	2	<2	<2	<2	3	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	20	30	<20	<20	30	<20	<20	<20	<20	30	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	54	94	107	86	82	50	44	61	<35	93	<35	mg/l	TM20/PM0
Total Dissolved Solids #	540	940	1070	860	820	500	440	610	<350	930	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96713
Location: Emeret Road
Contact: Richard Thompson
EMT Job No: 20/13079

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48					LOD/LOR	Units	Method No.
Sample ID	WS06	WS06	WS07	WS07	WS07	WS07							
Depth	2.00-3.00	2.70-3.00	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020							
Dissolved Antimony #	0.002	0.004	<0.002	<0.002	<0.002	<0.002					<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.02	0.04	<0.02	<0.02	<0.02	<0.02					<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	0.0043	<0.0025	<0.0025	<0.0025					<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	0.043	<0.025	<0.025	<0.025					<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.048	0.071	0.004	<0.003	0.007	0.051					<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.48	0.71	0.04	<0.03	0.07	0.51					<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012					<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12					<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005					<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	0.0035	<0.0015	<0.0015	<0.0015					<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	0.035	<0.015	<0.015	<0.015					<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007					<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07					<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.018	0.021	0.014	0.010	0.030	0.024					<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.18	0.21	0.14	0.10	0.30	0.24					<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002					<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02					<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	0.035	0.038	<0.003	<0.003	0.028	0.043					<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	0.35	0.38	<0.03	<0.03	0.28	0.43					<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003	0.003	<0.003	<0.003	<0.003					<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03					<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	0.00007	0.00009	0.00001	<0.00001	0.00002	0.00010					<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	0.0007	0.0009	<0.0001	<0.0001	0.0002	0.0010					<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3	0.3	0.4	<0.3	<0.3					<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	<3	4	<3	<3					<3	mg/kg	TM173/PM0
Sulphate as SO4 #	18.3	21.3	8.4	0.6	20.7	26.7					<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	183	213	84	6	207	267					<5	mg/kg	TM38/PM0
Chloride #	10.2	11.3	<0.3	<0.3	8.9	12.8					<0.3	mg/l	TM38/PM0
Chloride #	102	113	<3	<3	89	128					<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.05	0.05	0.04	<0.03	0.04	0.06					<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.5	0.5	0.4	<0.3	0.4	0.6					<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	2	2	5	2	<2	<2					<2	mg/l	TM60/PM0
Dissolved Organic Carbon	20	<20	50	<20	<20	<20					<20	mg/kg	TM60/PM0
Total Dissolved Solids #	110	104	76	43	94	110					<35	mg/l	TM20/PM0
Total Dissolved Solids #	1100	1039	760	430	940	1100					<350	mg/kg	TM20/PM0

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13079	Landfill Waste Acceptance Criteria Limits		
Sample No	3			
Client Sample No	WS23	Inert	Stable Non-reactive	Hazardous
Depth/Other	0.00-1.00			
Sample Date	22/09/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	1.77	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	125	500	-	-
PAH Sum of 6 (mg/kg)	0.57	-	-	-
PAH Sum of 17 (mg/kg)	1.07	100	-	-

Eluate Analysis	10:1 concn leached	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg		
	A10			
	mg/kg	mg/kg		
Arsenic	<0.025	0.5	2	25
Barium	0.12	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.14	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	29	1000	20000	50000
Total Dissolved Solids	540	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13079**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**6**			
Client Sample No	**WS23**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**22/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.83	3	5	6
Sum of BTEX (mg/kg)	0.051	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	655	500	-	-
PAH Sum of 6 (mg/kg)	0.27	-	-	-
PAH Sum of 17 (mg/kg)	1.10	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.23	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.26	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	5	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	43	1000	20000	50000
Total Dissolved Solids	940	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13079	Landfill Waste Acceptance Criteria Limits		
Sample No	9			
Client Sample No	WS23	Inert	Stable Non-reactive	Hazardous
Depth/Other	2.00-3.00			
Sample Date	22/09/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	0.68	3	5	6
Sum of BTEX (mg/kg)	0.175	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	1297	500	-	-
PAH Sum of 6 (mg/kg)	<2.20	-	-	-
PAH Sum of 17 (mg/kg)	<6.40	100	-	-

Eluate Analysis	10:1 concn leached A10 mg/kg	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg mg/kg		
Arsenic	<0.025	0.5	2	25
Barium	0.38	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.25	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.05	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	8	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	1070	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13079**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**12**			
Client Sample No	**WS23**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.40**			
Sample Date	**22/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.54	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	57	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.22	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.10	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.04	0.06	0.7	5
Selenium	0.35	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	23	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	60	1000	20000	50000
Total Dissolved Solids	860	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13079**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**15**			
Client Sample No	**WS08**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.15-1.00**			
Sample Date	**22/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.44	3	5	6
Sum of BTEX (mg/kg)	0.031	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	900	500	-	-
PAH Sum of 6 (mg/kg)	3.96	-	-	-
PAH Sum of 17 (mg/kg)	9.92	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.18	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	4	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	126	1000	20000	50000
Total Dissolved Solids	820	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13079	Landfill Waste Acceptance Criteria Limits		
Sample No	18			
Client Sample No	WS08	Inert	Stable Non-reactive	Hazardous
Depth/Other	1.00-2.00			
Sample Date	22/09/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	0.31	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	10:1 concn leached	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg		
	A10			
	mg/kg	mg/kg		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.08	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.05	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	23	1000	20000	50000
Total Dissolved Solids	500	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13079**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**21**			
Client Sample No	**WS08**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**22/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.36	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.23	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	12	1000	20000	50000
Total Dissolved Solids	440	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13079**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**24**			
Client Sample No	**WS08**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.40**			
Sample Date	**22/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.47	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.22	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.20	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.35	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	54	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	82	1000	20000	50000
Total Dissolved Solids	610	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	92.3
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13079**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**27**			
Client Sample No	**WS06**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**22/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.45	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	102	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.04	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	6	1000	20000	50000
Total Dissolved Solids	<350	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13079**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**30**			
Client Sample No	**WS06**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**22/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.32	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.23	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0006	0.01	0.2	2
Molybdenum	0.18	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	0.27	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	96	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	160	1000	20000	50000
Total Dissolved Solids	930	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13079**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**33**			
Client Sample No	**WS06**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**22/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.70	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.48	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0007	0.01	0.2	2
Molybdenum	0.18	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.02	0.06	0.7	5
Selenium	0.35	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	102	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	183	1000	20000	50000
Total Dissolved Solids	1100	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.3
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13079**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**36**			
Client Sample No	**WS06**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.70-3.00**			
Sample Date	**22/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.82	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.71	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0009	0.01	0.2	2
Molybdenum	0.21	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.04	0.06	0.7	5
Selenium	0.38	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	113	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	213	1000	20000	50000
Total Dissolved Solids	1039	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13079**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**39**			
Client Sample No	**WS07**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**22/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.61	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	1.13	-	-	-
PAH Sum of 17 (mg/kg)	2.19	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.043	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	0.035	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.14	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	84	1000	20000	50000
Total Dissolved Solids	760	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.3
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13079**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**42**			
Client Sample No	**WS07**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**22/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.46	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.10	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	6	1000	20000	50000
Total Dissolved Solids	430	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13079**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**45**			
Client Sample No	**WS07**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**22/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.76	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.07	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0002	0.01	0.2	2
Molybdenum	0.30	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.28	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	89	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	207	1000	20000	50000
Total Dissolved Solids	940	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	93.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13079**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**48**			
Client Sample No	**WS07**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.40**			
Sample Date	**22/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.74	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.51	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0010	0.01	0.2	2
Molybdenum	0.24	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.43	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	128	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	267	1000	20000	50000
Total Dissolved Solids	1100	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Reference: B96713

Location: Emeret Road

Contact: Richard Thompson

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/13079	1	WS23	0.00-1.00	1-3	Possible degraded diesel
20/13079	1	WS23	1.00-2.00	4-6	Degraded diesel
20/13079	1	WS23	2.00-3.00	7-9	Degraded diesel
20/13079	1	WS23	3.00-3.40	10-12	No interpretation possible
20/13079	1	WS08	0.15-1.00	13-15	Degraded diesel & Possible PAH's
20/13079	1	WS08	1.00-2.00	16-18	No interpretation possible
20/13079	1	WS08	2.00-3.00	19-21	No interpretation possible
20/13079	1	WS08	3.00-3.40	22-24	No interpretation possible
20/13079	1	WS06	0.00-1.00	25-27	Lubricating oil & Possible trace of PAH's
20/13079	1	WS06	1.00-2.00	28-30	No interpretation possible
20/13079	1	WS06	2.00-3.00	31-33	No interpretation possible
20/13079	1	WS06	2.70-3.00	34-36	No interpretation possible
20/13079	1	WS07	0.00-1.00	37-39	No interpretation possible
20/13079	1	WS07	1.00-2.00	40-42	No interpretation possible
20/13079	1	WS07	2.00-3.00	43-45	No interpretation possible
20/13079	1	WS07	3.00-3.40	46-48	No interpretation possible

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B96713

Location: Emeret Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
20/13079	1	WS23	0.00-1.00	1-3	TM21/PM24	Asbestos detected in sample
20/13079	1	WS23	0.00-1.00	1-3	TM160/PM110	pH > 4.00
20/13079	1	WS23	0.00-1.00	1-3	TM160/PM110	pH < 10.00
20/13079	1	WS23	0.00-1.00	1-3	TM22/PM0	Asbestos detected in sample
20/13079	1	WS23	1.00-2.00	4-6	TM160/PM110	pH > 4.00
20/13079	1	WS23	1.00-2.00	4-6	TM160/PM110	pH < 10.00
20/13079	1	WS23	2.00-3.00	7-9	TM160/PM110	Sample received is below pH4
20/13079	1	WS23	2.00-3.00	7-9	TM160/PM110	pH < 10.00
20/13079	1	WS23	3.00-3.40	10-12	TM160/PM110	Sample received is below pH4
20/13079	1	WS23	3.00-3.40	10-12	TM160/PM110	pH < 10.00
20/13079	1	WS08	0.15-1.00	13-15	TM160/PM110	pH > 4.00
20/13079	1	WS08	0.15-1.00	13-15	TM160/PM110	pH < 10.00
20/13079	1	WS08	1.00-2.00	16-18	TM160/PM110	pH > 4.00
20/13079	1	WS08	1.00-2.00	16-18	TM160/PM110	pH < 10.00
20/13079	1	WS08	2.00-3.00	19-21	TM160/PM110	pH > 4.00
20/13079	1	WS08	2.00-3.00	19-21	TM160/PM110	pH < 10.00
20/13079	1	WS08	3.00-3.40	22-24	TM160/PM110	Sample received is below pH4
20/13079	1	WS08	3.00-3.40	22-24	TM160/PM110	pH < 10.00
20/13079	1	WS07	0.00-1.00	37-39	TM21/PM24	Asbestos detected in sample
20/13079	1	WS07	0.00-1.00	37-39	TM22/PM0	Asbestos detected in sample

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B96713
Location: Emeret Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 20/13079						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/13079

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x10 Dilution

EMT Job No: 20/13079

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/13079

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM89	Preparation of positive asbestos samples for Eltra analysis			AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.			AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21	As received solid samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

EMT Job No: 20/13079

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM129	A hot hydrochloric acid digest is performed on an as received sample, and the resulting liquor is analysed.			AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM61	As received solid samples are extracted with hot water in a 20:1 ratio of water to soil ready for analysis by ICP.			AR	Yes

EMT Job No: 20/13079

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM160	Titrimetric determination of acid reserve to pH 4.0 or alkali reserve to pH 10.0 based on method C14.2 Canadian Government (2013).	PM110	Preparation of a 10% (w/w) aqueous solution of soil in distilled water			AR	No
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

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O'Connor Sutton Cronin & Assoc. Ltd
9 Prussia Street
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Attention :	Richard Thompson
Date :	8th October, 2020
Your reference :	B967/1
Our reference :	Test Report 20/13184 Batch 1
Location :	Emmet Road
Date samples received :	25th September, 2020
Status :	Final report
Issue :	1

Fifteen samples were received for analysis on 25th September, 2020 of which thirteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Phil Sommerton BSc
Senior Project Manager

Please include all sections of this report if it is reproduced

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13184

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	31-33	LOD/LOR	Units	Method No.
Sample ID	WS11	WS11	WS11	WS11	WS27	WS27	WS26	WS26	WS26	WS25			
Depth	0.12-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-1.50	0.00-1.00	1.00-2.00	2.00-2.80	0.00-1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020			
Antimony	1	1	2	2	-	2	2	2	2	2	<1	mg/kg	TM30/PM15
Arsenic #	10.7	3.5	10.7	10.5	-	8.0	33.6	14.0	9.2	11.4	<0.5	mg/kg	TM30/PM15
Barium #	283	35	59	77	-	114	130	110	70	100	<1	mg/kg	TM30/PM15
Cadmium #	0.9	1.3	2.9	2.3	-	2.3	0.7	1.8	2.0	1.6	<0.1	mg/kg	TM30/PM15
Chromium #	66.1	58.5	47.1	37.0	-	39.2	64.0	37.9	49.8	69.4	<0.5	mg/kg	TM30/PM15
Copper #	18	11	34	34	-	28	39	30	31	28	<1	mg/kg	TM30/PM15
Lead #	11	9	16	17	-	16	52	28	16	23	<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	5.1	4.4	6.3	5.7	-	4.5	2.8	4.7	6.0	5.8	<0.1	mg/kg	TM30/PM15
Nickel #	22.3	14.8	41.8	43.2	-	38.8	44.1	31.7	40.9	35.2	<0.7	mg/kg	TM30/PM15
Selenium #	<1	<1	3	3	-	2	1	2	3	1	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	696	295	1422	1417	-	342	536	566	1860	414	<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.7	0.4	0.4	0.6	-	0.7	0.7	0.6	0.4	1.2	<0.1	mg/kg	TM74/PM32
Zinc #	50	41	95	84	-	82	158	81	97	80	<5	mg/kg	TM30/PM15
Antimony	-	-	-	-	2	-	-	-	-	-	<1	mg/kg	TM30/PM62
Arsenic	-	-	-	-	15.7	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Barium	-	-	-	-	149	-	-	-	-	-	<1	mg/kg	TM30/PM62
Cadmium	-	-	-	-	1.8	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Chromium	-	-	-	-	19.5	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Copper	-	-	-	-	52	-	-	-	-	-	<1	mg/kg	TM30/PM62
Lead	-	-	-	-	171	-	-	-	-	-	<5	mg/kg	TM30/PM62
Mercury	-	-	-	-	<0.1	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Molybdenum	-	-	-	-	2.2	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Nickel	-	-	-	-	42.2	-	-	-	-	-	<0.7	mg/kg	TM30/PM62
Selenium	-	-	-	-	1	-	-	-	-	-	<1	mg/kg	TM30/PM62
Total Sulphate as SO4	-	-	-	-	1065	-	-	-	-	-	<50	mg/kg	TM50/PM129
Water Soluble Boron	-	-	-	-	1.3	-	-	-	-	-	<0.1	mg/kg	TM74/PM61
Zinc	-	-	-	-	205	-	-	-	-	-	<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13184

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	31-33	LOD/LOR	Units	Method No.
Sample ID	WS11	WS11	WS11	WS11	WS27	WS27	WS26	WS26	WS26	WS25			
Depth	0.12-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-1.50	0.00-1.00	1.00-2.00	2.00-2.80	0.00-1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020			
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	0.09	<0.04	0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	0.13	<0.03	0.07	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	0.08	0.09	0.08	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	<0.03	0.04	0.08	0.92	0.07	0.81	0.10	0.07	0.07	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	0.35	<0.04	0.27	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	<0.03	<0.03	<0.03	1.75	<0.03	1.53	0.16	<0.03	0.12	<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03	<0.03	<0.03	1.57	0.06	1.31	0.15	<0.03	0.11	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	<0.06	<0.06	1.05	<0.06	0.84	0.13	<0.06	0.10	<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	<0.02	<0.02	0.04	1.01	<0.02	0.86	0.11	0.04	0.07	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07	<0.07	<0.07	1.70	<0.07	1.63	0.19	<0.07	0.11	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04	<0.04	<0.04	0.90	<0.04	0.89	0.10	<0.04	0.06	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04	<0.04	<0.04	0.58	<0.04	0.65	0.08	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	0.14	<0.04	0.11	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	<0.04	<0.04	0.59	<0.04	0.70	0.08	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	0.12	<0.04	0.10	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	<0.22	<0.22	<0.22	5.52	<0.22	5.40	0.61	<0.22	0.29	<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	11.07	<0.64	9.98	1.10	<0.64	0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	1.22	<0.05	1.17	0.14	<0.05	0.08	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	0.48	<0.02	0.46	0.05	<0.02	0.03	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	99	100	97	93	90	82	95	87	89	98	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	92	514	90	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	0.2	<0.1 SV	<0.1 SV	<0.1	1.7	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	46.0	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	31	185	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	49	208	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	12	75	66	18	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	24	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	92	516	90	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	0.2	<0.1 SV	<0.1 SV	<0.1	1.7	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	101	520	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	<10	<10	<10	<10	58	19	<10	<10	<10	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13184

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	31-33	LOD/LOR	Units	Method No.
Sample ID	WS11	WS11	WS11	WS11	WS27	WS27	WS26	WS26	WS26	WS25			
Depth	0.12-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-1.50	0.00-1.00	1.00-2.00	2.00-2.80	0.00-1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020			
TPH CWG													
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	7.8	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	13	95	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	40	154	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	52	49	119	37	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	<7	<7	83	17	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26	<26	<26	105	306	202	54	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	197	822	292	54	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	77	317	18	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10	<10	<10	35	<10	134	29	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	0.011	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	0.026	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	0.012	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	9.7	7.3	9.7	9.4	15.6	13.6	12.2	14.1	9.6	12.9	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	8.8	6.8	8.8	8.6	13.5	12.0	10.9	12.3	8.7	11.4	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	66.1	58.5	47.1	37.0	-	39.2	64.0	37.9	49.8	69.4	<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	-	19.5	-	-	-	-	-	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.25	0.18	0.72	0.74	NDP	0.39	1.06	0.80	0.64	0.66	<0.02	%	TM21/PM24

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13184

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	31-33	LOD/LOR	Units	Method No.
Sample ID	WS11	WS11	WS11	WS11	WS27	WS27	WS26	WS26	WS26	WS25			
Depth	0.12-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-1.50	0.00-1.00	1.00-2.00	2.00-2.80	0.00-1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020			
Total Organic Carbon	-	-	-	-	2.50	-	-	-	-	-	<0.02	%	TM21/PM89
Sulphide	<10	<10	<10	<10	<10	12	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Acid Reserve	-	-	-	-	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	-	-	-	-	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	3	3	5	4	-	160	3	2	4	3	<1	mg/kg	TM108/PM114
Elemental Sulphur	-	-	-	-	22	-	-	-	-	-	<1	mg/kg	TM108/PM8
Loss on Ignition #	1.5	<1.0	1.3	1.7	NDP	1.7	3.1	2.3	1.7	2.8	<1.0	%	TM22/PM0
Loss on Ignition	-	-	-	-	3.8	-	-	-	-	-	<1.0	%	TM22/PM0
pH #	10.70	9.04	8.43	8.32	8.03	8.14	8.55	8.39	8.31	8.47	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1009	0.096	0.1013	0.1026	0.1062	0.1052	0.1026	0.1051	0.0999	0.1038		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13184

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	34-36	37-39	40-42								LOD/LOR	Units	Method No.
Sample ID	WS25	WS25	WS25										
Depth	1.00-2.00	2.00-3.00	3.00-3.20										
COC No / misc													
Containers	V J T	V J T	V J T										
Sample Date	23/09/2020	23/09/2020	23/09/2020										
Sample Type	Soil	Soil	Soil										
Batch Number	1	1	1										
Date of Receipt	25/09/2020	25/09/2020	25/09/2020										
Antimony	2	2	2								<1	mg/kg	TM30/PM15
Arsenic #	11.5	9.9	10.0								<0.5	mg/kg	TM30/PM15
Barium #	74	80	66								<1	mg/kg	TM30/PM15
Cadmium #	2.3	2.5	2.2								<0.1	mg/kg	TM30/PM15
Chromium #	43.0	40.6	41.1								<0.5	mg/kg	TM30/PM15
Copper #	35	38	33								<1	mg/kg	TM30/PM15
Lead #	16	19	17								<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1								<0.1	mg/kg	TM30/PM15
Molybdenum #	6.2	5.4	6.0								<0.1	mg/kg	TM30/PM15
Nickel #	42.6	43.7	42.3								<0.7	mg/kg	TM30/PM15
Selenium #	1	4	3								<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	222	1629	1189								<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.6	0.5	0.5								<0.1	mg/kg	TM74/PM32
Zinc #	102	95	85								<5	mg/kg	TM30/PM15
Antimony	-	-	-								<1	mg/kg	TM30/PM62
Arsenic	-	-	-								<0.5	mg/kg	TM30/PM62
Barium	-	-	-								<1	mg/kg	TM30/PM62
Cadmium	-	-	-								<0.1	mg/kg	TM30/PM62
Chromium	-	-	-								<0.5	mg/kg	TM30/PM62
Copper	-	-	-								<1	mg/kg	TM30/PM62
Lead	-	-	-								<5	mg/kg	TM30/PM62
Mercury	-	-	-								<0.1	mg/kg	TM30/PM62
Molybdenum	-	-	-								<0.1	mg/kg	TM30/PM62
Nickel	-	-	-								<0.7	mg/kg	TM30/PM62
Selenium	-	-	-								<1	mg/kg	TM30/PM62
Total Sulphate as SO4	-	-	-								<50	mg/kg	TM50/PM129
Water Soluble Boron	-	-	-								<0.1	mg/kg	TM74/PM61
Zinc	-	-	-								<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13184

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	34-36	37-39	40-42	LOD/LOR	Units	Method No.
Sample ID	WS25	WS25	WS25			
Depth	1.00-2.00	2.00-3.00	3.00-3.20			
COC No / misc						
Containers	V J T	V J T	V J T			
Sample Date	23/09/2020	23/09/2020	23/09/2020			
Sample Type	Soil	Soil	Soil			
Batch Number	1	1	1			
Date of Receipt	25/09/2020	25/09/2020	25/09/2020			
PAH MS						
Naphthalene #	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	0.04	0.06	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	0.03	0.03	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	99	92	91	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16
TPH CWG						
Aliphatics						
>C5-C6 #	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13184

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	34-36	37-39	40-42									
Sample ID	WS25	WS25	WS25									
Depth	1.00-2.00	2.00-3.00	3.00-3.20									
COC No / misc												
Containers	V J T	V J T	V J T									
Sample Date	23/09/2020	23/09/2020	23/09/2020									
Sample Type	Soil	Soil	Soil									
Batch Number	1	1	1									
Date of Receipt	25/09/2020	25/09/2020	25/09/2020									

Please see attached notes for all abbreviations and acronyms

				LOD/LOR	Units	Method No.
TPH CWG						
Aromatics						
>C5-EC7 #	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8
Phenol #	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	11.1	9.4	11.6	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	10.0	8.6	10.4	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	43.0	40.6	41.1	<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.40	0.85	0.75	<0.02	%	TM21/PM24

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13184

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	34-36	37-39	40-42									
Sample ID	WS25	WS25	WS25									
Depth	1.00-2.00	2.00-3.00	3.00-3.20									
COC No / misc												
Containers	V J T	V J T	V J T									
Sample Date	23/09/2020	23/09/2020	23/09/2020									
Sample Type	Soil	Soil	Soil									
Batch Number	1	1	1									
Date of Receipt	25/09/2020	25/09/2020	25/09/2020									

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Total Organic Carbon	-	-	-								<0.02	%	TM21/PM89
Sulphide	<10	<10	<10								<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	NDP								<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	NDP								<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	1	11	6								<1	mg/kg	TM108/PM114
Elemental Sulphur	-	-	-								<1	mg/kg	TM108/PM8
Loss on Ignition #	1.9	2.0	1.7								<1.0	%	TM22/PM0
Loss on Ignition	-	-	-								<1.0	%	TM22/PM0
pH #	8.52	8.45	8.43								<0.01	pH units	TM73/PM11
Mass of raw test portion	0.0979	0.1015	0.1033									kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09									kg	NONE/PM17

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13184

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	31-33	LOD/LOR	Units	Method No.
Sample ID	WS11	WS11	WS11	WS11	WS27	WS27	WS26	WS26	WS26	WS25			
Depth	0.12-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-1.50	0.00-1.00	1.00-2.00	2.00-2.80	0.00-1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020			
Dissolved Antimony #	<0.002	<0.002	<0.002	<0.002	<0.002	0.004	0.003	<0.002	0.005	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	0.03	<0.02	0.05	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	0.0044	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0097	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	0.044	<0.025	<0.025	<0.025	<0.025	<0.025	0.097	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.005	0.004	0.032	0.045	0.030	0.100	0.005	0.003	0.042	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.05	0.04	0.32	0.45	0.30	1.00	0.05	0.03	0.42	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	<0.012	<0.012	<0.012	0.016	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	<0.12	<0.12	<0.12	0.16	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	0.0059	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	0.059	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.008	0.006	0.015	0.022	0.015	0.055	0.004	0.021	0.020	0.008	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.08	0.06	0.15	0.22	0.15	0.55	0.04	0.21	0.20	0.08	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	0.025	0.037	<0.003	<0.003	<0.003	<0.003	0.040	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	0.25	0.37	<0.03	<0.03	<0.03	<0.03	0.40	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003	<0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	<0.03	<0.03	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	0.00001	<0.00001	0.00005	0.00009	<0.00001	<0.00001	<0.00001	<0.00001	0.00004	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	0.0001	<0.0001	0.0005	0.0009	<0.0001	<0.0001	<0.0001	<0.0001	0.0004	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	<0.3	<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	<3	<3	<3	<3	<3	3	<3	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	22.0	0.7	15.2	20.9	16.2	0.8	1.4	2.0	22.1	3.0	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	220	7	152	209	162	8	14	20	221	30	<5	mg/kg	TM38/PM0
Chloride #	<0.3	<0.3	7.5	7.8	7.1	1.1	<0.3	<0.3	9.8	<0.3	<0.3	mg/l	TM38/PM0
Chloride #	<3	<3	75	78	71	11	<3	<3	98	<3	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.05	<0.03	0.04	0.05	0.11	0.61	0.04	0.03	0.06	<0.03	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.5	<0.3	0.4	0.5	1.1	6.1	0.4	0.3	0.6	<0.3	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	3	<2	4	4	4	4	5	3	5	4	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	30	<20	40	40	40	40	50	30	50	40	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	96	<35	74	87	122	80	76	60	92	64	<35	mg/l	TM20/PM0
Total Dissolved Solids #	960	<350	740	870	1221	800	760	600	920	640	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13184

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	34-36	37-39	40-42								LOD/LOR	Units	Method No.
Sample ID	WS25	WS25	WS25										
Depth	1.00-2.00	2.00-3.00	3.00-3.20										
COC No / misc													
Containers	V J T	V J T	V J T										
Sample Date	23/09/2020	23/09/2020	23/09/2020										
Sample Type	Soil	Soil	Soil										
Batch Number	1	1	1										
Date of Receipt	25/09/2020	25/09/2020	25/09/2020										
Dissolved Antimony #	<0.002	<0.002	0.002								<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	0.02								<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025								<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025								<0.025	mg/kg	TM30/PM17
Dissolved Barium #	<0.003	0.008	0.015								<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	<0.03	0.08	0.15								<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	<0.012	0.013								<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	<0.12	0.13								<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005								<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005								<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015								<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015								<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007								<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07								<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005								<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05								<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.013	0.023	0.034								<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.13	0.23	0.34								<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002								<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02								<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	0.014	0.018								<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	0.14	0.18								<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003	<0.003								<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	<0.03								<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	0.00002								<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	0.0002								<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01								<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1								<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3	<0.3								<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	<3								<3	mg/kg	TM173/PM0
Sulphate as SO4 #	2.1	19.2	20.8								<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	21	192	208								<5	mg/kg	TM38/PM0
Chloride #	<0.3	5.2	7.9								<0.3	mg/l	TM38/PM0
Chloride #	<3	52	79								<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	<0.03	<0.03	<0.03								<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	<0.3	<0.3	<0.3								<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	3	2	2								<2	mg/l	TM60/PM0
Dissolved Organic Carbon	30	20	20								<20	mg/kg	TM60/PM0
Total Dissolved Solids #	58	81	91								<35	mg/l	TM20/PM0
Total Dissolved Solids #	580	810	910								<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13184**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**3**			
Client Sample No	**WS11**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.12-1.00**			
Sample Date	**23/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.25	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.044	0.5	2	25
Barium	0.05	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	0.059	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0001	0.01	0.2	2
Molybdenum	0.08	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	220	1000	20000	50000
Total Dissolved Solids	960	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	93.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13184**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**6**			
Client Sample No	**WS11**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**23/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.18	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.06	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	7	1000	20000	50000
Total Dissolved Solids	<350	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13184**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**9**			
Client Sample No	**WS11**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**23/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.72	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.32	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0005	0.01	0.2	2
Molybdenum	0.15	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.25	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	75	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	152	1000	20000	50000
Total Dissolved Solids	740	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13184**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**12**			
Client Sample No	**WS11**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.40**			
Sample Date	**23/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.74	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.45	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0009	0.01	0.2	2
Molybdenum	0.22	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.37	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	78	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	209	1000	20000	50000
Total Dissolved Solids	870	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	84.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13184**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**15**			
Client Sample No	**WS27**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**23/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	2.50	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	92	500	-	-
PAH Sum of 6 (mg/kg)	5.52	-	-	-
PAH Sum of 17 (mg/kg)	11.07	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.30	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.15	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	71	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	162	1000	20000	50000
Total Dissolved Solids	1221	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13184**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**18**			
Client Sample No	**WS27**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-1.50**			
Sample Date	**23/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.39	3	5	6
Sum of BTEX (mg/kg)	0.049	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	514	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	1.00	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.55	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.04	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	11	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	8	1000	20000	50000
Total Dissolved Solids	800	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13184**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**21**			
Client Sample No	**WS26**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**23/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.06	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	90	500	-	-
PAH Sum of 6 (mg/kg)	5.40	-	-	-
PAH Sum of 17 (mg/kg)	9.98	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.097	0.5	2	25
Barium	0.05	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.04	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	14	1000	20000	50000
Total Dissolved Solids	760	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13184**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**24**			
Client Sample No	**WS26**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**23/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.80	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.61	-	-	-
PAH Sum of 17 (mg/kg)	1.10	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.21	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	20	1000	20000	50000
Total Dissolved Solids	600	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13184**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**27**			
Client Sample No	**WS26**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-2.80**			
Sample Date	**23/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.64	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.42	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0004	0.01	0.2	2
Molybdenum	0.20	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.05	0.06	0.7	5
Selenium	0.40	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	98	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	221	1000	20000	50000
Total Dissolved Solids	920	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13184**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**33**			
Client Sample No	**WS25**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**23/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.66	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.29	-	-	-
PAH Sum of 17 (mg/kg)	0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.08	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	30	1000	20000	50000
Total Dissolved Solids	640	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	92.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13184**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**36**			
Client Sample No	**WS25**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**23/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.40	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.13	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	21	1000	20000	50000
Total Dissolved Solids	580	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

		Landfill Waste Acceptance Criteria Limits		
EMT Job No	**20/13184**			
Sample No	**39**			
Client Sample No	**WS25**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**23/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.85	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.08	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.23	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.14	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	52	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	192	1000	20000	50000
Total Dissolved Solids	810	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13184**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**42**			
Client Sample No	**WS25**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.20**			
Sample Date	**23/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.75	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.15	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0002	0.01	0.2	2
Molybdenum	0.34	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.02	0.06	0.7	5
Selenium	0.18	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	79	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	208	1000	20000	50000
Total Dissolved Solids	910	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Please include all sections of this report if it is reproduced

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/13184	1	WS11	0.12-1.00	1-3	No interpretation possible
20/13184	1	WS11	1.00-2.00	4-6	No interpretation possible
20/13184	1	WS11	2.00-3.00	7-9	No interpretation possible
20/13184	1	WS11	3.00-3.40	10-12	No interpretation possible
20/13184	1	WS27	0.00-1.00	13-15	Degraded diesel & PAH's
20/13184	1	WS27	1.00-1.50	16-18	Degraded diesel
20/13184	1	WS26	0.00-1.00	19-21	Lubricating oil, Possible tarmac/bitumen & PAH's
20/13184	1	WS26	1.00-2.00	22-24	Possible PAH's & Lubricating oil
20/13184	1	WS26	2.00-2.80	25-27	No interpretation possible
20/13184	1	WS25	0.00-1.00	31-33	No interpretation possible
20/13184	1	WS25	1.00-2.00	34-36	No interpretation possible
20/13184	1	WS25	2.00-3.00	37-39	No interpretation possible
20/13184	1	WS25	3.00-3.20	40-42	No interpretation possible

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
20/13184	1	WS27	0.00-1.00	13-15	TM21/PM24	Asbestos detected in sample
20/13184	1	WS27	0.00-1.00	13-15	TM160/PM110	pH > 4.00
20/13184	1	WS27	0.00-1.00	13-15	TM160/PM110	pH < 10.00
20/13184	1	WS27	0.00-1.00	13-15	TM22/PM0	Asbestos detected in sample
20/13184	1	WS27	1.00-1.50	16-18	TM160/PM110	pH > 4.00
20/13184	1	WS27	1.00-1.50	16-18	TM160/PM110	pH < 10.00
20/13184	1	WS26	0.00-1.00	19-21	TM160/PM110	pH > 4.00
20/13184	1	WS26	0.00-1.00	19-21	TM160/PM110	pH < 10.00
20/13184	1	WS26	1.00-2.00	22-24	TM160/PM110	pH > 4.00
20/13184	1	WS26	1.00-2.00	22-24	TM160/PM110	pH < 10.00
20/13184	1	WS26	2.00-2.80	25-27	TM160/PM110	pH > 4.00
20/13184	1	WS26	2.00-2.80	25-27	TM160/PM110	pH < 10.00
20/13184	1	WS25	0.00-1.00	31-33	TM160/PM110	pH > 4.00
20/13184	1	WS25	0.00-1.00	31-33	TM160/PM110	pH < 10.00
20/13184	1	WS25	1.00-2.00	34-36	TM160/PM110	Sample received is below pH4
20/13184	1	WS25	1.00-2.00	34-36	TM160/PM110	pH < 10.00
20/13184	1	WS25	2.00-3.00	37-39	TM160/PM110	Sample received is below pH4
20/13184	1	WS25	2.00-3.00	37-39	TM160/PM110	pH < 10.00
20/13184	1	WS25	3.00-3.20	40-42	TM160/PM110	pH > 4.00
20/13184	1	WS25	3.00-3.20	40-42	TM160/PM110	pH < 10.00

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 20/13184						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/13184

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/13184

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/13184

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM89	Preparation of positive asbestos samples for Eltra analysis			AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.			AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21	As received solid samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

EMT Job No: 20/13184

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM129	A hot hydrochloric acid digest is performed on an as received sample, and the resulting liquor is analysed.			AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM61	As received solid samples are extracted with hot water in a 20:1 ratio of water to soil ready for analysis by ICP.			AR	Yes

EMT Job No: 20/13184

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM160	Titrimetric determination of acid reserve to pH 4.0 or alkali reserve to pH 10.0 based on method C14.2 Canadian Government (2013).	PM110	Preparation of a 10% (w/w) aqueous solution of soil in distilled water			AR	No
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

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O'Connor Sutton Cronin & Assoc. Ltd
9 Prussia Street
Dublin 7
Ireland

Attention :	Richard Thompson
Date :	13th October, 2020
Your reference :	B967/1
Our reference :	Test Report 20/13299 Batch 1
Location :	Emmet Road
Date samples received :	29th September, 2020
Status :	Final report
Issue :	1

Thirty three samples were received for analysis on 29th September, 2020 of which thirty two were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Bruce Leslie
Project Manager

Please include all sections of this report if it is reproduced

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS24	WS24	WS24	WS24	WS24	WS28	WS28	WS29	WS29	WS29			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	0.80-1.00	0.00-1.00	1.00-2.00	3.00-3.40			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Antimony	1	<1	2	1	2	3	2	2	1	2	<1	mg/kg	TM30/PM15
Arsenic #	10.1	9.1	10.2	7.0	11.8	14.0	11.6	15.2	6.0	8.9	<0.5	mg/kg	TM30/PM15
Barium #	68	102	91	47	63	138	114	116	93	259	<1	mg/kg	TM30/PM15
Cadmium #	1.3	2.5	2.4	1.5	2.6	2.2	1.5	1.7	1.8	1.8	<0.1	mg/kg	TM30/PM15
Chromium #	55.5	49.3	44.4	72.8	41.7	56.1	51.3	66.7	42.1	49.9	<0.5	mg/kg	TM30/PM15
Copper #	28	18	32	23	35	51	33	34	21	27	<1	mg/kg	TM30/PM15
Lead #	32	13	15	10	18	82	110	54	11	14	<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.9	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	3.7	4.6	5.1	6.7	6.0	5.4	5.0	5.1	4.1	5.5	<0.1	mg/kg	TM30/PM15
Nickel #	27.1	35.2	38.3	27.2	48.0	41.4	30.1	36.1	29.0	31.7	<0.7	mg/kg	TM30/PM15
Selenium #	1	<1	1	2	4	2	1	2	<1	2	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	402	409	533	1230	4268	1034	1565	662	365	2779	<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.9	0.9	0.6	0.5	0.5	1.5	2.1	1.8	0.5	0.7	<0.1	mg/kg	TM74/PM32
Zinc #	78	53	82	51	89	118	110	108	58	68	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	0.08	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	0.06	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	0.23	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	<0.04	0.18	0.05	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.13	<0.03	<0.03	<0.03	0.08	1.81	0.60	0.08	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	0.34	0.16	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.20	<0.03	<0.03	<0.03	<0.03	2.14	1.10	0.14	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	0.18	<0.03	<0.03	<0.03	<0.03	1.86	0.98	0.11	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.15	<0.06	<0.06	<0.06	<0.06	1.06	0.64	0.11	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	0.12	<0.02	<0.02	<0.02	0.05	0.93	0.57	0.09	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	0.22	<0.07	<0.07	<0.07	<0.07	1.67	1.06	0.14	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.12	<0.04	<0.04	<0.04	<0.04	0.88	0.55	0.07	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	0.08	<0.04	<0.04	<0.04	<0.04	0.51	0.31	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	0.13	0.07	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.09	<0.04	<0.04	<0.04	<0.04	0.51	0.30	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	0.08	0.05	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	0.71	<0.22	<0.22	<0.22	<0.22	5.71	3.32	0.35	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	1.29	<0.64	<0.64	<0.64	<0.64	12.44	6.58	0.74	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.16	<0.05	<0.05	<0.05	<0.05	1.20	0.76	0.10	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.06	<0.02	<0.02	<0.02	<0.02	0.47	0.30	0.04	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	95	95	97	98	96	99	98	93	95	96	<0	%	TM4/PM8
Mineral Oil (C10-C40)	63	<30	<30	<30	40	71	<30	65	<30	<30	<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS24	WS24	WS24	WS24	WS24	WS28	WS28	WS29	WS29	WS29			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	0.80-1.00	0.00-1.00	1.00-2.00	3.00-3.40			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	0.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	8	<4	<4	<4	8	6	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	18	<7	<7	<7	14	16	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	37	<7	<7	<7	17	49	<7	44	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	21	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	63	<26	<26	<26	40	71	<26	65	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C25	45	<10	<10	<10	30	26	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	13	<10	<10	<10	<10	16	<10	59	<10	<10	<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7	13	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	37	<7	<7	<7	<7	62	45	118	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	16	<7	<7	<7	<7	15	9	90	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	53	<26	<26	<26	<26	90	54	208	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	116	<52	<52	<52	<52	161	54	273	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	<10	17	17	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	26	<10	<10	<10	<10	38	38	110	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.015	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	0.048	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS24	WS24	WS24	WS24	WS24	WS28	WS28	WS29	WS29	WS29			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	0.80-1.00	0.00-1.00	1.00-2.00	3.00-3.40			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	11.6	9.6	13.6	11.3	8.5	13.9	14.8	14.9	11.6	10.6	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	10.4	8.7	12.0	10.2	7.8	12.2	12.9	12.9	10.4	9.6	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	55.5	49.3	44.4	72.8	41.7	56.1	51.3	66.7	42.1	49.9	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.57	0.31	0.33	0.50	0.84	1.51	1.24	1.84	0.30	0.53	<0.02	%	TM21/PM24
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	3.564	<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	14	3	4	5	5	21	39	3	3	<1	<1	mg/kg	TM108/PM114
Loss on Ignition #	2.1	1.7	1.7	1.2	1.9	3.6	2.7	4.8	1.3	1.9	<1.0	%	TM22/PM0
pH #	8.44	8.63	8.49	8.31	8.29	8.09	8.27	9.20	9.45	9.50	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.0987	0.0974	0.0977	0.0992	0.0983	0.111	0.1062	0.0997	0.1023	0.0987		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	LOD/LOR	Units	Method No.
Sample ID	WS30	WS30	WS30	WS30	WS03	WS03	WS03	WS03	WS03	WS31			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	3.00-3.40	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	25/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Antimony	2	1	1	1	2	<1	2	2	2	7	<1	mg/kg	TM30/PM15
Arsenic #	12.1	7.7	5.5	6.5	10.9	3.4	13.1	10.5	10.6	7.5	<0.5	mg/kg	TM30/PM15
Barium #	122	102	69	29	166	23	68	68	52	62	<1	mg/kg	TM30/PM15
Cadmium #	1.7	1.5	1.6	1.9	2.5	0.9	2.5	2.2	2.4	1.1	<0.1	mg/kg	TM30/PM15
Chromium #	56.6	44.6	45.9	46.9	65.8	21.1	45.8	35.0	35.2	65.2	<0.5	mg/kg	TM30/PM15
Copper #	31	16	17	25	31	11	45	34	41	35	<1	mg/kg	TM30/PM15
Lead #	51	11	7	12	193	6	18	16	18	39	<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	4.4	4.5	4.2	5.4	5.5	1.9	5.6	5.1	5.2	5.3	<0.1	mg/kg	TM30/PM15
Nickel #	32.5	23.4	21.5	29.7	37.5	17.6	52.3	39.7	44.0	27.9	<0.7	mg/kg	TM30/PM15
Selenium #	1	1	<1	3	2	<1	1	3	4	<1	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	549	295	286	2253	709	334	192	310	4097	447	<50	mg/kg	TM50/PM29
Water Soluble Boron #	1.5	0.6	0.4	0.5	1.5	0.6	0.4	0.5	0.3	0.6	<0.1	mg/kg	TM74/PM32
Zinc #	94	53	50	59	118	29	95	75	80	74	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	0.20	<0.03	0.10	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	0.06	<0.05	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	0.31	<0.04	0.13	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.14	<0.03	0.45	<0.03	1.90	<0.03	<0.03	<0.03	0.09	0.15	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	0.49	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.21	<0.03	<0.03	<0.03	3.22	<0.03	<0.03	<0.03	<0.03	0.19	<0.03	mg/kg	TM4/PM8
Pyrene #	0.19	<0.03	<0.03	<0.03	2.63	<0.03	<0.03	<0.03	<0.03	0.21	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.16	<0.06	<0.06	<0.06	1.65	<0.06	<0.06	<0.06	<0.06	0.13	<0.06	mg/kg	TM4/PM8
Chrysene #	0.13	<0.02	<0.02	<0.02	1.54	<0.02	<0.02	<0.02	0.07	0.11	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	0.21	<0.07	<0.07	<0.07	2.87	<0.07	<0.07	<0.07	<0.07	0.15	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.10	<0.04	<0.04	<0.04	1.48	<0.04	<0.04	<0.04	<0.04	0.08	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	0.06	<0.04	<0.04	<0.04	0.91	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	0.17	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.07	<0.04	<0.04	<0.04	0.83	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	0.10	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	0.65	<0.22	<0.22	<0.22	9.31	<0.22	<0.22	<0.22	<0.22	0.48	<0.22	mg/kg	TM4/PM8
PAH 17 Total	1.27	<0.64	1.02	<0.64	18.22	<0.64	<0.64	<0.64	<0.64	1.08	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.15	<0.05	<0.05	<0.05	2.07	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.06	<0.02	<0.02	<0.02	0.80	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	97	96	93	95	96	95	88	78	96	93	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	1289	<30	<30	<30	<30	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	LOD/LOR	Units	Method No.
Sample ID	WS30	WS30	WS30	WS30	WS03	WS03	WS03	WS03	WS03	WS31			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	3.00-3.40	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	25/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	6.0	<0.1 SV	<0.1	0.1	<0.1	0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	153.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	485	<4	<4	<4	<4	<4	<4	4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	484	<7	<7	<7	<7	<7	<7	17	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	166	<7	<7	<7	<7	<7	<7	8	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	1295	<26	<26	<26	<26	<26	<26	29	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	<0.1	6.0	<0.1 SV	<0.1	0.1	<0.1	0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	1266	<10	<10	<10	<10	<10	<10	31	<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	22	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	0.2	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	52.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	294	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	409	<7	13	<7	<7	<7	<7	10	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	194	<7	96	<7	<7	<7	<7	8	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	19	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26	950	<26	128	<26	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52	2245	<52	128	<52	<52	<52	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1	0.2	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	905	<10	40	<10	<10	<10	<10	18	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10	43	<10	75	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	<0.005	0.025	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	<0.005	0.120	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	<0.005	0.090	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	LOD/LOR	Units	Method No.
Sample ID	WS30	WS30	WS30	WS30	WS03	WS03	WS03	WS03	WS03	WS31			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	3.00-3.40	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	25/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	16.6	12.2	10.5	8.7	21.6	18.5	14.9	13.5	9.8	12.3	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	14.2	10.9	9.5	8.0	17.7	15.6	12.9	11.9	8.9	10.9	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	56.6	44.6	45.9	46.9	65.8	21.1	45.8	35.0	35.2	65.2	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	1.12	0.38	0.34	0.63	1.16	0.36	0.44	0.57	0.74	0.82	<0.02	%	TM21/PM24
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	NDP	NDP	-	-	-	-	-	NDP	<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	NDP	NDP	-	-	-	-	-	NDP	<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	4	4	12	6	<1	2	<1	<1	7	16	<1	mg/kg	TM108/PM114
Loss on Ignition #	4.2	1.5	1.2	1.3	3.8	1.1	2.2	2.1	2.1	2.2	<1.0	%	TM22/PM0
pH #	8.50	8.39	7.94	8.42	9.00	8.59	8.50	8.54	8.30	8.33	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1047	0.1	0.0998	0.0987	0.1111	0.1017	0.1019	0.1023	0.0996	0.1009		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	61-63	64-66	67-69	70-72	73-75	76-78	79-81	82-84	85-87	88-90	LOD/LOR	Units	Method No.
Sample ID	WS31	WS34	WS34	WS34	WS34	WS34	WS34	WS32	WS32	WS32			
Depth	1.00-1.60	0.00-1.00	0.80-1.00	1.30-1.50	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	0.80-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Antimony	1	2	2	2	1	2	2	2	2	2	<1	mg/kg	TM30/PM15
Arsenic #	4.5	13.0	10.5	8.6	8.9	12.9	7.6	13.6	12.5	10.6	<0.5	mg/kg	TM30/PM15
Barium #	31	86	103	121	121	68	49	178	75	78	<1	mg/kg	TM30/PM15
Cadmium #	1.5	1.6	1.9	0.5	1.3	2.0	2.7	3.1	2.6	2.5	<0.1	mg/kg	TM30/PM15
Chromium #	56.0	59.9	57.6	74.3	46.9	40.8	36.0	48.8	43.4	42.5	<0.5	mg/kg	TM30/PM15
Copper #	20	43	33	24	19	30	33	34	37	36	<1	mg/kg	TM30/PM15
Lead #	13	73	35	16	17	14	18	34	15	16	<5	mg/kg	TM30/PM15
Mercury #	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	3.8	4.6	5.0	6.4	3.7	5.5	2.2	5.8	6.1	5.1	<0.1	mg/kg	TM30/PM15
Nickel #	20.7	30.1	35.5	39.2	29.9	39.3	39.6	47.6	40.3	40.5	<0.7	mg/kg	TM30/PM15
Selenium #	1	1	2	1	1	4	5	2	2	<1	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	361	451	780	267	423	182	535	489	390	332	<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.6	1.5	2.3	0.8	0.9	0.6	0.5	1.2	0.8	0.6	<0.1	mg/kg	TM74/PM32
Zinc #	57	99	99	49	65	82	112	87	86	81	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	0.49$_{AA}$	1.67$_{AA}$	<0.40$_{AA}$	<0.40$_{AA}$	0.14	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.13	0.50$_{AA}$	1.45$_{AA}$	0.51$_{AA}$	0.52$_{AA}$	0.07	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	0.10	<0.50$_{AA}$	0.94$_{AA}$	<0.50$_{AA}$	<0.50$_{AA}$	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	0.45	1.57$_{AA}$	3.73$_{AA}$	1.66$_{AA}$	1.24$_{AA}$	0.21	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.84	3.09$_{AA}$	7.62$_{AA}$	3.28$_{AA}$	2.46$_{AA}$	0.39	<0.03	0.07	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Anthracene #	0.07	<0.40$_{AA}$	<0.40$_{AA}$	<0.40$_{AA}$	<0.40$_{AA}$	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.06	<0.30$_{AA}$	<0.30$_{AA}$	<0.30$_{AA}$	<0.30$_{AA}$	<0.03	<0.03	0.09	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	0.08	0.36$_{AA}$	<0.30$_{AA}$	<0.30$_{AA}$	<0.30$_{AA}$	<0.03	<0.03	0.08	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.60$_{AA}$	<0.60$_{AA}$	<0.60$_{AA}$	<0.60$_{AA}$	<0.06	<0.06	0.08	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	0.03	<0.20$_{AA}$	<0.20$_{AA}$	<0.20$_{AA}$	<0.20$_{AA}$	<0.02	<0.02	0.06	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.70$_{AA}$	<0.70$_{AA}$	<0.70$_{AA}$	<0.70$_{AA}$	<0.07	<0.07	0.08	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.40$_{AA}$	<0.40$_{AA}$	<0.40$_{AA}$	<0.40$_{AA}$	<0.04	<0.04	0.05	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.40$_{AA}$	<0.40$_{AA}$	<0.40$_{AA}$	<0.40$_{AA}$	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.40$_{AA}$	<0.40$_{AA}$	<0.40$_{AA}$	<0.40$_{AA}$	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.40$_{AA}$	<0.40$_{AA}$	<0.40$_{AA}$	<0.40$_{AA}$	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.40$_{AA}$	<0.40$_{AA}$	<0.40$_{AA}$	<0.40$_{AA}$	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	<2.20$_{AA}$	<2.20$_{AA}$	<2.20$_{AA}$	<2.20$_{AA}$	<0.22	<0.22	0.22	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	1.76	<6.40$_{AA}$	15.41$_{AA}$	<6.40$_{AA}$	<6.40$_{AA}$	0.81	<0.64	<0.64	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.50$_{AA}$	<0.50$_{AA}$	<0.50$_{AA}$	<0.50$_{AA}$	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.20$_{AA}$	<0.20$_{AA}$	<0.20$_{AA}$	<0.20$_{AA}$	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<10$_{AA}$	<10$_{AA}$	<10$_{AA}$	<10$_{AA}$	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	94	96$_{AA}$	100$_{AA}$	95$_{AA}$	89$_{AA}$	94	93	96	96	99	<0	%	TM4/PM8
Mineral Oil (C10-C40)	819	1583	4454	3091	2974	606	<30	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	61-63	64-66	67-69	70-72	73-75	76-78	79-81	82-84	85-87	88-90	LOD/LOR	Units	Method No.
Sample ID	WS31	WS34	WS34	WS34	WS34	WS34	WS34	WS32	WS32	WS32			
Depth	1.00-1.60	0.00-1.00	0.80-1.00	1.30-1.50	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	0.80-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #	0.1	0.2 SV	2.7	3.5	0.5	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	1.4	4.6 SV	24.9	25.5	7.4	0.8	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #	91.7	196.7	588.7	400.2	402.1	67.7	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	292	583	1602	1120	1080	225	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	323	593	1660	1157	1106	233	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	112	210	603	414	386	80	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	820	1588	4481	3120	2982	607	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	1.5	4.8 SV	27.6	29.0	7.9	0.8	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25	804	1569	4389	3021	2935	605	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	14	31	77	65	54	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	0.2 SV	1.0	1.1	0.4	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	30.7	110.5	300.8	186.7	202.2	32.7	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	181	520	1237	879	888	153	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	248	600	1420	1028	1017	175	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	84	247	572	402	392	53	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	544	1478	3531	2497	2500	414	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	1364	3066	8012	5617	5482	1021	<52	<52	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	0.2 SV	1.0	1.1	0.4	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25	538	1425	3416	2427	2432	410	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	52	111	68	66	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005 SV	0.025	0.101	0.018	0.008	<0.005 SV	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	0.009	0.026 SV	0.161	0.149	0.041	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	0.032	0.107 SV	0.598	0.678	0.180	0.023	<0.005 SV	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
o-Xylene #	0.013	0.051 SV	0.297	0.339	0.098	0.008	<0.005 SV	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	61-63	64-66	67-69	70-72	73-75	76-78	79-81	82-84	85-87	88-90	LOD/LOR	Units	Method No.
Sample ID	WS31	WS34	WS34	WS34	WS34	WS34	WS34	WS32	WS32	WS32			
Depth	1.00-1.60	0.00-1.00	0.80-1.00	1.30-1.50	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	0.80-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	15.3	16.1	29.1	23.3	20.5	15.3	15.8	14.4	11.4	12.3	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	13.3	13.9	22.6	18.9	17.0	13.3	13.7	12.6	10.2	10.9	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	56.0	59.9	57.6	74.3	46.9	40.8	36.0	48.8	43.4	42.5	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.45	2.24	1.23	0.53	0.50	0.51	0.68	0.53	0.38	0.39	<0.02	%	TM21/PM24
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	41	9	24	6	24	12	7	4	1	<1	<1	mg/kg	TM108/PM114
Loss on Ignition #	1.3	4.7	4.4	3.2	2.6	1.9	1.8	2.8	2.1	1.9	<1.0	%	TM22/PM0
pH #	7.98	8.05	7.65	7.72	7.86	8.00	8.09	8.50	8.51	8.44	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1088	0.1065	0.1124	0.1092	0.1089	0.1026	0.1031	0.0994	0.0978	0.1021		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	91-93	94-96									LOD/LOR	Units	Method No.
Sample ID	WS32	WS30											
Depth	2.00-3.00	2.00-3.00											
COC No / misc													
Containers	V J T	V J T											
Sample Date	25/09/2020	25/09/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	29/09/2020	29/09/2020											
Antimony	1	2									<1	mg/kg	TM30/PM15
Arsenic #	5.6	7.8									<0.5	mg/kg	TM30/PM15
Barium #	26	34									<1	mg/kg	TM30/PM15
Cadmium #	1.4	2.1									<0.1	mg/kg	TM30/PM15
Chromium #	52.9	45.2									<0.5	mg/kg	TM30/PM15
Copper #	17	25									<1	mg/kg	TM30/PM15
Lead #	10	11									<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1									<0.1	mg/kg	TM30/PM15
Molybdenum #	4.3	4.4									<0.1	mg/kg	TM30/PM15
Nickel #	21.4	29.2									<0.7	mg/kg	TM30/PM15
Selenium #	2	8									<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	984	630									<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.4	0.7									<0.1	mg/kg	TM74/PM32
Zinc #	47	75									<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03									<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05									<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	0.07									<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	<0.03									<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03									<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06									<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	<0.02									<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07									<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	<0.22									<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64									<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05									<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02									<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1									<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	97	98									<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	126									<30	mg/kg	TM5/PM8/PM16

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	91-93	94-96									LOD/LOR	Units	Method No.
Sample ID	WS32	WS30											
Depth	2.00-3.00	2.00-3.00											
COC No / misc													
Containers	V J T	V J T											
Sample Date	25/09/2020	25/09/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	29/09/2020	29/09/2020											
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1 SV	<0.1									<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1 SV	<0.1									<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1 SV	1.5									<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	19.2									<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	47									<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	47									<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	13									<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7									<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	128									<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1 SV	1.5									<0.1	mg/kg	TM36/PM12
>C10-C25	<10	126									<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10									<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1 SV	<0.1									<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1 SV	<0.1									<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1 SV	<0.1									<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	8.0									<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	27									<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	32									<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	15									<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7									<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	82									<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	210									<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1 SV	<0.1									<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	82									<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10									<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005 SV	<0.005									<0.005	mg/kg	TM36/PM12
Benzene #	<0.005 SV	<0.005									<0.005	mg/kg	TM36/PM12
Toluene #	<0.005 SV	<0.005									<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005 SV	0.008									<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005 SV	0.035									<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005 SV	0.016									<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035									<0.035	mg/kg	TM17/PM8

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	91-93	94-96											
Sample ID	WS32	WS30											
Depth	2.00-3.00	2.00-3.00											
COC No / misc													
Containers	V J T	V J T											
Sample Date	25/09/2020	25/09/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	29/09/2020	29/09/2020											

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Phenol #	<0.01	<0.01									<0.01	mg/kg	TM26/PM21
Natural Moisture Content	11.3	14.2									<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	10.1	12.4									<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3									<0.3	mg/kg	TM38/PM20
Chromium III	52.9	45.2									<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5									<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.40	0.53									<0.02	%	TM21/PM24
Sulphide	<10	<10									<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP									<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP									<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	10	3									<1	mg/kg	TM108/PM114
Loss on Ignition #	<1.0	1.3									<1.0	%	TM22/PM0
pH #	8.39	8.29									<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1006	0.1008										kg	NONE/PM17
Mass of dried test portion	0.09	0.09										kg	NONE/PM17

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Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS24	WS24	WS24	WS24	WS24	WS28	WS28	WS29	WS29	WS29			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	0.80-1.00	0.00-1.00	1.00-2.00	3.00-3.40			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Dissolved Antimony #	<0.002	<0.002	<0.002	0.002	<0.002	0.003	0.006	<0.002	<0.002	0.003	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	<0.02	0.02	<0.02	0.03	0.06	<0.02	<0.02	0.03	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0033	0.0029	<0.0025	<0.0025	0.0037	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	0.033	0.029	<0.025	<0.025	0.037	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.007	<0.003	0.005	0.029	0.063	0.029	0.063	0.004	<0.003	0.011	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.07	<0.03	0.05	0.29	0.63	0.29	0.63	0.04	<0.03	0.11	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	0.020	0.013	0.015	<0.012	<0.012	0.032	0.061	0.013	<0.012	0.015	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	0.20	0.13	0.15	<0.12	<0.12	0.32	0.61	0.13	<0.12	0.15	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	0.0017	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.017	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.012	0.019	0.015	0.021	0.012	0.014	0.017	0.007	0.013	0.021	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.12	0.19	0.15	0.21	0.12	0.14	0.17	0.07	0.13	0.21	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	0.022	<0.003	<0.003	<0.003	<0.003	<0.003	0.032	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	0.22	<0.03	<0.03	<0.03	<0.03	<0.03	0.32	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.009	0.005	0.004	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.09	0.05	0.04	<0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	0.00002	0.00005	<0.00001	0.00003	0.00001	<0.00001	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	0.0002	0.0005	<0.0001	0.0003	0.0001	<0.0001	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	0.3	0.4	<0.3	0.3	<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	<3	<3	<3	<3	<3	4	<3	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	5.0	3.8	8.9	19.0	18.4	93.7	51.4	4.8	2.4	25.5	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	50	38	89	190	184	937	514	48	24	255	<5	mg/kg	TM38/PM0
Chloride #	1.3	<0.3	<0.3	6.8	8.3	0.7	1.3	<0.3	<0.3	16.2	<0.3	mg/l	TM38/PM0
Chloride #	13	<3	<3	68	83	7	13	<3	<3	162	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.05	0.06	<0.03	0.04	0.05	<0.03	<0.03	0.04	<0.03	0.12	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.5	0.6	<0.3	0.4	0.5	<0.3	<0.3	0.4	<0.3	1.2	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	5	5	3	4	4	5	3	6	4	4	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	50	50	30	40	40	50	30	60	40	40	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	74	50	51	87	92	212	162	64	44	141	<35	mg/l	TM20/PM0
Total Dissolved Solids #	740	500	510	870	920	2120	1620	640	440	1410	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	LOD/LOR	Units	Method No.
Sample ID	WS30	WS30	WS30	WS30	WS03	WS03	WS03	WS03	WS03	WS31			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	3.00-3.40	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	25/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Dissolved Antimony #	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.005	0.013	0.181	0.025	0.007	<0.003	<0.003	0.007	0.020	0.009	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.05	0.13	1.81	0.25	0.07	<0.03	<0.03	0.07	0.20	0.09	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	0.012	0.012	<0.012	<0.012	0.015	0.015	<0.012	<0.012	<0.012	<0.012	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	0.12	0.12	<0.12	<0.12	0.15	0.15	<0.12	<0.12	<0.12	<0.12	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.005	0.006	0.022	0.010	0.014	0.004	0.010	0.026	0.021	0.010	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.05	0.06	0.22	0.10	0.14	0.04	0.10	0.26	0.21	0.10	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	0.017	<0.003	<0.003	<0.003	<0.003	0.041	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	0.17	<0.03	<0.03	<0.03	<0.03	0.41	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	0.003	<0.003	<0.003	<0.003	0.005	0.004	0.003	0.003	<0.003	0.004	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	0.03	<0.03	<0.03	<0.03	0.05	0.04	<0.03	0.03	<0.03	0.04	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	0.00002	0.00001	<0.00001	<0.00001	<0.00001	0.00005	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	0.0002	0.0001	<0.0001	<0.0001	<0.0001	0.0005	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	0.4	<0.3	<0.3	<0.3	0.5	0.4	0.4	<0.3	<0.3	<0.3	<0.3	mg/l	TM173/PM0
Fluoride	4	<3	<3	<3	5	4	4	<3	<3	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	1.2	2.1	6.9	16.6	5.2	2.2	0.9	1.6	22.4	1.8	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	12	21	69	166	52	22	9	16	224	18	<5	mg/kg	TM38/PM0
Chloride #	<0.3	<0.3	0.4	7.7	0.4	<0.3	<0.3	0.5	8.9	0.3	<0.3	mg/l	TM38/PM0
Chloride #	<3	<3	4	77	4	<3	<3	5	89	3	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	<0.03	<0.03	<0.03	0.05	<0.03	<0.03	<0.03	<0.03	0.03	0.03	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	<0.3	<0.3	<0.3	0.5	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	4	2	3	<2	5	4	3	3	3	4	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	40	20	30	<20	50	40	30	30	30	40	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	71	46	88	83	64	50	44	38	91	48	<35	mg/l	TM20/PM0
Total Dissolved Solids #	710	460	880	830	640	500	440	380	910	480	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	61-63	64-66	67-69	70-72	73-75	76-78	79-81	82-84	85-87	88-90	LOD/LOR	Units	Method No.
Sample ID	WS31	WS34	WS34	WS34	WS34	WS34	WS34	WS32	WS32	WS32			
Depth	1.00-1.60	0.00-1.00	0.80-1.00	1.30-1.50	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	0.80-1.00	1.00-2.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Dissolved Antimony #	0.005	<0.002	0.002	<0.002	0.002	<0.002	0.022	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.05	<0.02	<0.02	<0.02	<0.02	<0.02	0.22	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	0.0039	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	0.039	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.024	0.017	0.028	0.009	0.022	0.061	0.064	0.008	0.007	0.005	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.24	0.17	0.28	0.09	0.22	0.61	0.64	0.08	0.07	0.05	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	0.014	0.028	0.085	0.013	0.014	0.018	<0.012	0.019	<0.012	0.012	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	0.14	0.28	0.85	0.13	0.14	0.18	<0.12	0.19	<0.12	<0.12	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.016	0.011	0.016	0.016	0.013	0.028	0.007	0.011	0.009	0.010	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.16	0.11	0.16	0.16	0.13	0.28	0.07	0.11	0.09	0.10	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.013	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.13	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.050	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.50	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	0.003	0.004	<0.003	<0.003	0.003	0.005	0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	0.03	0.04	<0.03	<0.03	0.03	0.05	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	0.3	<0.3	0.5	0.5	0.6	<0.3	0.4	0.3	0.4	<0.3	mg/l	TM173/PM0
Fluoride	<3	3	<3	5	5	6	<3	4	<3	4	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	1.3	2.5	<0.5	0.5	<0.5	<0.5	4.1	11.1	9.9	15.9	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	13	25	<5	<5	<5	<5	41	111	99	159	<5	mg/kg	TM38/PM0
Chloride #	0.6	1.3	4.9	2.8	3.0	1.2	7.1	<0.3	<0.3	<0.3	<0.3	mg/l	TM38/PM0
Chloride #	6	13	49	28	30	12	71	<3	<3	<3	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.25	0.43	1.68	0.05	0.15	<0.03	0.10	<0.03	<0.03	<0.03	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	2.5	4.3	16.8	0.5	1.5	<0.3	1.0	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	6	6	14	6	6	4	4	4	<2	2	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	60	60	140	60	60	40	40	40	<20	<20	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	95	103	158	79	95	91	92	77	57	73	<35	mg/l	TM20/PM0
Total Dissolved Solids #	950	1030	1580	790	950	910	920	770	570	730	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13299

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	91-93	94-96											
Sample ID	WS32	WS30											
Depth	2.00-3.00	2.00-3.00											
COC No / misc													
Containers	V J T	V J T											
Sample Date	25/09/2020	25/09/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	29/09/2020	29/09/2020											

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Dissolved Antimony #	<0.002	<0.002									<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02									<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025									<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025									<0.025	mg/kg	TM30/PM17
Dissolved Barium #	<0.003	0.014									<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	<0.03	0.14									<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	0.014									<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	0.14									<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005									<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005									<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015									<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015									<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007									<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07									<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005									<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05									<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.011	0.010									<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.11	0.10									<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002									<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02									<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	0.009	0.035									<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	0.09	0.35									<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003									<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03									<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001									<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001									<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01									<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1									<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3									<0.3	mg/l	TM173/PM0
Fluoride	<3	<3									<3	mg/kg	TM173/PM0
Sulphate as SO4 #	4.8	2.0									<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	48	20									<5	mg/kg	TM38/PM0
Chloride #	1.9	0.7									<0.3	mg/l	TM38/PM0
Chloride #	19	7									<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	<0.03	0.03									<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	<0.3	0.3									<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	<2	3									<2	mg/l	TM60/PM0
Dissolved Organic Carbon	<20	30									<20	mg/kg	TM60/PM0
Total Dissolved Solids #	53	51									<35	mg/l	TM20/PM0
Total Dissolved Solids #	530	510									<350	mg/kg	TM20/PM0

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**3**			
Client Sample No	**WS24**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**24/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.57	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	63	500	-	-
PAH Sum of 6 (mg/kg)	0.71	-	-	-
PAH Sum of 17 (mg/kg)	1.29	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.07	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.12	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	13	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	50	1000	20000	50000
Total Dissolved Solids	740	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	92.3
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**6**			
Client Sample No	**WS24**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**24/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.31	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.19	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	38	1000	20000	50000
Total Dissolved Solids	500	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	92.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13299	Landfill Waste Acceptance Criteria Limits		
Sample No	9			
Client Sample No	WS24	Inert	Stable Non-reactive	Hazardous
Depth/Other	1.00-2.00			
Sample Date	24/09/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	0.33	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	10:1 concn leached	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg		
	A10			
	mg/kg	mg/kg		
Arsenic	<0.025	0.5	2	25
Barium	0.05	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.15	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	89	1000	20000	50000
Total Dissolved Solids	510	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**12**			
Client Sample No	**WS24**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**24/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.50	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.29	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0002	0.01	0.2	2
Molybdenum	0.21	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.02	0.06	0.7	5
Selenium	0.22	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	68	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	190	1000	20000	50000
Total Dissolved Solids	870	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**15**			
Client Sample No	**WS24**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.40**			
Sample Date	**24/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.84	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	40	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.63	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0005	0.01	0.2	2
Molybdenum	0.12	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	83	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	184	1000	20000	50000
Total Dissolved Solids	920	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	81.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13299	Landfill Waste Acceptance Criteria Limits		
Sample No	18			
Client Sample No	WS28	Inert	Stable Non-reactive	Hazardous
Depth/Other	0.00-1.00			
Sample Date	24/09/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	1.51	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	71	500	-	-
PAH Sum of 6 (mg/kg)	5.71	-	-	-
PAH Sum of 17 (mg/kg)	12.44	100	-	-

Eluate Analysis	10:1 concn leached A10 mg/kg	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg mg/kg		
Arsenic	0.033	0.5	2	25
Barium	0.29	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.14	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	7	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	937	1000	20000	50000
Total Dissolved Solids	2120	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	84.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13299	Landfill Waste Acceptance Criteria Limits		
Sample No	21			
Client Sample No	WS28	Inert	Stable Non-reactive	Hazardous
Depth/Other	0.80-1.00			
Sample Date	24/09/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	1.24	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	0.048	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	3.32	-	-	-
PAH Sum of 17 (mg/kg)	6.58	100	-	-

Eluate Analysis	10:1 concn leached A10 mg/kg	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg mg/kg		
Arsenic	0.029	0.5	2	25
Barium	0.63	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0003	0.01	0.2	2
Molybdenum	0.17	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.06	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.09	4	50	200
Chloride	13	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	514	1000	20000	50000
Total Dissolved Solids	1620	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**24**			
Client Sample No	**WS29**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**24/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.84	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	65	500	-	-
PAH Sum of 6 (mg/kg)	0.35	-	-	-
PAH Sum of 17 (mg/kg)	0.74	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0001	0.01	0.2	2
Molybdenum	0.07	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.05	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	48	1000	20000	50000
Total Dissolved Solids	640	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	60	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13299	Landfill Waste Acceptance Criteria Limits		
Sample No	27			
Client Sample No	WS29			
Depth/Other	1.00-2.00	Inert	Stable Non-reactive	Hazardous
Sample Date	24/09/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	0.30	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	10:1 concn leached	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg		
	A10			
	mg/kg	mg/kg		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.13	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	24	1000	20000	50000
Total Dissolved Solids	440	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13299	Landfill Waste Acceptance Criteria Limits		
Sample No	30			
Client Sample No	WS29			
Depth/Other	3.00-3.40	Inert	Stable Non-reactive	Hazardous
Sample Date	24/09/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	0.53	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	10:1 concn leached	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg		
	A10			
	mg/kg	mg/kg		
Arsenic	0.037	0.5	2	25
Barium	0.11	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	0.017	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.21	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	0.32	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	162	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	255	1000	20000	50000
Total Dissolved Solids	1410	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**33**			
Client Sample No	**WS30**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**24/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.12	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.65	-	-	-
PAH Sum of 17 (mg/kg)	1.27	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.05	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	12	1000	20000	50000
Total Dissolved Solids	710	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**36**			
Client Sample No	**WS30**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**24/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.38	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.13	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.06	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	21	1000	20000	50000
Total Dissolved Solids	460	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**39**			
Client Sample No	**WS30**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**24/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.34	3	5	6
Sum of BTEX (mg/kg)	0.235	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	1289	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	1.02	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	1.81	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.22	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	4	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	69	1000	20000	50000
Total Dissolved Solids	880	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13299	Landfill Waste Acceptance Criteria Limits		
Sample No	42			
Client Sample No	WS30	Inert	Stable Non-reactive	Hazardous
Depth/Other	3.00-3.40			
Sample Date	24/09/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	0.63	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	10:1 concn leached	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg		
	A10			
	mg/kg	mg/kg		
Arsenic	<0.025	0.5	2	25
Barium	0.25	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0002	0.01	0.2	2
Molybdenum	0.10	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.17	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	77	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	166	1000	20000	50000
Total Dissolved Solids	830	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	80.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13299	Landfill Waste Acceptance Criteria Limits		
Sample No	45			
Client Sample No	WS03	Inert	Stable Non-reactive	Hazardous
Depth/Other	0.00-1.00			
Sample Date	24/09/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	1.16	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	9.31	-	-	-
PAH Sum of 17 (mg/kg)	18.22	100	-	-

Eluate Analysis	10:1 concn leached	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg		
	A10			
	mg/kg	mg/kg		
Arsenic	<0.025	0.5	2	25
Barium	0.07	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0001	0.01	0.2	2
Molybdenum	0.14	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.05	4	50	200
Chloride	4	800	15000	25000
Fluoride	5	10	150	500
Sulphate as SO4	52	1000	20000	50000
Total Dissolved Solids	640	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

		Landfill Waste Acceptance Criteria Limits		
EMT Job No	**20/13299**			
Sample No	**48**			
Client Sample No	**WS03**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**24/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.36	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.04	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	22	1000	20000	50000
Total Dissolved Solids	500	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**51**			
Client Sample No	**WS03**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**24/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.44	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.10	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	9	1000	20000	50000
Total Dissolved Solids	440	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**54**			
Client Sample No	**WS03**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**24/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.57	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.07	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.26	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	5	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	16	1000	20000	50000
Total Dissolved Solids	380	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**57**			
Client Sample No	**WS03**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.40**			
Sample Date	**24/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.74	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.20	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0005	0.01	0.2	2
Molybdenum	0.21	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.41	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	89	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	224	1000	20000	50000
Total Dissolved Solids	910	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13299	Landfill Waste Acceptance Criteria Limits		
Sample No	60			
Client Sample No	WS31	Inert	Stable Non-reactive	Hazardous
Depth/Other	0.00-1.00			
Sample Date	25/09/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	0.82	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.48	-	-	-
PAH Sum of 17 (mg/kg)	1.08	100	-	-

Eluate Analysis	10:1 concn leached	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg		
	A10			
	mg/kg	mg/kg		
Arsenic	<0.025	0.5	2	25
Barium	0.09	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.10	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	18	1000	20000	50000
Total Dissolved Solids	480	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	83.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**63**			
Client Sample No	**WS31**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-1.60**			
Sample Date	**25/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.45	3	5	6
Sum of BTEX (mg/kg)	0.054	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	819	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	1.76	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.24	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.16	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.05	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	6	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	13	1000	20000	50000
Total Dissolved Solids	950	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	60	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	84.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**66**			
Client Sample No	**WS34**			
Depth/Other	**0.00-1.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**25/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	2.24	3	5	6
Sum of BTEX (mg/kg)	0.184	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	1583	500	-	-
PAH Sum of 6 (mg/kg)	<2.20	-	-	-
PAH Sum of 17 (mg/kg)	<6.40	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.17	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.11	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	13	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	25	1000	20000	50000
Total Dissolved Solids	1030	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	60	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	79.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**69**			
Client Sample No	**WS34**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**25/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.23	3	5	6
Sum of BTEX (mg/kg)	1.056	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	4454	500	-	-
PAH Sum of 6 (mg/kg)	<2.20	-	-	-
PAH Sum of 17 (mg/kg)	15.41	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.039	0.5	2	25
Barium	0.28	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.16	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	49	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	1580	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	140	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	82.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13299	Landfill Waste Acceptance Criteria Limits		
Sample No	72			
Client Sample No	WS34			
Depth/Other	1.30-1.50			
Sample Date	25/09/2020	Inert	Stable Non-reactive	Hazardous
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	0.53	3	5	6
Sum of BTEX (mg/kg)	1.166	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	3091	500	-	-
PAH Sum of 6 (mg/kg)	<2.20	-	-	-
PAH Sum of 17 (mg/kg)	<6.40	100	-	-

Eluate Analysis	10:1 concn leached	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg		
	A10			
	mg/kg	mg/kg		
Arsenic	<0.025	0.5	2	25
Barium	0.09	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.16	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	28	800	15000	25000
Fluoride	5	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	790	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	60	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	82.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**75**			
Client Sample No	**WS34**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**25/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.50	3	5	6
Sum of BTEX (mg/kg)	0.319	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	2974	500	-	-
PAH Sum of 6 (mg/kg)	<2.20	-	-	-
PAH Sum of 17 (mg/kg)	<6.40	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.22	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.13	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	30	800	15000	25000
Fluoride	5	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	950	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	60	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**78**			
Client Sample No	**WS34**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**25/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.51	3	5	6
Sum of BTEX (mg/kg)	0.031	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	606	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	0.81	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.61	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.28	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	12	800	15000	25000
Fluoride	6	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	910	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**81**			
Client Sample No	**WS34**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.40**			
Sample Date	**25/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.68	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.64	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.07	0.5	10	30
Nickel	0.13	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.22	0.06	0.7	5
Selenium	0.50	0.1	0.5	7
Zinc	0.05	4	50	200
Chloride	71	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	41	1000	20000	50000
Total Dissolved Solids	920	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**84**			
Client Sample No	**WS32**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**25/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.53	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.08	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.11	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	111	1000	20000	50000
Total Dissolved Solids	770	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	92.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**87**			
Client Sample No	**WS32**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**25/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.38	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.07	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.09	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	99	1000	20000	50000
Total Dissolved Solids	570	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**90**			
Client Sample No	**WS32**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**25/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.39	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.05	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.10	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	159	1000	20000	50000
Total Dissolved Solids	730	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**93**			
Client Sample No	**WS32**			
Depth/Other	**2.00-3.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**25/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.40	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.11	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.09	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	19	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	48	1000	20000	50000
Total Dissolved Solids	530	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13299**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**96**			
Client Sample No	**WS30**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**25/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.53	3	5	6
Sum of BTEX (mg/kg)	0.059	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	126	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.14	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.10	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.35	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	7	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	20	1000	20000	50000
Total Dissolved Solids	510	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/13299	1	WS24	0.00-1.00	1-3	Possible PAH's & Trace of possible degraded diesel
20/13299	1	WS24	0.80-1.00	4-6	No interpretation possible
20/13299	1	WS24	1.00-2.00	7-9	No interpretation possible
20/13299	1	WS24	2.00-3.00	10-12	No interpretation possible
20/13299	1	WS24	3.00-3.40	13-15	No interpretation possible
20/13299	1	WS28	0.00-1.00	16-18	PAH's & Possible lubricating oil
20/13299	1	WS28	0.80-1.00	19-21	Trace of possible naturally occurring compounds
20/13299	1	WS29	0.00-1.00	22-24	Possible tarmac/bitumen & Possible lubricating oil
20/13299	1	WS29	1.00-2.00	25-27	No interpretation possible
20/13299	1	WS29	3.00-3.40	28-30	No interpretation possible
20/13299	1	WS30	0.00-1.00	31-33	No interpretation possible
20/13299	1	WS30	0.80-1.00	34-36	No interpretation possible
20/13299	1	WS30	1.00-2.00	37-39	Degraded diesel
20/13299	1	WS30	3.00-3.40	40-42	No interpretation possible
20/13299	1	WS03	0.00-1.00	43-45	PAH's
20/13299	1	WS03	0.80-1.00	46-48	No interpretation possible
20/13299	1	WS03	1.00-2.00	49-51	No interpretation possible
20/13299	1	WS03	2.00-3.00	52-54	No interpretation possible
20/13299	1	WS03	3.00-3.40	55-57	No interpretation possible
20/13299	1	WS31	0.00-1.00	58-60	No interpretation possible
20/13299	1	WS31	1.00-1.60	61-63	Degraded diesel
20/13299	1	WS34	0.00-1.00	64-66	Degraded diesel
20/13299	1	WS34	0.80-1.00	67-69	Degraded diesel
20/13299	1	WS34	1.30-1.50	70-72	Degraded diesel
20/13299	1	WS34	1.00-2.00	73-75	Degraded diesel
20/13299	1	WS34	2.00-3.00	76-78	Degraded diesel
20/13299	1	WS34	3.00-3.40	79-81	No interpretation possible
20/13299	1	WS32	0.00-1.00	82-84	No interpretation possible
20/13299	1	WS32	0.80-1.00	85-87	No interpretation possible
20/13299	1	WS32	1.00-2.00	88-90	No interpretation possible
20/13299	1	WS32	2.00-3.00	91-93	No interpretation possible
20/13299	1	WS30	2.00-3.00	94-96	Degraded diesel

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson

Note:

Asbestos Screen analysis is carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Detailed Gravimetric Quantification and PCOM Fibre Analysis is carried out in accordance with our documented in-house methods PM042 and TM131 and HSG 248 using Stereo and Polarised Light Microscopy and Phase Contrast Optical Microscopy (PCOM). Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions, including ACM type and Asbestos level less than 0.1%, lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Element Materials Technology consultant, Element Materials Technology cannot be responsible for inaccurate or unrepresentative sampling.

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
20/13299	1	WS24	0.00-1.00	2	09/10/2020	**General Description (Bulk Analysis)**	soil.stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS24	0.80-1.00	5	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stone
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS24	1.00-2.00	8	09/10/2020	**General Description (Bulk Analysis)**	soil-stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS24	2.00-3.00	11	09/10/2020	**General Description (Bulk Analysis)**	soil-stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS24	3.00-3.40	14	09/10/2020	**General Description (Bulk Analysis)**	soil-stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS28	0.00-1.00	17	09/10/2020	**General Description (Bulk Analysis)**	soil-stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS28	0.80-1.00	20	09/10/2020	**General Description (Bulk Analysis)**	soil-stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
20/13299	1	WS28	0.80-1.00	20	09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS29	0.00-1.00	23	09/10/2020	**General Description (Bulk Analysis)**	soil-stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS29	1.00-2.00	26	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS29	3.00-3.40	29	09/10/2020	**General Description (Bulk Analysis)**	soil.stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS30	0.00-1.00	32	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stone
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS30	0.80-1.00	35	09/10/2020	**General Description (Bulk Analysis)**	soil.stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS30	1.00-2.00	38	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS30	3.00-3.40	41	09/10/2020	**General Description (Bulk Analysis)**	soil-stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS03	0.00-1.00	44	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS03	0.80-1.00	47	09/10/2020	**General Description (Bulk Analysis)**	soil.stones
					09/10/2020	**Asbestos Fibres**	NAD

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
20/13299	1	WS03	0.80-1.00	47	09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS03	1.00-2.00	50	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS03	2.00-3.00	53	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS03	3.00-3.40	56	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stone
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS31	0.00-1.00	59	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS31	1.00-1.60	62	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS34	0.00-1.00	65	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS34	0.80-1.00	68	09/10/2020	**General Description (Bulk Analysis)**	soil-stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS34	1.30-1.50	71	09/10/2020	**General Description (Bulk Analysis)**	soil.stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
20/13299	1	WS34	1.00-2.00	74	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS34	2.00-3.00	77	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS34	3.00-3.40	80	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS32	0.00-1.00	83	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS32	0.80-1.00	86	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stone
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS32	1.00-2.00	89	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stone
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS32	2.00-3.00	92	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stone
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD
20/13299	1	WS30	2.00-3.00	95	09/10/2020	**General Description (Bulk Analysis)**	Soil/Stones
					09/10/2020	**Asbestos Fibres**	NAD
					09/10/2020	**Asbestos ACM**	NAD
					09/10/2020	**Asbestos Type**	NAD
					09/10/2020	**Asbestos Level Screen**	NAD

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
20/13299	1	WS24	0.00-1.00	1-3	TM160/PM110	pH > 4.00
20/13299	1	WS24	0.00-1.00	1-3	TM160/PM110	pH < 10.00
20/13299	1	WS24	0.80-1.00	4-6	TM160/PM110	pH > 4.00
20/13299	1	WS24	0.80-1.00	4-6	TM160/PM110	pH < 10.00
20/13299	1	WS24	1.00-2.00	7-9	TM160/PM110	pH > 4.00
20/13299	1	WS24	1.00-2.00	7-9	TM160/PM110	pH < 10.00
20/13299	1	WS24	2.00-3.00	10-12	TM160/PM110	pH > 4.00
20/13299	1	WS24	2.00-3.00	10-12	TM160/PM110	pH < 10.00
20/13299	1	WS24	3.00-3.40	13-15	TM160/PM110	pH > 4.00
20/13299	1	WS24	3.00-3.40	13-15	TM160/PM110	pH < 10.00
20/13299	1	WS28	0.00-1.00	16-18	TM160/PM110	pH > 4.00
20/13299	1	WS28	0.00-1.00	16-18	TM160/PM110	pH < 10.00
20/13299	1	WS28	0.80-1.00	19-21	TM160/PM110	pH > 4.00
20/13299	1	WS28	0.80-1.00	19-21	TM160/PM110	pH < 10.00
20/13299	1	WS29	0.00-1.00	22-24	TM160/PM110	pH > 4.00
20/13299	1	WS29	0.00-1.00	22-24	TM160/PM110	pH < 10.00
20/13299	1	WS29	1.00-2.00	25-27	TM160/PM110	pH > 4.00
20/13299	1	WS29	1.00-2.00	25-27	TM160/PM110	pH < 10.00
20/13299	1	WS29	3.00-3.40	28-30	TM160/PM110	pH > 4.00
20/13299	1	WS30	0.00-1.00	31-33	TM160/PM110	pH > 4.00
20/13299	1	WS30	0.00-1.00	31-33	TM160/PM110	pH < 10.00
20/13299	1	WS30	0.80-1.00	34-36	TM160/PM110	pH > 4.00
20/13299	1	WS30	0.80-1.00	34-36	TM160/PM110	pH < 10.00
20/13299	1	WS30	1.00-2.00	37-39	TM160/PM110	pH > 4.00
20/13299	1	WS30	1.00-2.00	37-39	TM160/PM110	pH < 10.00
20/13299	1	WS30	3.00-3.40	40-42	TM160/PM110	pH > 4.00
20/13299	1	WS30	3.00-3.40	40-42	TM160/PM110	pH < 10.00
20/13299	1	WS31	0.00-1.00	58-60	TM160/PM110	pH > 4.00
20/13299	1	WS31	0.00-1.00	58-60	TM160/PM110	pH < 10.00
20/13299	1	WS31	1.00-1.60	61-63	TM160/PM110	pH > 4.00
20/13299	1	WS31	1.00-1.60	61-63	TM160/PM110	pH < 10.00
20/13299	1	WS34	0.00-1.00	64-66	TM160/PM110	pH > 4.00
20/13299	1	WS34	0.00-1.00	64-66	TM160/PM110	pH < 10.00
20/13299	1	WS34	0.80-1.00	67-69	TM160/PM110	pH > 4.00
20/13299	1	WS34	0.80-1.00	67-69	TM160/PM110	pH < 10.00

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
20/13299	1	WS34	1.30-1.50	70-72	TM160/PM110	pH > 4.00
20/13299	1	WS34	1.30-1.50	70-72	TM160/PM110	pH < 10.00
20/13299	1	WS34	1.00-2.00	73-75	TM160/PM110	pH > 4.00
20/13299	1	WS34	1.00-2.00	73-75	TM160/PM110	pH < 10.00
20/13299	1	WS34	2.00-3.00	76-78	TM160/PM110	pH > 4.00
20/13299	1	WS34	2.00-3.00	76-78	TM160/PM110	pH < 10.00
20/13299	1	WS34	3.00-3.40	79-81	TM160/PM110	pH > 4.00
20/13299	1	WS34	3.00-3.40	79-81	TM160/PM110	pH < 10.00
20/13299	1	WS32	0.00-1.00	82-84	TM160/PM110	pH > 4.00
20/13299	1	WS32	0.00-1.00	82-84	TM160/PM110	pH < 10.00
20/13299	1	WS32	0.80-1.00	85-87	TM160/PM110	pH > 4.00
20/13299	1	WS32	0.80-1.00	85-87	TM160/PM110	pH < 10.00
20/13299	1	WS32	1.00-2.00	88-90	TM160/PM110	pH > 4.00
20/13299	1	WS32	1.00-2.00	88-90	TM160/PM110	pH < 10.00
20/13299	1	WS32	2.00-3.00	91-93	TM160/PM110	pH > 4.00
20/13299	1	WS32	2.00-3.00	91-93	TM160/PM110	pH < 10.00
20/13299	1	WS30	2.00-3.00	94-96	TM160/PM110	pH > 4.00
20/13299	1	WS30	2.00-3.00	94-96	TM160/PM110	pH < 10.00

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 20/13299						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/13299

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x10 Dilution

EMT Job No: 20/13299

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/13299

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21	As received solid samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes

EMT Job No: 20/13299

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248 First edition (2006)	PM42	Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes
TM160	Titrimetric determination of acid reserve to pH 4.0 or alkali reserve to pH 10.0 based on method C14.2 Canadian Government (2013).	PM110	Preparation of a 10% (w/w) aqueous solution of soil in distilled water			AR	No

EMT Job No: 20/13299

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

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O'Connor Sutton Cronin & Assoc. Ltd
9 Prussia Street
Dublin 7
Ireland

Attention :	Richard Thompson
Date :	14th October, 2020
Your reference :	B967/1
Our reference :	Test Report 20/13350 Batch 1
Location :	Emmet Rd
Date samples received :	30th September, 2020
Status :	Final report
Issue :	1

Sixteen samples were received for analysis on 30th September, 2020 of which fifteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Lucas Halliwell
Project Co-ordinator

Please include all sections of this report if it is reproduced

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Rd
Contact: Richard Thompson
EMT Job No: 20/13350

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	31-33	LOD/LOR	Units	Method No.
Sample ID	WS 36	WS 36	WS 36	WS 36	WS 37	WS 37	WS 38	WS 38	WS 38	WS 39			
Depth	0.08-1.0	0.0-1.0	1.0-2.0	2.0-2.5	0.08-1.0	0-0-1.0	0-0-1.0	2.0-3.0	0.8-1.0	0.08-1.0			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020			
Antimony	2	2	2	<1	-	2	4	1	14	1	<1	mg/kg	TM30/PM15
Arsenic #	9.8	20.3	8.5	5.9	-	133.9	17.0	8.3	31.2	7.4	<0.5	mg/kg	TM30/PM15
Barium #	48	184	50	33	-	114	122	28	562	56	<1	mg/kg	TM30/PM15
Cadmium #	1.9	1.6	2.2	0.7	-	1.0	1.2	1.5	2.2	1.3	<0.1	mg/kg	TM30/PM15
Chromium #	34.3	45.4	36.7	24.4	-	56.7	56.9	41.1	78.7	63.3	<0.5	mg/kg	TM30/PM15
Copper #	25	30	29	19	-	36	37	22	119	20	<1	mg/kg	TM30/PM15
Lead #	14	58	11	8	-	41	100	13	402	18	<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	0.4	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	5.6	3.5	5.1	2.6	-	4.1	3.4	3.8	6.6	4.8	<0.1	mg/kg	TM30/PM15
Nickel #	28.9	32.3	32.7	33.0	-	40.5	36.3	23.6	59.6	36.4	<0.7	mg/kg	TM30/PM15
Selenium #	1	2	2	1	-	2	2	<1	3	<1	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	1017	1650	383	446	-	427	577	794	1079	496	<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.8	0.8	0.6	1.0	-	1.1	1.0	0.5	1.8	0.6	<0.1	mg/kg	TM74/PM32
Zinc #	73	103	83	35	-	107	156	75	660	65	<5	mg/kg	TM30/PM15
Antimony	-	-	-	-	2	-	-	-	-	-	<1	mg/kg	TM30/PM62
Arsenic	-	-	-	-	46.5	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Barium	-	-	-	-	104	-	-	-	-	-	<1	mg/kg	TM30/PM62
Cadmium	-	-	-	-	1.6	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Chromium	-	-	-	-	18.1	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Copper	-	-	-	-	30	-	-	-	-	-	<1	mg/kg	TM30/PM62
Lead	-	-	-	-	73	-	-	-	-	-	<5	mg/kg	TM30/PM62
Mercury	-	-	-	-	<0.1	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Molybdenum	-	-	-	-	1.6	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Nickel	-	-	-	-	28.9	-	-	-	-	-	<0.7	mg/kg	TM30/PM62
Selenium	-	-	-	-	<1	-	-	-	-	-	<1	mg/kg	TM30/PM62
Total Sulphate as SO4	-	-	-	-	278	-	-	-	-	-	<50	mg/kg	TM50/PM129
Water Soluble Boron	-	-	-	-	0.7	-	-	-	-	-	<0.1	mg/kg	TM74/PM61
Zinc	-	-	-	-	166	-	-	-	-	-	<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Rd
Contact: Richard Thompson
EMT Job No: 20/13350

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	31-33	LOD/LOR	Units	Method No.
Sample ID	WS 36	WS 36	WS 36	WS 36	WS 37	WS 37	WS 38	WS 38	WS 38	WS 39			
Depth	0.08-1.0	0.0-1.0	1.0-2.0	2.0-2.5	0.08-1.0	0-0-1.0	0-0-1.0	2.0-3.0	0.8-1.0	0.08-1.0			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020			
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.12	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.17	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.10	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	<0.04	0.11	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	0.14	<0.03	<0.03	0.28	0.10	0.39	<0.03	2.14	0.05	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	0.11	<0.04	0.52	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	0.24	<0.03	0.15	0.52	0.17	0.74	<0.03	4.12	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	0.23	<0.03	0.13	0.42	0.14	0.61	<0.03	3.31	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	0.14	<0.06	<0.06	0.21	0.09	0.45	<0.06	2.24	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	0.17	<0.02	0.05	0.28	0.10	0.45	<0.02	2.37	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	0.27	<0.07	<0.07	0.36	0.14	0.68	<0.07	3.76	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	0.14	<0.04	<0.04	0.17	0.07	0.36	<0.04	1.99	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	0.06	<0.04	<0.04	0.08	<0.04	0.20	<0.04	1.18	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.25	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	0.07	<0.04	<0.04	0.08	<0.04	0.20	<0.04	1.11	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.15	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	0.78	<0.22	<0.22	1.21	0.38	2.18	<0.22	12.16	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	1.46	<0.64	<0.64	2.47	0.81	4.19	<0.64	23.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	0.19	<0.05	<0.05	0.26	0.10	0.49	<0.05	2.71	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	0.08	<0.02	<0.02	0.10	0.04	0.19	<0.02	1.05	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	95	91	93	93	92	86	97	97	97	97	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	340	<30	<30	52	<30	33	537	<30	mg/kg	TM5/PM8/PM16
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	20.6	<0.2	<0.2	<0.2	<0.2	<0.2	11.4	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	114	<4	<4	<4	<4	<4	161	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	141	<7	<7	<7	<7	<7	259	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	<7	64	<7	<7	44	<7	33	106	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	8	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	340	<26	<26	52	<26	33	538	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	313	<10	<10	15	<10	<10	527	<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	<10	15	<10	<10	45	<10	33	<10	<10	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Rd
Contact: Richard Thompson
EMT Job No: 20/13350

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	31-33	LOD/LOR	Units	Method No.
Sample ID	WS 36	WS 36	WS 36	WS 36	WS 37	WS 37	WS 38	WS 38	WS 38	WS 39			
Depth	0.08-1.0	0.0-1.0	1.0-2.0	2.0-2.5	0.08-1.0	0-0-1.0	0-0-1.0	2.0-3.0	0.8-1.0	0.08-1.0			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020			
TPH CWG													
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.4	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	41	<4	<4	<4	<4	<4	51	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	94	21	<7	<7	<7	28	256	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	<7	28	145	<7	123	<7	161	209	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	72	<7	58	<7	42	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26	<26	163	238	<26	181	<26	231	516	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52	<52	503	238	<52	233	<52	264	1054	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	169	64	<10	27	<10	68	469	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10	<10	<10	126	<10	108	<10	128	46	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Benzene #	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	12.2	15.8	9.5	15.0	12.9	12.8	19.0	9.5	20.9	9.4	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	10.9	13.6	8.7	13.0	11.4	11.4	15.9	8.7	17.3	8.6	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	34.3	45.4	36.7	24.4	-	56.7	56.9	41.1	78.7	63.3	<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	-	18.1	-	-	-	-	-	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.29	1.01	0.38	0.40	NDP	0.61	1.31	0.33	7.00	0.38	<0.02	%	TM21/PM24

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Rd
Contact: Richard Thompson
EMT Job No: 20/13350

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	31-33	LOD/LOR	Units	Method No.
Sample ID	WS 36	WS 36	WS 36	WS 36	WS 37	WS 37	WS 38	WS 38	WS 38	WS 39			
Depth	0.08-1.0	0.0-1.0	1.0-2.0	2.0-2.5	0.08-1.0	0-0-1.0	0-0-1.0	2.0-3.0	0.8-1.0	0.08-1.0			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020			
Total Organic Carbon	-	-	-	-	0.53	-	-	-	-	-	<0.02	%	TM21/PM89
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	0.569	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	2	1	1	104	-	1	2	1	3	6	<1	mg/kg	TM108/PM114
Elemental Sulphur	-	-	-	-	<1	-	-	-	-	-	<1	mg/kg	TM108/PM8
Loss on Ignition #	1.6	3.1	1.6	1.9	NDP	2.8	4.2	1.2	9.6	1.7	<1.0	%	TM22/PM0
Loss on Ignition	-	-	-	-	2.5	-	-	-	-	-	<1.0	%	TM22/PM0
pH #	10.77	9.79	8.79	8.45	9.16	8.51	8.08	8.51	7.82	8.14	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1042	0.1033	0.0986	0.1031	0.1049	0.1062	0.1081	0.101	0.1102	0.1028		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Rd
Contact: Richard Thompson
EMT Job No: 20/13350

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	34-36	37-39	40-42	43-45	46-48						LOD/LOR	Units	Method No.
Sample ID	WS 39	WS 39	WS 39	WS 39	WS 39								
Depth	1.0-2.0	2.0-3.0	3.0-3.2	1.20-1.45	0.0-1.0								
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T								
Sample Date	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020								
Sample Type	Soil	Soil	Soil	Soil	Soil								
Batch Number	1	1	1	1	1								
Date of Receipt	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020								
Antimony	2	2	1	2	2						<1	mg/kg	TM30/PM15
Arsenic #	8.5	10.6	6.8	9.2	8.0						<0.5	mg/kg	TM30/PM15
Barium #	53	107	66	49	303						<1	mg/kg	TM30/PM15
Cadmium #	2.2	1.9	1.5	1.7	0.9						<0.1	mg/kg	TM30/PM15
Chromium #	41.1	59.9	51.0	59.1	40.5						<0.5	mg/kg	TM30/PM15
Copper #	24	33	16	26	17						<1	mg/kg	TM30/PM15
Lead #	12	16	9	14	40						<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1						<0.1	mg/kg	TM30/PM15
Molybdenum #	5.3	5.9	4.8	6.3	3.8						<0.1	mg/kg	TM30/PM15
Nickel #	31.1	45.7	21.9	28.0	18.9						<0.7	mg/kg	TM30/PM15
Selenium #	2	3	2	<1	1						<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	221	544	226	258	776						<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.5	0.8	0.5	0.6	0.7						<0.1	mg/kg	TM74/PM32
Zinc #	77	97	53	67	57						<5	mg/kg	TM30/PM15
Antimony	-	-	-	-	-						<1	mg/kg	TM30/PM62
Arsenic	-	-	-	-	-						<0.5	mg/kg	TM30/PM62
Barium	-	-	-	-	-						<1	mg/kg	TM30/PM62
Cadmium	-	-	-	-	-						<0.1	mg/kg	TM30/PM62
Chromium	-	-	-	-	-						<0.5	mg/kg	TM30/PM62
Copper	-	-	-	-	-						<1	mg/kg	TM30/PM62
Lead	-	-	-	-	-						<5	mg/kg	TM30/PM62
Mercury	-	-	-	-	-						<0.1	mg/kg	TM30/PM62
Molybdenum	-	-	-	-	-						<0.1	mg/kg	TM30/PM62
Nickel	-	-	-	-	-						<0.7	mg/kg	TM30/PM62
Selenium	-	-	-	-	-						<1	mg/kg	TM30/PM62
Total Sulphate as SO4	-	-	-	-	-						<50	mg/kg	TM50/PM129
Water Soluble Boron	-	-	-	-	-						<0.1	mg/kg	TM74/PM61
Zinc	-	-	-	-	-						<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Rd
Contact: Richard Thompson
EMT Job No: 20/13350

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	34-36	37-39	40-42	43-45	46-48						LOD/LOR	Units	Method No.
Sample ID	WS 39	WS 39	WS 39	WS 39	WS 39								
Depth	1.0-2.0	2.0-3.0	3.0-3.2	1.20-1.45	0.0-1.0								
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T								
Sample Date	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020								
Sample Type	Soil	Soil	Soil	Soil	Soil								
Batch Number	1	1	1	1	1								
Date of Receipt	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020								
PAH MS													
Naphthalene #	<0.40 AA	0.18	0.24	<0.40 AA	0.07						<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.85 AA	0.11	0.07	0.65 AA	<0.03						<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.50 AA	0.06	0.06	<0.50 AA	<0.05						<0.05	mg/kg	TM4/PM8
Fluorene #	2.40 AA	0.29	0.25	2.35 AA	<0.04						<0.04	mg/kg	TM4/PM8
Phenanthrene #	4.53 AA	0.53	0.45	4.48 AA	0.28						<0.03	mg/kg	TM4/PM8
Anthracene #	<0.40 AA	<0.04	<0.04	<0.40 AA	0.08						<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.30 AA	<0.03	<0.03	<0.30 AA	0.46						<0.03	mg/kg	TM4/PM8
Pyrene #	<0.30 AA	<0.03	<0.03	<0.30 AA	0.42						<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.60 AA	<0.06	<0.06	<0.60 AA	0.22						<0.06	mg/kg	TM4/PM8
Chrysene #	<0.20 AA	<0.02	<0.02	<0.20 AA	0.24						<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.70 AA	<0.07	<0.07	<0.70 AA	0.39						<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.40 AA	<0.04	<0.04	<0.40 AA	0.21						<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.40 AA	<0.04	<0.04	<0.40 AA	0.11						<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.40 AA	<0.04	<0.04	<0.40 AA	<0.04						<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.40 AA	<0.04	<0.04	<0.40 AA	0.13						<0.04	mg/kg	TM4/PM8
Coronene	<0.40 AA	<0.04	<0.04	<0.40 AA	<0.04						<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<2.20 AA	<0.22	<0.22	<2.20 AA	1.30						<0.22	mg/kg	TM4/PM8
PAH 17 Total	7.78 AA	1.17	1.07	7.48 AA	2.61						<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.50 AA	<0.05	<0.05	<0.50 AA	0.28						<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.20 AA	<0.02	<0.02	<0.20 AA	0.11						<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<10 AA	<1	<1	<10 AA	<1						<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	101 AA	86	84	99 AA	91						<0	%	TM4/PM8
Mineral Oil (C10-C40)	2448	1004	732	3728	<30						<30	mg/kg	TM5/PM8/PM16
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1	<0.1						<0.1	mg/kg	TM36/PM12
>C6-C8 #	0.5	0.3	0.5	0.9	<0.1						<0.1	mg/kg	TM36/PM12
>C8-C10	6.6	2.7	2.4	7.8	<0.1						<0.1	mg/kg	TM36/PM12
>C10-C12 #	225.2	87.2	63.1	379.8	<0.2						<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	882	366	240	1384	<4						<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	981	413	308	1468	<7						<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	360	138	121	496	<7						<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7						<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	2455	1007	735	3737	<26						<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	7.1	3.0	2.9	8.7	<0.1						<0.1	mg/kg	TM36/PM12
>C10-C25	2401	992	680	3678	<10						<10	mg/kg	TM5/PM8/PM16
>C25-C35	47	12	<10	50	<10						<10	mg/kg	TM5/PM8/PM16

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Rd
Contact: Richard Thompson
EMT Job No: 20/13350

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	34-36	37-39	40-42	43-45	46-48						LOD/LOR	Units	Method No.
Sample ID	WS 39	WS 39	WS 39	WS 39	WS 39								
Depth	1.0-2.0	2.0-3.0	3.0-3.2	1.20-1.45	0.0-1.0								
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T								
Sample Date	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020								
Sample Type	Soil	Soil	Soil	Soil	Soil								
Batch Number	1	1	1	1	1								
Date of Receipt	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020								
TPH CWG													
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1	<0.1						<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1	<0.1						<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	0.2	<0.1	<0.1	0.2	<0.1						<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	104.6	44.4	33.3	166.5	<0.2						<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	659	241	152	1020	<4						<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	886	327	213	1351	<7						<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	347	123	72	533	<7						<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	<7						<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	1997	735	470	3071	<26						<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	4452	1742	1205	6808	<52						<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	0.2	<0.1	<0.1	0.2	<0.1						<0.1	mg/kg	TM36/PM12
>EC10-EC25	1955	727	462	3007	<10						<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	40	<10	<10	64	<10						<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	0.014	0.027	0.011	<0.005						<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM36/PM12
Ethylbenzene #	0.037	0.019	0.021	0.034	<0.005						<0.005	mg/kg	TM36/PM12
m/p-Xylene #	0.109	0.040	0.029	0.118	<0.005						<0.005	mg/kg	TM36/PM12
o-Xylene #	0.073	0.025	0.012	0.080	<0.005						<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035						<0.035	mg/kg	TM17/PM8
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01						<0.01	mg/kg	TM26/PM21
Natural Moisture Content	9.0	13.2	17.5	7.7	14.6						<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	8.2	11.7	14.9	7.2	12.8						<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3						<0.3	mg/kg	TM38/PM20
Chromium III	41.1	59.9	51.0	59.1	40.5						<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	-	-						<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5						<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.50	0.53	0.33	0.54	1.13						<0.02	%	TM21/PM24

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Rd
Contact: Richard Thompson
EMT Job No: 20/13350

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	34-36	37-39	40-42	43-45	46-48								
Sample ID	WS 39	WS 39	WS 39	WS 39	WS 39								
Depth	1.0-2.0	2.0-3.0	3.0-3.2	1.20-1.45	0.0-1.0								
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T								
Sample Date	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020								
Sample Type	Soil	Soil	Soil	Soil	Soil								
Batch Number	1	1	1	1	1								
Date of Receipt	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020								

Please see attached notes for all abbreviations and acronyms

											LOD/LOR	Units	Method No.
Total Organic Carbon	-	-	-	-	-						<0.02	%	TM21/PM89
Sulphide	<10	<10	<10	<10	<10						<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	NDP	NDP	NDP						<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	NDP	NDP	NDP						<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	2	11	2	3	2						<1	mg/kg	TM108/PM114
Elemental Sulphur	-	-	-	-	-						<1	mg/kg	TM108/PM8
Loss on Ignition #	2.1	1.9	1.2	1.7	1.5						<1.0	%	TM22/PM0
Loss on Ignition	-	-	-	-	-						<1.0	%	TM22/PM0
pH #	8.09	8.11	8.28	8.18	8.66						<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1001	0.1031	0.0998	0.0994	0.1033							kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09							kg	NONE/PM17

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Rd
Contact: Richard Thompson
EMT Job No: 20/13350

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	31-33	LOD/LOR	Units	Method No.
Sample ID	WS 36	WS 36	WS 36	WS 36	WS 37	WS 37	WS 38	WS 38	WS 38	WS 39			
Depth	0.08-1.0	0.0-1.0	1.0-2.0	2.0-2.5	0.08-1.0	0-0-1.0	0-0-1.0	2.0-3.0	0.8-1.0	0.08-1.0			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020			
Dissolved Antimony #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	0.004	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	0.04	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	0.0035	0.0254	<0.0025	<0.0025	0.0114	0.0111	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	0.035	0.254	<0.025	<0.025	0.114	0.111	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.004	0.006	<0.003	0.007	0.003	0.004	0.018	<0.003	0.037	0.029	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.04	0.06	<0.03	0.07	0.03	0.04	0.18	<0.03	0.37	0.29	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	0.025	0.014	<0.012	0.013	0.024	0.020	<0.012	<0.012	0.028	<0.012	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	0.25	0.14	<0.12	0.13	0.24	0.20	<0.12	<0.12	0.28	<0.12	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	0.0020	<0.0015	<0.0015	0.0038	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	0.020	<0.015	<0.015	0.038	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.028	0.010	0.015	0.017	0.007	0.004	0.005	0.005	0.007	0.014	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.28	0.10	0.15	0.17	0.07	0.04	0.05	0.05	0.07	0.14	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	0.003	<0.003	<0.003	0.004	0.003	<0.003	<0.003	0.004	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	<0.03	<0.03	0.04	0.03	<0.03	<0.03	0.04	<0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	0.5	0.6	<0.3	<0.3	<0.3	<0.3	0.5	0.4	<0.3	<0.3	<0.3	mg/l	TM173/PM0
Fluoride	5	6	<3	<3	<3	<3	5	4	<3	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	23.9	17.3	0.8	0.5	4.1	2.8	13.8	1.7	36.2	7.1	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	239	173	8	<5	41	28	138	17	362	71	<5	mg/kg	TM38/PM0
Chloride #	3.1	0.9	<0.3	1.1	<0.3	<0.3	<0.3	<0.3	0.3	<0.3	<0.3	mg/l	TM38/PM0
Chloride #	31	9	<3	11	<3	<3	<3	<3	3	<3	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.06	0.09	0.05	0.09	<0.03	0.04	<0.03	0.03	<0.03	<0.03	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.6	0.9	0.5	0.9	<0.3	0.4	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	4	6	2	3	5	3	3	<2	2	9	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	40	60	<20	30	50	30	30	<20	20	90	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	206	123	43	57	54	60	98	55	135	87	<35	mg/l	TM20/PM0
Total Dissolved Solids #	2060	1230	430	570	540	600	980	550	1351	870	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

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All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Rd
Contact: Richard Thompson
EMT Job No: 20/13350

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	34-36	37-39	40-42	43-45	46-48						LOD/LOR	Units	Method No.
Sample ID	WS 39	WS 39	WS 39	WS 39	WS 39								
Depth	1.0-2.0	2.0-3.0	3.0-3.2	1.20-1.45	0.0-1.0								
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T								
Sample Date	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020								
Sample Type	Soil	Soil	Soil	Soil	Soil								
Batch Number	1	1	1	1	1								
Date of Receipt	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020								
Dissolved Antimony #	0.007	0.006	0.003	0.006	<0.002						<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.07	0.06	0.03	0.06	<0.02						<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025						<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025						<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.084	0.125	0.083	0.056	0.016						<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.84	1.25	0.83	0.56	0.16						<0.03	mg/kg	TM30/PM17
Dissolved Boron #	0.015	0.025	0.018	<0.012	<0.012						<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	0.15	0.25	0.18	<0.12	<0.12						<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005						<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015						<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015						<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007						<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07						<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05						<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.018	0.017	0.010	0.020	0.009						<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.18	0.17	0.10	0.20	0.09						<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002						<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02						<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	0.008	<0.003	<0.003						<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	0.08	<0.03	<0.03						<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003	0.006	<0.003	<0.003						<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	0.06	<0.03	<0.03						<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001						<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001						<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01						<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1						<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3	<0.3	<0.3	0.4						<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	<3	<3	4						<3	mg/kg	TM173/PM0
Sulphate as SO4 #	0.5	2.1	3.7	1.5	4.9						<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	5	21	37	15	49						<5	mg/kg	TM38/PM0
Chloride #	0.3	1.5	0.7	0.4	0.4						<0.3	mg/l	TM38/PM0
Chloride #	3	15	7	4	4						<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.12	0.08	0.06	0.13	<0.03						<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	1.2	0.8	0.6	1.3	<0.3						<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	2	<2	2	2	4						<2	mg/l	TM60/PM0
Dissolved Organic Carbon	20	<20	20	<20	40						<20	mg/kg	TM60/PM0
Total Dissolved Solids #	79	88	55	96	76						<35	mg/l	TM20/PM0
Total Dissolved Solids #	790	880	550	960	760						<350	mg/kg	TM20/PM0

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**3**			
Client Sample No	**WS 36**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.08-1.0**			
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.29	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.035	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.28	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	31	800	15000	25000
Fluoride	5	10	150	500
Sulphate as SO4	239	1000	20000	50000
Total Dissolved Solids	2060	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**9**			
Client Sample No	**WS 36**			
Depth/Other	**1.0-2.0**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.38	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.15	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	8	1000	20000	50000
Total Dissolved Solids	430	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**12**			
Client Sample No	**WS 36**			
Depth/Other	**2.0-2.5**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.40	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	340	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.07	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.17	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	11	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	570	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**15**			
Client Sample No	**WS 37**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.08-1.0**			
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.53	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	1.21	-	-	-
PAH Sum of 17 (mg/kg)	2.47	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.114	0.5	2	25
Barium	0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	0.038	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.07	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	41	1000	20000	50000
Total Dissolved Solids	540	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	84.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**18**			
Client Sample No	**WS 37**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0-0-1.0**			
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.61	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.38	-	-	-
PAH Sum of 17 (mg/kg)	0.81	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.111	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.04	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	28	1000	20000	50000
Total Dissolved Solids	600	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	83.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**21**			
Client Sample No	**WS 38**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0-0-1.0**			
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.31	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	52	500	-	-
PAH Sum of 6 (mg/kg)	2.18	-	-	-
PAH Sum of 17 (mg/kg)	4.19	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.18	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	5	10	150	500
Sulphate as SO4	138	1000	20000	50000
Total Dissolved Solids	980	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**24**			
Client Sample No	**WS 38**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.0-3.0**			
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.33	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	17	1000	20000	50000
Total Dissolved Solids	550	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	81.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**27**			
Client Sample No	**WS 38**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.8-1.0**			
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	7.00	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	33	500	-	-
PAH Sum of 6 (mg/kg)	12.16	-	-	-
PAH Sum of 17 (mg/kg)	23.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.37	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.07	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.04	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	362	1000	20000	50000
Total Dissolved Solids	1351	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**33**			
Client Sample No	**WS 39**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.08-1.0**			
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.38	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	537	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.29	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.14	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	71	1000	20000	50000
Total Dissolved Solids	870	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	90	500	800	1000

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Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**36**			
Client Sample No	**WS 39**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.0-2.0**			
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.50	3	5	6
Sum of BTEX (mg/kg)	0.219	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	2448	500	-	-
PAH Sum of 6 (mg/kg)	<2.20	-	-	-
PAH Sum of 17 (mg/kg)	7.78	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.84	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.18	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.07	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	5	1000	20000	50000
Total Dissolved Solids	790	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**39**			
Client Sample No	**WS 39**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.0-3.0**			
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.53	3	5	6
Sum of BTEX (mg/kg)	0.084	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	1004	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	1.17	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	1.25	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.17	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.06	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	15	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	21	1000	20000	50000
Total Dissolved Solids	880	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**42**			
Client Sample No	**WS 39**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.0-3.2**			
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.33	3	5	6
Sum of BTEX (mg/kg)	0.062	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	732	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	1.07	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.83	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.10	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	0.08	0.1	0.5	7
Zinc	0.06	4	50	200
Chloride	7	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	37	1000	20000	50000
Total Dissolved Solids	550	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**45**			
Client Sample No	**WS 39**			
Depth/Other	**1.20-1.45**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.54	3	5	6
Sum of BTEX (mg/kg)	0.232	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	3728	500	-	-
PAH Sum of 6 (mg/kg)	<2.20	-	-	-
PAH Sum of 17 (mg/kg)	7.48	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.56	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.20	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.06	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	4	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	15	1000	20000	50000
Total Dissolved Solids	960	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**48**			
Client Sample No	**WS 39**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.0-1.0**			
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.13	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	1.30	-	-	-
PAH Sum of 17 (mg/kg)	2.61	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.16	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.09	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	4	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	49	1000	20000	50000
Total Dissolved Solids	760	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13350**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**6**			
Client Sample No	**WS 36**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.0-1.0**			
Sample Date	**28/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.01	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.78	-	-	-
PAH Sum of 17 (mg/kg)	1.46	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.254	0.5	2	25
Barium	0.06	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	0.020	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.10	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	9	800	15000	25000
Fluoride	6	10	150	500
Sulphate as SO4	173	1000	20000	50000
Total Dissolved Solids	1230	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	60	500	800	1000

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Reference: B967/1

Location: Emmet Rd

Contact: Richard Thompson

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/13350	1	WS 36	0.08-1.0	1-3	No interpretation possible
20/13350	1	WS 36	0.0-1.0	4-6	No interpretation possible
20/13350	1	WS 36	1.0-2.0	7-9	No interpretation possible
20/13350	1	WS 36	2.0-2.5	10-12	Degraded diesel
20/13350	1	WS 37	0.08-1.0	13-15	PAH's
20/13350	1	WS 37	0-0-1.0	16-18	No interpretation possible
20/13350	1	WS 38	0-0-1.0	19-21	PAH's & Possible lubricating oil
20/13350	1	WS 38	2.0-3.0	22-24	No interpretation possible
20/13350	1	WS 38	0.8-1.0	25-27	PAH's & Possible lubricating oil
20/13350	1	WS 39	0.08-1.0	31-33	Degraded diesel
20/13350	1	WS 39	1.0-2.0	34-36	Degraded diesel
20/13350	1	WS 39	2.0-3.0	37-39	Degraded diesel
20/13350	1	WS 39	3.0-3.2	40-42	Degraded diesel
20/13350	1	WS 39	1.20-1.45	43-45	Degraded diesel
20/13350	1	WS 39	0.0-1.0	46-48	No interpretation possible

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Rd

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
20/13350	1	WS 36	0.08-1.0	1-3	TM160/PM110	pH > 4.00
20/13350	1	WS 36	0.0-1.0	4-6	TM160/PM110	pH > 4.00
20/13350	1	WS 36	0.0-1.0	4-6	TM160/PM110	pH < 10.00
20/13350	1	WS 36	1.0-2.0	7-9	TM160/PM110	pH > 4.00
20/13350	1	WS 36	1.0-2.0	7-9	TM160/PM110	pH < 10.00
20/13350	1	WS 36	2.0-2.5	10-12	TM160/PM110	pH > 4.00
20/13350	1	WS 36	2.0-2.5	10-12	TM160/PM110	pH < 10.00
20/13350	1	WS 37	0.08-1.0	13-15	TM21/PM24	Asbestos detected in sample
20/13350	1	WS 37	0.08-1.0	13-15	TM160/PM110	pH > 4.00
20/13350	1	WS 37	0.08-1.0	13-15	TM160/PM110	pH < 10.00
20/13350	1	WS 37	0.08-1.0	13-15	TM22/PM0	Asbestos detected in sample
20/13350	1	WS 37	0-0-1.0	16-18	TM160/PM110	pH > 4.00
20/13350	1	WS 37	0-0-1.0	16-18	TM160/PM110	pH < 10.00
20/13350	1	WS 38	0-0-1.0	19-21	TM160/PM110	pH > 4.00
20/13350	1	WS 38	0-0-1.0	19-21	TM160/PM110	pH < 10.00
20/13350	1	WS 38	2.0-3.0	22-24	TM160/PM110	pH > 4.00
20/13350	1	WS 38	2.0-3.0	22-24	TM160/PM110	pH < 10.00
20/13350	1	WS 38	0.8-1.0	25-27	TM160/PM110	pH > 4.00
20/13350	1	WS 38	0.8-1.0	25-27	TM160/PM110	pH < 10.00
20/13350	1	WS 39	0.08-1.0	31-33	TM160/PM110	pH > 4.00
20/13350	1	WS 39	0.08-1.0	31-33	TM160/PM110	pH < 10.00
20/13350	1	WS 39	1.0-2.0	34-36	TM160/PM110	pH > 4.00
20/13350	1	WS 39	1.0-2.0	34-36	TM160/PM110	pH < 10.00
20/13350	1	WS 39	2.0-3.0	37-39	TM160/PM110	pH > 4.00
20/13350	1	WS 39	2.0-3.0	37-39	TM160/PM110	pH < 10.00
20/13350	1	WS 39	3.0-3.2	40-42	TM160/PM110	pH > 4.00
20/13350	1	WS 39	3.0-3.2	40-42	TM160/PM110	pH < 10.00
20/13350	1	WS 39	1.20-1.45	43-45	TM160/PM110	pH > 4.00
20/13350	1	WS 39	1.20-1.45	43-45	TM160/PM110	pH < 10.00
20/13350	1	WS 39	0.0-1.0	46-48	TM160/PM110	pH > 4.00
20/13350	1	WS 39	0.0-1.0	46-48	TM160/PM110	pH < 10.00

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Rd
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 20/13350						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

Please include all sections of this report if it is reproduced

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/13350

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x10 Dilution

EMT Job No: 20/13350

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/13350

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM89	Preparation of positive asbestos samples for Eltra analysis			AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.			AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21	As received solid samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

EMT Job No: 20/13350

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM129	A hot hydrochloric acid digest is performed on an as received sample, and the resulting liquor is analysed.			AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248 First edition (2006)	PM42	Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes

EMT Job No: 20/13350

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM61	As received solid samples are extracted with hot water in a 20:1 ratio of water to soil ready for analysis by ICP.			AR	Yes
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM160	Titrimetric determination of acid reserve to pH 4.0 or alkali reserve to pH 10.0 based on method C14.2 Canadian Government (2013).	PM110	Preparation of a 10% (w/w) aqueous solution of soil in distilled water			AR	No
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	

EMT Job No: 20/13350

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

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O'Connor Sutton Cronin & Assoc. Ltd
9 Prussia Street
Dublin 7
Ireland

Attention :	Richard Thompson
Date :	14th October, 2020
Your reference :	B967/1
Our reference :	Test Report 20/13444 Batch 1
Location :	Emmet Road
Date samples received :	1st October, 2020
Status :	Final report
Issue :	1.2

Twenty one samples were received for analysis on 1st October, 2020 of which twenty one were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Lucas Halliwell
Project Co-ordinator

Please include all sections of this report if it is reproduced

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13444

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS43	WS43	WS43	WS43	WS42	WS42	WS42	WS42	WS41	WS41			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.50	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.50	0.00-1.00	0.80-1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020			
Antimony	2	2	2	1	2	2	2	2	2	1	<1	mg/kg	TM30/PM15
Arsenic #	19.9	8.6	10.1	6.7	9.8	12.2	8.4	9.5	19.9	5.7	<0.5	mg/kg	TM30/PM15
Barium #	108	68	80	47	55	91	99	41	63	39	<1	mg/kg	TM30/PM15
Cadmium #	1.6	1.5	1.9	1.3	2.1	2.1	1.9	1.4	1.3	1.3	<0.1	mg/kg	TM30/PM15
Chromium #	61.7	57.8	46.2	38.4	41.8	44.5	37.0	27.3	57.0	53.6	<0.5	mg/kg	TM30/PM15
Copper #	67	24	34	22	27	31	28	29	26	16	<1	mg/kg	TM30/PM15
Lead #	57	25	47	26	15	13	11	14	31	8	<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	5.3	5.2	5.1	4.2	3.4	5.3	4.7	3.9	3.9	4.3	<0.1	mg/kg	TM30/PM15
Nickel #	39.5	27.1	38.4	28.5	32.0	41.3	39.0	44.1	28.4	20.7	<0.7	mg/kg	TM30/PM15
Selenium #	1	<1	3	3	<1	1	1	3	<1	<1	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	580	278	1067	1374	372	418	242	834	606	559	<50	mg/kg	TM50/PM29
Water Soluble Boron #	1.3	0.6	0.8	0.7	0.5	0.5	0.5	0.7	1.0	0.5	<0.1	mg/kg	TM74/PM32
Zinc #	136	76	99	61	83	88	69	64	84	52	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.23	<0.03	0.19	0.17	<0.03	<0.03	<0.03	<0.03	0.14	<0.03	<0.03	mg/kg	TM4/PM8
Anthracene #	0.06	<0.04	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.32	<0.03	0.35	0.14	<0.03	<0.03	<0.03	<0.03	0.19	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	0.31	<0.03	0.29	0.13	<0.03	<0.03	<0.03	<0.03	0.18	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.23	<0.06	0.21	0.09	<0.06	<0.06	<0.06	<0.06	0.15	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	0.22	<0.02	0.18	0.07	<0.02	<0.02	<0.02	<0.02	0.12	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	0.37	<0.07	0.26	0.09	<0.07	<0.07	<0.07	<0.07	0.19	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.21	<0.04	0.14	0.05	<0.04	<0.04	<0.04	<0.04	0.10	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	0.13	<0.04	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.15	<0.04	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	1.18	<0.22	0.91	0.28	<0.22	<0.22	<0.22	<0.22	0.63	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	2.23	<0.64	1.83	0.82	<0.64	<0.64	<0.64	<0.64	1.22	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.27	<0.05	0.19	0.06	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.10	<0.02	0.07	0.03	<0.02	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	89	87	79	76	92	89	83	89	89	90	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13444

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS43	WS43	WS43	WS43	WS42	WS42	WS42	WS42	WS41	WS41			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.50	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.50	0.00-1.00	0.80-1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020			
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13444

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS43	WS43	WS43	WS43	WS42	WS42	WS42	WS42	WS41	WS41			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.50	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.50	0.00-1.00	0.80-1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020			
Phenol #	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	15.1	9.6	14.5	15.0	14.1	9.3	14.2	14.9	13.2	9.7	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	13.2	8.8	12.7	13.0	12.4	8.5	12.4	12.9	11.6	8.8	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	61.7	57.8	46.2	38.4	41.8	44.5	37.0	27.3	57.0	53.6	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	2.03	6.04	0.74	0.68	0.42	0.29	0.44	0.88	0.76	0.33	<0.02	%	TM21/PM24
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	<1	4	2	2	1	<1	<1	2	1	1	<1	mg/kg	TM108/PM114
Loss on Ignition #	5.0	2.4	1.9	1.4	1.8	1.9	1.9	2.1	2.9	1.3	<1.0	%	TM22/PM0
pH #	8.15	8.64	8.28	8.56	8.55	8.49	8.31	8.42	8.28	8.52	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1036	0.0968	0.1086	0.1036	0.1048	0.1012	0.1051	0.104	0.1055	0.0997		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13444

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	LOD/LOR	Units	Method No.
Sample ID	WS41	WS41	WS40	WS40	WS40	WS40	WS44	WS44	WS44	WS44			
Depth	1.00-1.50	2.00-2.50	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.40	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020			
Antimony	2	1	2	1	1	2	2	2	2	2	<1	mg/kg	TM30/PM15
Arsenic #	7.1	9.5	13.4	10.2	7.6	8.9	15.7	10.7	11.1	11.4	<0.5	mg/kg	TM30/PM15
Barium #	102	30	160	150	53	42	74	84	93	83	<1	mg/kg	TM30/PM15
Cadmium #	1.8	1.2	2.1	2.3	1.9	1.8	1.5	1.7	2.3	2.4	<0.1	mg/kg	TM30/PM15
Chromium #	51.2	27.1	55.3	48.2	40.3	43.0	47.9	47.6	47.6	43.6	<0.5	mg/kg	TM30/PM15
Copper #	18	19	38	19	23	26	34	33	29	37	<1	mg/kg	TM30/PM15
Lead #	12	10	204	27	15	12	63	49	25	20	<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	5.4	2.4	4.9	5.1	4.4	5.3	4.3	4.9	5.5	5.2	<0.1	mg/kg	TM30/PM15
Nickel #	31.8	25.6	36.8	33.9	33.5	36.3	31.8	32.3	39.1	42.8	<0.7	mg/kg	TM30/PM15
Selenium #	1	4	2	<1	<1	1	<1	<1	2	2	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	297	2385	949	437	406	258	605	553	439	469	<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.4	0.8	1.7	1.2	0.7	0.7	1.6	1.8	1.4	1.0	<0.1	mg/kg	TM74/PM32
Zinc #	75	52	112	88	80	78	107	90	94	101	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	<0.03	0.09	0.06	<0.03	<0.03	0.07	<0.03	0.05	<0.03	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	<0.03	0.15	0.07	<0.03	<0.03	0.12	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03	0.14	0.06	<0.03	<0.03	0.12	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	0.11	<0.06	<0.06	<0.06	0.12	<0.06	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	<0.02	0.11	0.04	<0.02	<0.02	0.08	<0.02	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07	0.20	<0.07	<0.07	<0.07	0.15	<0.07	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04	0.11	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	<0.22	0.60	<0.22	<0.22	<0.22	0.47	<0.22	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	1.05	<0.64	<0.64	<0.64	0.86	<0.64	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	0.14	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	0.06	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	96	90	87	90	85	89	89	89	92	85	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	<30	<30	35	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13444

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	LOD/LOR	Units	Method No.
Sample ID	WS41	WS41	WS40	WS40	WS40	WS40	WS44	WS44	WS44	WS44			
Depth	1.00-1.50	2.00-2.50	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.40	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020			
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	10.5	<0.2	<0.2	4.7	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4	24	<4	<4	12	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	35	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	<10	<10	25	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1 SV	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	<0.005 SV	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13444

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	LOD/LOR	Units	Method No.
Sample ID	WS41	WS41	WS40	WS40	WS40	WS40	WS44	WS44	WS44	WS44			
Depth	1.00-1.50	2.00-2.50	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.40	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020			
Phenol #	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	14.9	18.0	24.2	17.1	16.1	13.0	15.5	16.7	14.2	12.9	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	12.9	15.3	19.5	14.6	13.9	11.5	13.4	14.3	12.4	11.4	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	51.2	27.1	55.3	48.2	40.3	43.0	47.9	47.6	47.6	43.6	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.29	0.45	1.88	0.74	0.46	0.35	12.92	1.27	0.75	0.50	<0.02	%	TM21/PM24
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	2	95	2	2	2	1	<1	<1	1	<1	<1	mg/kg	TM108/PM114
Loss on Ignition #	1.4	<1.0	5.8	3.2	2.0	1.7	16.5	3.7	2.8	2.4	<1.0	%	TM22/PM0
pH #	8.67	8.01	8.25	8.60	8.64	8.50	8.48	8.30	8.36	8.26	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.0977	0.1071	0.1098	0.1051	0.1056	0.1025	0.1056	0.1054	0.1037	0.1015		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13444

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	61-63										LOD/LOR	Units	Method No.
Sample ID	WS44												
Depth	3.00-3.40												
COC No / misc													
Containers	V J T												
Sample Date	29/09/2020												
Sample Type	Soil												
Batch Number	1												
Date of Receipt	01/10/2020												
Antimony	2										<1	mg/kg	TM30/PM15
Arsenic #	10.9										<0.5	mg/kg	TM30/PM15
Barium #	77										<1	mg/kg	TM30/PM15
Cadmium #	2.1										<0.1	mg/kg	TM30/PM15
Chromium #	51.2										<0.5	mg/kg	TM30/PM15
Copper #	32										<1	mg/kg	TM30/PM15
Lead #	22										<5	mg/kg	TM30/PM15
Mercury #	<0.1										<0.1	mg/kg	TM30/PM15
Molybdenum #	5.7										<0.1	mg/kg	TM30/PM15
Nickel #	47.7										<0.7	mg/kg	TM30/PM15
Selenium #	2										<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	509										<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.8										<0.1	mg/kg	TM74/PM32
Zinc #	96										<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04										<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03										<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05										<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04										<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03										<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04										<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03										<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03										<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06										<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02										<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07										<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04										<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04										<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04										<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04										<0.04	mg/kg	TM4/PM8
Coronene	<0.04										<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22										<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64										<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05										<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02										<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1										<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	86										<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30										<30	mg/kg	TM5/PM8/PM16

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13444

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	61-63										LOD/LOR	Units	Method No.
Sample ID	WS44												
Depth	3.00-3.40												
COC No / misc													
Containers	V J T												
Sample Date	29/09/2020												
Sample Type	Soil												
Batch Number	1												
Date of Receipt	01/10/2020												
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1										<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1										<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1										<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2										<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4										<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7										<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7										<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7										<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26										<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1										<0.1	mg/kg	TM36/PM12
>C10-C25	<10										<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10										<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1										<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1										<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1										<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2										<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4										<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7										<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7										<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7										<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26										<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52										<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1										<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10										<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10										<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005										<0.005	mg/kg	TM36/PM12
Benzene #	<0.005										<0.005	mg/kg	TM36/PM12
Toluene #	<0.005										<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005										<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005										<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005										<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005										<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005										<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005										<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005										<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005										<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005										<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005										<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035										<0.035	mg/kg	TM17/PM8

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13444

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	Sample ID	Depth	COC No / misc	Containers	Sample Date	Sample Type	Batch Number	Date of Receipt	LOD/LOR	Units	Method No.
	61-63	WS44	3.00-3.40		V J T	29/09/2020	Soil	1	01/10/2020			
Phenol #	<0.01									<0.01	mg/kg	TM26/PM21
Natural Moisture Content	15.3									<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	13.3									<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3									<0.3	mg/kg	TM38/PM20
Chromium III	51.2									<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5									<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.51									<0.02	%	TM21/PM24
Sulphide	<10									<10	mg/kg	TM107/PM45
Acid Reserve	NDP									<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP									<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	<1									<1	mg/kg	TM108/PM114
Loss on Ignition #	2.3									<1.0	%	TM22/PM0
pH #	8.33									<0.01	pH units	TM73/PM11
Mass of raw test portion	0.106										kg	NONE/PM17
Mass of dried test portion	0.09										kg	NONE/PM17

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13444

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS43	WS43	WS43	WS43	WS42	WS42	WS42	WS42	WS41	WS41			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.50	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.50	0.00-1.00	0.80-1.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020			
Dissolved Antimony #	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.006	<0.003	0.016	0.019	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.06	<0.03	0.16	0.19	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	<0.012	<0.012	0.014	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	<0.12	<0.12	0.14	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.015	0.015	0.037	0.016	0.005	0.011	0.016	0.016	0.004	0.005	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.15	0.15	0.37	0.16	0.05	0.11	0.16	0.16	0.04	0.05	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	0.15	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003	<0.003	0.004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	<0.03	0.04	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	0.4	<0.3	0.6	0.4	<0.3	<0.3	<0.3	0.4	0.4	<0.3	<0.3	mg/l	TM173/PM0
Fluoride	4	<3	6	4	<3	<3	<3	4	4	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	1.2	0.8	19.4	28.4	1.7	<0.5	0.6	2.2	1.0	<0.5	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	12	8	194	284	17	<5	6	22	10	<5	<5	mg/kg	TM38/PM0
Chloride #	0.4	<0.3	0.4	4.2	<0.3	<0.3	0.4	0.7	0.4	0.4	<0.3	mg/l	TM38/PM0
Chloride #	4	<3	4	42	<3	<3	4	7	4	4	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	<0.03	<0.03	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.4	<0.3	<0.3	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	4	2	2	4	2	3	<2	<2	3	<2	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	40	<20	20	40	20	30	<20	<20	30	<20	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	60	37	82	96	53	43	40	39	71	39	<35	mg/l	TM20/PM0
Total Dissolved Solids #	600	370	820	960	530	430	400	390	710	390	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13444

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	LOD/LOR	Units	Method No.
Sample ID	WS41	WS41	WS40	WS40	WS40	WS40	WS44	WS44	WS44	WS44			
Depth	1.00-1.50	2.00-2.50	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.40	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020			
Dissolved Antimony #	<0.002	0.003	<0.002	0.003	<0.002	<0.002	0.002	0.003	0.002	0.008	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	0.03	<0.02	0.03	<0.02	<0.02	0.02	0.03	0.02	0.08	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	0.0030	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	0.030	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	<0.003	0.061	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.004	0.011	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	<0.03	0.61	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	0.11	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	0.017	<0.012	<0.012	<0.012	<0.012	0.014	0.025	0.025	0.023	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	0.17	<0.12	<0.12	<0.12	<0.12	0.14	0.25	0.25	0.23	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.013	0.002	0.005	0.006	0.014	0.012	0.007	0.011	0.018	0.018	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.13	0.02	0.05	0.06	0.14	0.12	0.07	0.11	0.18	0.18	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	0.010	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	0.10	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	0.034	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	0.34	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003	<0.003	0.003	<0.003	<0.003	0.004	0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	<0.03	0.03	<0.03	<0.03	0.04	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	0.6	0.4	0.4	0.4	0.5	0.4	<0.3	0.3	0.3	<0.3	mg/l	TM173/PM0
Fluoride	<3	6	4	4	4	5	4	<3	3	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	<0.5	26.7	0.9	<0.5	0.5	1.4	6.6	4.8	4.3	5.2	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	<5	267	9	<5	<5	14	66	48	43	52	<5	mg/kg	TM38/PM0
Chloride #	0.3	12.0	0.5	<0.3	<0.3	<0.3	0.5	0.3	0.4	0.5	<0.3	mg/l	TM38/PM0
Chloride #	<3	120	5	<3	<3	<3	5	<3	4	5	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	<0.03	0.11	<0.03	0.03	0.03	0.03	<0.03	<0.03	0.03	0.05	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	<0.3	1.1	<0.3	0.3	<0.3	0.3	<0.3	<0.3	0.3	0.5	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	<2	<2	4	5	<2	<2	4	2	<2	<2	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	<20	<20	40	50	<20	<20	40	<20	<20	<20	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	<35	160	70	55	45	44	74	75	62	57	<35	mg/l	TM20/PM0
Total Dissolved Solids #	<350	1601	700	550	450	440	740	750	620	570	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13444

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	61-63										LOD/LOR	Units	Method No.
Sample ID	WS44												
Depth	3.00-3.40												
COC No / misc													
Containers	V J T												
Sample Date	29/09/2020												
Sample Type	Soil												
Batch Number	1												
Date of Receipt	01/10/2020												
Dissolved Antimony #	<0.002										<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02										<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025										<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025										<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.004										<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.04										<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012										<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12										<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005										<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005										<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015										<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015										<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007										<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07										<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005										<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05										<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.014										<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.14										<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002										<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02										<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003										<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03										<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003										<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03										<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001										<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001										<0.0001	mg/kg	TM61/PM0
Phenol	<0.01										<0.01	mg/l	TM26/PM0
Phenol	<0.1										<0.1	mg/kg	TM26/PM0
Fluoride	0.4										<0.3	mg/l	TM173/PM0
Fluoride	4										<3	mg/kg	TM173/PM0
Sulphate as SO4 #	2.6										<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	26										<5	mg/kg	TM38/PM0
Chloride #	0.5										<0.3	mg/l	TM38/PM0
Chloride #	5										<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.03										<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.3										<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	<2										<2	mg/l	TM60/PM0
Dissolved Organic Carbon	<20										<20	mg/kg	TM60/PM0
Total Dissolved Solids #	55										<35	mg/l	TM20/PM0
Total Dissolved Solids #	550										<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**3**			
Client Sample No	**WS43**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	2.03	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	1.18	-	-	-
PAH Sum of 17 (mg/kg)	2.23	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.06	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.15	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	4	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	12	1000	20000	50000
Total Dissolved Solids	600	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	92.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**6**			
Client Sample No	**WS43**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	6.04	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.15	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	8	1000	20000	50000
Total Dissolved Solids	370	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	82.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**9**			
Client Sample No	**WS43**			
Depth/Other	**1.00-2.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.74	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.91	-	-	-
PAH Sum of 17 (mg/kg)	1.83	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.16	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.37	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	4	800	15000	25000
Fluoride	6	10	150	500
Sulphate as SO4	194	1000	20000	50000
Total Dissolved Solids	820	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**12**			
Client Sample No	**WS43**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-2.50**			
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.68	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.28	-	-	-
PAH Sum of 17 (mg/kg)	0.82	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.19	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.16	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	0.15	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	42	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	284	1000	20000	50000
Total Dissolved Solids	960	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**15**			
Client Sample No	**WS42**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.42	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	17	1000	20000	50000
Total Dissolved Solids	530	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**18**			
Client Sample No	**WS42**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.29	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.11	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	430	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**21**			
Client Sample No	**WS42**			
Depth/Other	**1.00-2.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.44	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.16	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	4	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	6	1000	20000	50000
Total Dissolved Solids	400	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**24**			
Client Sample No	**WS42**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-2.50**			
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.88	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.16	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	7	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	22	1000	20000	50000
Total Dissolved Solids	390	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**27**			
Client Sample No	**WS41**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.76	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.63	-	-	-
PAH Sum of 17 (mg/kg)	1.22	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.04	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	4	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	10	1000	20000	50000
Total Dissolved Solids	710	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**30**			
Client Sample No	**WS41**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.33	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	4	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	390	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	92.3
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**33**			
Client Sample No	**WS41**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-1.50**			
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.29	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.030	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.13	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	<350	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	83.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**36**			
Client Sample No	**WS41**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-2.50**			
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.45	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.61	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.02	0.5	10	30
Nickel	0.10	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	0.34	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	120	800	15000	25000
Fluoride	6	10	150	500
Sulphate as SO4	267	1000	20000	50000
Total Dissolved Solids	1601	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	82.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**39**			
Client Sample No	**WS40**			
Depth/Other	**0.00-1.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.88	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.60	-	-	-
PAH Sum of 17 (mg/kg)	1.05	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	5	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	9	1000	20000	50000
Total Dissolved Solids	700	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**42**			
Client Sample No	**WS40**			
Depth/Other	**0.80-1.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.74	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.06	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	550	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**45**			
Client Sample No	**WS40**			
Depth/Other	**1.00-2.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.46	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.14	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	450	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**48**			
Client Sample No	**WS40**			
Depth/Other	**2.00-2.40**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.35	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.12	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	5	10	150	500
Sulphate as SO4	14	1000	20000	50000
Total Dissolved Solids	440	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	84.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**51**			
Client Sample No	**WS44**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	12.92	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	35	500	-	-
PAH Sum of 6 (mg/kg)	0.47	-	-	-
PAH Sum of 17 (mg/kg)	0.86	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.07	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	5	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	66	1000	20000	50000
Total Dissolved Solids	740	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**54**			
Client Sample No	**WS44**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.27	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.11	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	48	1000	20000	50000
Total Dissolved Solids	750	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**57**			
Client Sample No	**WS44**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.75	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.18	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	4	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	43	1000	20000	50000
Total Dissolved Solids	620	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**60**			
Client Sample No	**WS44**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.50	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.11	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.18	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.08	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	5	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	52	1000	20000	50000
Total Dissolved Solids	570	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	84.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13444**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**63**			
Client Sample No	**WS44**			
Depth/Other	**3.00-3.40**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**29/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.51	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.14	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	5	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	26	1000	20000	50000
Total Dissolved Solids	550	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/13444	1	WS43	0.00-1.00	1-3	No interpretation possible
20/13444	1	WS43	0.80-1.00	4-6	No interpretation possible
20/13444	1	WS43	1.00-2.00	7-9	No interpretation possible
20/13444	1	WS43	2.00-2.50	10-12	No interpretation possible
20/13444	1	WS42	0.00-1.00	13-15	No interpretation possible
20/13444	1	WS42	0.80-1.00	16-18	No interpretation possible
20/13444	1	WS42	1.00-2.00	19-21	No interpretation possible
20/13444	1	WS42	2.00-2.50	22-24	No interpretation possible
20/13444	1	WS41	0.00-1.00	25-27	No interpretation possible
20/13444	1	WS41	0.80-1.00	28-30	No interpretation possible
20/13444	1	WS41	1.00-1.50	31-33	No interpretation possible
20/13444	1	WS41	2.00-2.50	34-36	No interpretation possible
20/13444	1	WS40	0.00-1.00	37-39	No interpretation possible#
20/13444	1	WS40	0.80-1.00	40-42	No interpretation possible
20/13444	1	WS40	1.00-2.00	43-45	No interpretation possible
20/13444	1	WS40	2.00-2.40	46-48	No interpretation possible
20/13444	1	WS44	0.00-1.00	49-51	Degraded kerosene
20/13444	1	WS44	0.80-1.00	52-54	No interpretation possible
20/13444	1	WS44	1.00-2.00	55-57	No interpretation possible
20/13444	1	WS44	2.00-3.00	58-60	Degraded kerosene
20/13444	1	WS44	3.00-3.40	61-63	No interpretation possible

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
20/13444	1	WS43	0.00-1.00	1-3	TM160/PM110	pH > 4.00
20/13444	1	WS43	0.00-1.00	1-3	TM160/PM110	pH < 10.00
20/13444	1	WS43	0.80-1.00	4-6	TM160/PM110	pH > 4.00
20/13444	1	WS43	0.80-1.00	4-6	TM160/PM110	pH < 10.00
20/13444	1	WS43	1.00-2.00	7-9	TM160/PM110	pH > 4.00
20/13444	1	WS43	1.00-2.00	7-9	TM160/PM110	pH < 10.00
20/13444	1	WS43	2.00-2.50	10-12	TM160/PM110	pH > 4.00
20/13444	1	WS43	2.00-2.50	10-12	TM160/PM110	pH < 10.00
20/13444	1	WS42	0.00-1.00	13-15	TM160/PM110	pH > 4.00
20/13444	1	WS42	0.00-1.00	13-15	TM160/PM110	pH < 10.00
20/13444	1	WS42	0.80-1.00	16-18	TM160/PM110	pH > 4.00
20/13444	1	WS42	0.80-1.00	16-18	TM160/PM110	pH < 10.00
20/13444	1	WS42	1.00-2.00	19-21	TM160/PM110	pH > 4.00
20/13444	1	WS42	1.00-2.00	19-21	TM160/PM110	pH < 10.00
20/13444	1	WS42	2.00-2.50	22-24	TM160/PM110	pH > 4.00
20/13444	1	WS42	2.00-2.50	22-24	TM160/PM110	pH < 10.00
20/13444	1	WS41	0.00-1.00	25-27	TM160/PM110	pH > 4.00
20/13444	1	WS41	0.00-1.00	25-27	TM160/PM110	pH < 10.00
20/13444	1	WS41	0.80-1.00	28-30	TM160/PM110	pH > 4.00
20/13444	1	WS41	0.80-1.00	28-30	TM160/PM110	pH < 10.00
20/13444	1	WS41	1.00-1.50	31-33	TM160/PM110	pH > 4.00
20/13444	1	WS41	1.00-1.50	31-33	TM160/PM110	pH < 10.00
20/13444	1	WS41	2.00-2.50	34-36	TM160/PM110	pH > 4.00
20/13444	1	WS41	2.00-2.50	34-36	TM160/PM110	pH < 10.00
20/13444	1	WS40	0.00-1.00	37-39	TM160/PM110	pH > 4.00
20/13444	1	WS40	0.00-1.00	37-39	TM160/PM110	pH < 10.00
20/13444	1	WS40	0.80-1.00	40-42	TM160/PM110	pH > 4.00
20/13444	1	WS40	0.80-1.00	40-42	TM160/PM110	pH < 10.00
20/13444	1	WS40	1.00-2.00	43-45	TM160/PM110	pH > 4.00
20/13444	1	WS40	1.00-2.00	43-45	TM160/PM110	pH < 10.00
20/13444	1	WS40	2.00-2.40	46-48	TM160/PM110	pH > 4.00
20/13444	1	WS40	2.00-2.40	46-48	TM160/PM110	pH < 10.00
20/13444	1	WS44	0.00-1.00	49-51	TM160/PM110	pH > 4.00
20/13444	1	WS44	0.00-1.00	49-51	TM160/PM110	pH < 10.00
20/13444	1	WS44	0.80-1.00	52-54	TM160/PM110	pH > 4.00

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
20/13444	1	WS44	0.80-1.00	52-54	TM160/PM110	pH < 10.00
20/13444	1	WS44	1.00-2.00	55-57	TM160/PM110	pH > 4.00
20/13444	1	WS44	1.00-2.00	55-57	TM160/PM110	pH < 10.00
20/13444	1	WS44	2.00-3.00	58-60	TM160/PM110	pH > 4.00
20/13444	1	WS44	2.00-3.00	58-60	TM160/PM110	pH < 10.00
20/13444	1	WS44	3.00-3.40	61-63	TM160/PM110	pH > 4.00
20/13444	1	WS44	3.00-3.40	61-63	TM160/PM110	pH < 10.00

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 20/13444						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/13444

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/13444

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/13444

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21	As received solid samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes

EMT Job No: 20/13444

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248 First edition (2006)	PM42	Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes
TM160	Titrimetric determination of acid reserve to pH 4.0 or alkali reserve to pH 10.0 based on method C14.2 Canadian Government (2013).	PM110	Preparation of a 10% (w/w) aqueous solution of soil in distilled water			AR	No

EMT Job No: 20/13444

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

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O'Connor Sutton Cronin & Assoc. Ltd
9 Prussia Street
Dublin 7
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Attention :	Richard Thompson
Date :	14th October, 2020
Your reference :	B967/1
Our reference :	Test Report 20/13523 Batch 1
Location :	Emmet Road
Date samples received :	2nd October, 2020
Status :	Final report
Issue :	1

Twelve samples were received for analysis on 2nd October, 2020 of which twelve were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Phil Sommerton BSc
Senior Project Manager

Please include all sections of this report if it is reproduced

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13523

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS 45	WS 45	WS 45	WS 45	WS 45	WS 46	WS 46	WS 46	WS 46	WS 47			
Depth	0.8-1.0	0.0-1.0	1.0-2.0	2.0-3.0	3.0-3.4	0.8-1.0	1.0-2.0	2.0-2.5	0.0-1.0	0.8-1.0			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020			
Antimony	1	2	2	1	1	1	2	1	2	4	<1	mg/kg	TM30/PM15
Arsenic #	6.1	13.0	7.0	6.1	6.2	6.1	7.9	7.0	30.9	7.9	<0.5	mg/kg	TM30/PM15
Barium #	67	85	64	39	26	39	45	49	77	89	<1	mg/kg	TM30/PM15
Cadmium #	0.9	1.2	2.6	2.1	1.4	1.4	1.9	1.5	0.9	2.2	<0.1	mg/kg	TM30/PM15
Chromium #	52.1	71.0	52.0	48.4	46.2	53.6	43.3	34.0	83.9	97.9	<0.5	mg/kg	TM30/PM15
Copper #	13	25	19	22	18	20	22	25	29	96	<1	mg/kg	TM30/PM15
Lead #	29	44	14	11	9	16	11	11	65	319	<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	3.7	4.4	5.1	4.7	4.1	4.4	4.5	3.5	6.2	5.0	<0.1	mg/kg	TM30/PM15
Nickel #	15.1	28.9	31.3	25.5	24.8	29.5	30.4	31.1	28.8	49.4	<0.7	mg/kg	TM30/PM15
Selenium #	<1	<1	<1	4	2	<1	<1	5	1	<1	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	915	589	1020	367	1257	281	269	758	914	361	<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.4	0.6	0.4	0.4	0.4	0.5	0.6	0.9	1.1	0.9	<0.1	mg/kg	TM74/PM32
Zinc #	62	97	82	72	49	70	79	59	100	372	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.14	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	0.18	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.17	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.22	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.07	<0.03	<0.03	<0.03	<0.03	0.06	<0.03	<0.03	0.30	2.50	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.09	0.48	<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.16	0.06	<0.03	<0.03	<0.03	0.10	<0.03	<0.03	0.67	2.73	<0.03	mg/kg	TM4/PM8
Pyrene #	0.18	0.07	<0.03	<0.03	<0.03	0.09	<0.03	<0.03	0.61	2.46	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.09	<0.06	<0.06	<0.06	<0.06	0.06	<0.06	<0.06	0.34	0.87	<0.06	mg/kg	TM4/PM8
Chrysene #	0.10	0.06	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	0.39	1.24	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	0.14	0.15	<0.07	<0.07	<0.07	0.11	<0.07	<0.07	0.76	2.09	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.10	0.09	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	0.40	1.01	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.26	0.78	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.04	0.17	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.06	0.10	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.28	1.19	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.39	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	0.46	0.48	<0.22	<0.22	<0.22	0.26	<0.22	<0.22	2.37	7.80	<0.22	mg/kg	TM4/PM8
PAH 17 Total	0.90	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	4.17	16.62	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.10	0.11	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	0.55	1.50	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.04	0.04	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	0.21	0.59	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	96	95	97	92	96	93	94	92	92	93	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	44	<30	<30	<30	<30	<30	<30	<30	1845	<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13523

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS 45	WS 45	WS 45	WS 45	WS 45	WS 46	WS 46	WS 46	WS 46	WS 47			
Depth	0.8-1.0	0.0-1.0	1.0-2.0	2.0-3.0	3.0-3.4	0.8-1.0	1.0-2.0	2.0-2.5	0.0-1.0	0.8-1.0			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020			
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	10.3	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	49	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	20	<7	<7	<7	<7	<7	<7	<7	1572	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	24	<7	<7	<7	<7	<7	<7	<7	214	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	44	<26	<26	<26	<26	<26	<26	<26	1845	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	<10	<10	<10	<10	<10	284	<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	19	<10	<10	<10	<10	<10	<10	<10	1351	<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	121.1	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	19	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	65	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	39	<7	<7	<7	<7	<7	<7	<7	973	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	37	<7	<7	<7	<7	<7	<7	<7	258	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	76	<26	<26	<26	<26	<26	<26	<26	1436	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	120	<52	<52	<52	<52	<52	<52	<52	3281	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	<10	<10	531	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	40	<10	<10	<10	<10	<10	<10	<10	647	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.024	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.019	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	0.067	<0.035	mg/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13523

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS 45	WS 45	WS 45	WS 45	WS 45	WS 46	WS 46	WS 46	WS 46	WS 47			
Depth	0.8-1.0	0.0-1.0	1.0-2.0	2.0-3.0	3.0-3.4	0.8-1.0	1.0-2.0	2.0-2.5	0.0-1.0	0.8-1.0			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020			
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	11.5	13.3	9.9	9.5	8.6	7.7	14.5	13.5	12.1	20.7	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	10.3	11.8	9.0	8.7	7.9	7.1	12.7	11.9	10.8	17.2	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	52.1	71.0	52.0	48.4	46.2	53.6	43.3	34.0	83.9	97.9	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.27	0.82	0.26	0.48	0.43	0.31	0.34	0.74	1.07	3.39	<0.02	%	TM21/PM24
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	1	<1	1	8	8	<1	1	5	1	14	<1	mg/kg	TM108/PM114
Loss on Ignition #	1.3	3.0	1.3	1.2	<1.0	1.5	1.5	1.7	3.7	5.5	<1.0	%	TM22/PM0
pH #	7.81	8.06	8.76	8.72	6.48	8.99	8.81	8.75	8.65	8.41	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.101	0.1	0.0994	0.0989	0.0984	0.1007	0.0992	0.1022	0.1046	0.1121		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13523

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	31-33	34-36									LOD/LOR	Units	Method No.
Sample ID	WS 47	WS 47											
Depth	0.0-1.0	1.0-1.85											
COC No / misc													
Containers	V J T	V J T											
Sample Date	30/09/2020	30/09/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	02/10/2020	02/10/2020											
Antimony	3	2									<1	mg/kg	TM30/PM15
Arsenic #	13.2	12.2									<0.5	mg/kg	TM30/PM15
Barium #	81	94									<1	mg/kg	TM30/PM15
Cadmium #	2.3	2.1									<0.1	mg/kg	TM30/PM15
Chromium #	94.8	50.2									<0.5	mg/kg	TM30/PM15
Copper #	53	39									<1	mg/kg	TM30/PM15
Lead #	83	41									<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1									<0.1	mg/kg	TM30/PM15
Molybdenum #	5.1	5.3									<0.1	mg/kg	TM30/PM15
Nickel #	54.1	51.8									<0.7	mg/kg	TM30/PM15
Selenium #	2	3									<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	1453	420									<50	mg/kg	TM50/PM29
Water Soluble Boron #	1.0	0.6									<0.1	mg/kg	TM74/PM32
Zinc #	173	119									<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	0.05	0.06									<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.09	0.06									<0.03	mg/kg	TM4/PM8
Acenaphthene #	0.15	<0.05									<0.05	mg/kg	TM4/PM8
Fluorene #	0.11	0.05									<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.96	0.37									<0.03	mg/kg	TM4/PM8
Anthracene #	0.51	0.20									<0.04	mg/kg	TM4/PM8
Fluoranthene #	4.59	1.16									<0.03	mg/kg	TM4/PM8
Pyrene #	3.78	1.09									<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	1.31	0.72									<0.06	mg/kg	TM4/PM8
Chrysene #	1.78	0.77									<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	3.61	1.51									<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	1.92	0.87									<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	1.30	0.62									<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	0.21	0.14									<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	1.14	0.57									<0.04	mg/kg	TM4/PM8
Coronene	0.25	0.11									<0.04	mg/kg	TM4/PM8
PAH 6 Total #	12.56	4.73									<0.22	mg/kg	TM4/PM8
PAH 17 Total	21.76	8.30									<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	2.60	1.09									<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	1.01	0.42									<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1									<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	96	91									<0	%	TM4/PM8
Mineral Oil (C10-C40)	1742	58									<30	mg/kg	TM5/PM8/PM16

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All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13523

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36									LOD/LOR	Units	Method No.
Sample ID	WS 47	WS 47											
Depth	0.0-1.0	1.0-1.85											
COC No / misc													
Containers	V J T	V J T											
Sample Date	30/09/2020	30/09/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	02/10/2020	02/10/2020											
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1 SV	<0.1 SV									<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1 SV	<0.1 SV									<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1 SV	<0.1 SV									<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2									<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	8	<4									<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	21	9									<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	1590	49									<7	mg/kg	TM5/PM8/PM16
>C35-C40	123	<7									<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	1742	58									<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1 SV	<0.1 SV									<0.1	mg/kg	TM36/PM12
>C10-C25	245	20									<10	mg/kg	TM5/PM8/PM16
>C25-C35	1372	34									<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1 SV	<0.1 SV									<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1 SV	<0.1 SV									<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1 SV	<0.1 SV									<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2									<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4									<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	16	<7									<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	739	45									<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	135	<7									<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	890	45									<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	2632	103									<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1 SV	<0.1 SV									<0.1	mg/kg	TM36/PM12
>EC10-EC25	124	14									<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	632	33									<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005 SV	<0.005 SV									<0.005	mg/kg	TM36/PM12
Benzene #	<0.005 SV	<0.005 SV									<0.005	mg/kg	TM36/PM12
Toluene #	0.007 SV	<0.005 SV									<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005 SV	<0.005 SV									<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005 SV	<0.005 SV									<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005 SV	<0.005 SV									<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035									<0.035	mg/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13523

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	31-33	34-36									LOD/LOR	Units	Method No.
Sample ID	WS 47	WS 47											
Depth	0.0-1.0	1.0-1.85											
COC No / misc													
Containers	V J T	V J T											
Sample Date	30/09/2020	30/09/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	02/10/2020	02/10/2020											
Phenol #	0.01	<0.01									<0.01	mg/kg	TM26/PM21
Natural Moisture Content	16.8	14.9									<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	14.4	12.9									<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3									<0.3	mg/kg	TM38/PM20
Chromium III	94.8	50.2									<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5									<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	1.58	0.52									<0.02	%	TM21/PM24
Sulphide	<10	<10									<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP									<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP									<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	<1	2									<1	mg/kg	TM108/PM114
Loss on Ignition #	5.6	2.3									<1.0	%	TM22/PM0
pH #	8.72	8.49									<0.01	pH units	TM73/PM11
Mass of raw test portion	0.112	0.1022										kg	NONE/PM17
Mass of dried test portion	0.09	0.09										kg	NONE/PM17

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13523

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS 45	WS 45	WS 45	WS 45	WS 45	WS 46	WS 46	WS 46	WS 46	WS 47			
Depth	0.8-1.0	0.0-1.0	1.0-2.0	2.0-3.0	3.0-3.4	0.8-1.0	1.0-2.0	2.0-2.5	0.0-1.0	0.8-1.0			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020	02/10/2020			
Dissolved Antimony #	0.003	<0.002	0.003	<0.002	0.005	<0.002	<0.002	<0.002	0.003	0.007	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.03	<0.02	0.03	<0.02	0.05	<0.02	<0.02	<0.02	0.03	0.07	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	0.0027	<0.0025	<0.0025	<0.0025	0.0043	<0.0025	<0.0025	0.0127	0.0037	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	0.027	<0.025	<0.025	<0.025	0.043	<0.025	<0.025	0.127	0.037	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.009	0.004	<0.003	0.008	0.006	0.005	<0.003	0.003	0.005	0.010	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.09	0.04	<0.03	0.08	0.06	0.05	<0.03	0.03	0.05	0.10	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	0.0049	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.049	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	0.008	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.08	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.003	<0.002	0.009	0.019	0.012	0.004	0.008	0.019	0.004	0.002	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.03	<0.02	0.09	0.19	0.12	0.04	0.08	0.19	0.04	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	0.117	0.040	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	1.17	0.40	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	0.003	0.003	<0.003	<0.003	<0.003	0.004	<0.003	<0.003	0.004	0.008	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	0.03	0.03	<0.03	<0.03	<0.03	0.04	<0.03	<0.03	0.04	0.08	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.4	0.4	<0.3	<0.3	mg/l	TM173/PM0
Fluoride	<3	3	<3	<3	<3	<3	<3	4	4	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	2.3	1.5	<0.5	3.4	8.8	2.2	0.7	1.6	13.9	3.7	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	23	15	<5	34	88	22	7	16	139	37	<5	mg/kg	TM38/PM0
Chloride #	<0.3	<0.3	<0.3	1.7	6.5	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/l	TM38/PM0
Chloride #	<3	<3	<3	17	65	<3	<3	<3	<3	<3	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	<0.03	<0.03	0.04	0.09	0.04	<0.03	<0.03	<0.03	0.06	<0.03	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	<0.3	<0.3	0.4	0.9	0.4	<0.3	<0.3	<0.3	0.6	<0.3	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	2	3	2	3	<2	3	3	3	6	7	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	20	30	20	30	<20	30	30	30	60	70	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	69	63	<35	60	80	68	48	45	97	52	<35	mg/l	TM20/PM0
Total Dissolved Solids #	690	630	<350	600	800	680	480	450	970	520	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13523

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36									LOD/LOR	Units	Method No.
Sample ID	WS 47	WS 47											
Depth	0.0-1.0	1.0-1.85											
COC No / misc													
Containers	V J T	V J T											
Sample Date	30/09/2020	30/09/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	02/10/2020	02/10/2020											
Dissolved Antimony #	0.002	<0.002									<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.02	<0.02									<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025									<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025									<0.025	mg/kg	TM30/PM17
Dissolved Barium #	<0.003	0.009									<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	<0.03	0.09									<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	<0.012									<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	<0.12									<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005									<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005									<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	0.0066	<0.0015									<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	0.066	<0.015									<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007									<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07									<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005									<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05									<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.005	0.025									<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.05	0.25									<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002									<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02									<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003									<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03									<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	0.003	0.004									<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	0.03	0.04									<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001									<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001									<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01									<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1									<0.1	mg/kg	TM26/PM0
Fluoride	0.6	<0.3									<0.3	mg/l	TM173/PM0
Fluoride	6	<3									<3	mg/kg	TM173/PM0
Sulphate as SO4 #	11.5	11.2									<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	115	112									<5	mg/kg	TM38/PM0
Chloride #	0.5	2.7									<0.3	mg/l	TM38/PM0
Chloride #	5	27									<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.05	0.06									<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.5	0.6									<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	6	5									<2	mg/l	TM60/PM0
Dissolved Organic Carbon	60	50									<20	mg/kg	TM60/PM0
Total Dissolved Solids #	66	63									<35	mg/l	TM20/PM0
Total Dissolved Solids #	660	630									<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13523	Landfill Waste Acceptance Criteria Limits		
Sample No	3			
Client Sample No	WS 45	Inert	Stable Non-reactive	Hazardous
Depth/Other	0.8-1.0			
Sample Date	30/09/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	0.27	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.46	-	-	-
PAH Sum of 17 (mg/kg)	0.90	100	-	-

Eluate Analysis	10:1 concn leached	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg		
	A10			
	mg/kg	mg/kg		
Arsenic	<0.025	0.5	2	25
Barium	0.09	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.03	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	23	1000	20000	50000
Total Dissolved Solids	690	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13523**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**6**			
Client Sample No	**WS 45**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.0-1.0**			
Sample Date	**30/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.82	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	44	500	-	-
PAH Sum of 6 (mg/kg)	0.48	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.027	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	<0.02	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	15	1000	20000	50000
Total Dissolved Solids	630	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13523**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**9**			
Client Sample No	**WS 45**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.0-2.0**			
Sample Date	**30/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.26	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.09	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	<350	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13523	Landfill Waste Acceptance Criteria Limits		
Sample No	12			
Client Sample No	WS 45	Inert	Stable Non-reactive	Hazardous
Depth/Other	2.0-3.0			
Sample Date	30/09/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	0.48	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	10:1 concn leached A10 mg/kg	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg mg/kg		
Arsenic	<0.025	0.5	2	25
Barium	0.08	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.19	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	1.17	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	17	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	34	1000	20000	50000
Total Dissolved Solids	600	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13523**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**15**			
Client Sample No	**WS 45**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.0-3.4**			
Sample Date	**30/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.43	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.06	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.12	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.05	0.06	0.7	5
Selenium	0.40	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	65	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	88	1000	20000	50000
Total Dissolved Solids	800	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13523**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**18**			
Client Sample No	**WS 46**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.8-1.0**			
Sample Date	**30/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.31	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.26	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.043	0.5	2	25
Barium	0.05	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.04	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	22	1000	20000	50000
Total Dissolved Solids	680	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13523**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**21**			
Client Sample No	**WS 46**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.0-2.0**			
Sample Date	**30/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.34	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.08	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	7	1000	20000	50000
Total Dissolved Solids	480	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13523**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**24**			
Client Sample No	**WS 46**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.0-2.5**			
Sample Date	**30/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.74	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.19	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	16	1000	20000	50000
Total Dissolved Solids	450	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13523**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**27**			
Client Sample No	**WS 46**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.0-1.0**			
Sample Date	**30/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.07	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	2.37	-	-	-
PAH Sum of 17 (mg/kg)	4.17	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.127	0.5	2	25
Barium	0.05	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	0.049	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.04	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	139	1000	20000	50000
Total Dissolved Solids	970	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	60	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	80.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13523**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**30**			
Client Sample No	**WS 47**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.8-1.0**			
Sample Date	**30/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	3.39	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	0.067	1	-	-
Mineral Oil (mg/kg)	1845	500	-	-
PAH Sum of 6 (mg/kg)	7.80	-	-	-
PAH Sum of 17 (mg/kg)	16.62	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.037	0.5	2	25
Barium	0.10	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	0.08	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	<0.02	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.07	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.08	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	37	1000	20000	50000
Total Dissolved Solids	520	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	70	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	80.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13523**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**33**			
Client Sample No	**WS 47**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.0-1.0**			
Sample Date	**30/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.58	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	1742	500	-	-
PAH Sum of 6 (mg/kg)	12.56	-	-	-
PAH Sum of 17 (mg/kg)	21.76	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	0.066	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	5	800	15000	25000
Fluoride	6	10	150	500
Sulphate as SO4	115	1000	20000	50000
Total Dissolved Solids	660	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	60	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13523**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**36**			
Client Sample No	**WS 47**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.0-1.85**			
Sample Date	**30/09/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.52	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	58	500	-	-
PAH Sum of 6 (mg/kg)	4.73	-	-	-
PAH Sum of 17 (mg/kg)	8.30	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.09	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.25	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	27	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	112	1000	20000	50000
Total Dissolved Solids	630	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/13523	1	WS 45	0.8-1.0	1-3	No interpretation possible
20/13523	1	WS 45	0.0-1.0	4-6	Trace of possible taramc/bitumen
20/13523	1	WS 45	1.0-2.0	7-9	No interpretation possible
20/13523	1	WS 45	2.0-3.0	10-12	No interpretation possible
20/13523	1	WS 45	3.0-3.4	13-15	No interpretation possible
20/13523	1	WS 46	0.8-1.0	16-18	No interpretation possible
20/13523	1	WS 46	1.0-2.0	19-21	No interpretation possible[
20/13523	1	WS 46	2.0-2.5	22-24	No interpretation possible
20/13523	1	WS 46	0.0-1.0	25-27	No interpretation possible
20/13523	1	WS 47	0.8-1.0	28-30	Lubricating oil, Naturally occurring compounds & Possible PAH's
20/13523	1	WS 47	0.0-1.0	31-33	Lubricating oil
20/13523	1	WS 47	1.0-1.85	34-36	PAH's & Possible lubricating oil

Please include all sections of this report if it is reproduced

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
20/13523	1	WS 45	0.8-1.0	1-3	TM160/PM110	pH > 4.00
20/13523	1	WS 45	0.8-1.0	1-3	TM160/PM110	pH < 10.00
20/13523	1	WS 45	0.0-1.0	4-6	TM160/PM110	pH > 4.00
20/13523	1	WS 45	0.0-1.0	4-6	TM160/PM110	pH < 10.00
20/13523	1	WS 45	1.0-2.0	7-9	TM160/PM110	pH > 4.00
20/13523	1	WS 45	1.0-2.0	7-9	TM160/PM110	pH < 10.00
20/13523	1	WS 45	2.0-3.0	10-12	TM160/PM110	pH > 4.00
20/13523	1	WS 45	2.0-3.0	10-12	TM160/PM110	pH < 10.00
20/13523	1	WS 45	3.0-3.4	13-15	TM160/PM110	pH > 4.00
20/13523	1	WS 45	3.0-3.4	13-15	TM160/PM110	pH < 10.00
20/13523	1	WS 46	0.8-1.0	16-18	TM160/PM110	pH > 4.00
20/13523	1	WS 46	0.8-1.0	16-18	TM160/PM110	pH < 10.00
20/13523	1	WS 46	1.0-2.0	19-21	TM160/PM110	pH > 4.00
20/13523	1	WS 46	1.0-2.0	19-21	TM160/PM110	pH < 10.00
20/13523	1	WS 46	2.0-2.5	22-24	TM160/PM110	pH > 4.00
20/13523	1	WS 46	2.0-2.5	22-24	TM160/PM110	pH < 10.00
20/13523	1	WS 46	0.0-1.0	25-27	TM160/PM110	pH > 4.00
20/13523	1	WS 46	0.0-1.0	25-27	TM160/PM110	pH < 10.00
20/13523	1	WS 47	0.8-1.0	28-30	TM160/PM110	pH > 4.00
20/13523	1	WS 47	0.8-1.0	28-30	TM160/PM110	pH < 10.00
20/13523	1	WS 47	0.0-1.0	31-33	TM160/PM110	pH > 4.00
20/13523	1	WS 47	0.0-1.0	31-33	TM160/PM110	pH < 10.00
20/13523	1	WS 47	1.0-1.85	34-36	TM160/PM110	pH > 4.00
20/13523	1	WS 47	1.0-1.85	34-36	TM160/PM110	pH < 10.00

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 20/13523						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/13523

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/13523

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/13523

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21	As received solid samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes

EMT Job No: 20/13523

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes
TM160	Titrimetric determination of acid reserve to pH 4.0 or alkali reserve to pH 10.0 based on method C14.2 Canadian Government (2013).	PM110	Preparation of a 10% (w/w) aqueous solution of soil in distilled water			AR	No
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes

EMT Job No: 20/13523

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

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Attention :	Richard Thompson
Date :	15th October, 2020
Your reference :	B967/1
Our reference :	Test Report 20/13660 Batch 1
Location :	Emmet Road
Date samples received :	6th October, 2020
Status :	Final report
Issue :	1

Twelve samples were received for analysis on 6th October, 2020 of which twelve were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Bruce Leslie
Project Manager

Please include all sections of this report if it is reproduced

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13660

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS51	WS51	WS51	WS50	WS50	WS50	WS48	WS48	WS48	WS48			
Depth	0.80-1.00	0.00-1.00	1.00-1.70	0.80-1.00	0.00-1.00	1.00-2.00	0.80-1.00	0.00-1.00	1.30-2.00	2.40-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020			
Antimony	2	1	2	2	2	2	2	2	1	2	<1	mg/kg	TM30/PM15
Arsenic #	10.1	29.4	6.8	22.4	15.8	11.6	8.0	14.3	4.9	9.1	<0.5	mg/kg	TM30/PM15
Barium #	71	34	42	64	90	80	59	108	27	44	<1	mg/kg	TM30/PM15
Cadmium #	2.3	0.7	2.2	1.5	2.0	2.2	1.9	1.2	1.3	1.9	<0.1	mg/kg	TM30/PM15
Chromium #	43.6	35.8	37.3	41.0	46.9	39.9	59.9	53.5	40.0	35.7	<0.5	mg/kg	TM30/PM15
Copper #	34	19	26	30	28	34	20	39	15	23	<1	mg/kg	TM30/PM15
Lead #	17	15	11	24	31	20	15	67	9	11	<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	5.5	3.0	4.7	3.7	4.8	5.5	5.5	4.6	3.6	4.4	<0.1	mg/kg	TM30/PM15
Nickel #	45.3	18.4	27.3	33.4	39.0	47.1	29.6	31.2	20.5	31.7	<0.7	mg/kg	TM30/PM15
Selenium #	2	<1	3	<1	1	2	<1	1	<1	1	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	261	274	311	393	1382	312	302	526	314	410	<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.7	0.6	0.5	0.8	0.8	0.7	1.1	1.8	0.5	0.7	<0.1	mg/kg	TM74/PM32
Zinc #	93	65	65	90	95	100	69	128	49	67	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	0.34	<0.03	0.06	0.09	<0.03	<0.03	0.14	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	0.17	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	1.16	<0.03	0.08	0.13	<0.03	<0.03	0.24	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	0.87	<0.03	0.07	0.12	<0.03	<0.03	0.22	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	0.39	<0.06	<0.06	0.08	<0.06	<0.06	0.17	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	0.41	<0.02	0.05	0.07	<0.02	<0.02	0.18	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	0.42	<0.07	<0.07	0.13	<0.07	<0.07	0.31	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	0.18	<0.04	<0.04	0.07	<0.04	<0.04	0.17	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	0.10	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	0.10	<0.04	<0.04	<0.04	<0.04	<0.04	0.13	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	1.94	<0.22	<0.22	0.33	<0.22	<0.22	0.95	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	4.12	<0.64	<0.64	0.69	<0.64	<0.64	1.79	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	0.30	<0.05	<0.05	0.09	<0.05	<0.05	0.22	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	0.12	<0.02	<0.02	0.04	<0.02	<0.02	0.09	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	92	93	95	96	96	104	90	90	80	99	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13660

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS51	WS51	WS51	WS50	WS50	WS50	WS48	WS48	WS48	WS48			
Depth	0.80-1.00	0.00-1.00	1.00-1.70	0.80-1.00	0.00-1.00	1.00-2.00	0.80-1.00	0.00-1.00	1.30-2.00	2.40-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020			
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	<7	11	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	<10	11	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	11	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	40	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	<7	90	<7	<7	<7	37	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	25	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26	<26	166	<26	<26	<26	37	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52	<52	166	<52	<52	<52	<52	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	83	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10	<10	64	<10	<10	<10	25	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13660

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS51	WS51	WS51	WS50	WS50	WS50	WS48	WS48	WS48	WS48			
Depth	0.80-1.00	0.00-1.00	1.00-1.70	0.80-1.00	0.00-1.00	1.00-2.00	0.80-1.00	0.00-1.00	1.30-2.00	2.40-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020			
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	9.8	7.7	6.9	13.5	16.1	11.8	10.7	14.4	6.3	10.7	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	8.9	7.1	6.5	11.9	13.9	10.5	9.7	12.6	5.9	9.7	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	43.6	35.8	37.3	41.0	46.9	39.9	59.9	53.5	40.0	35.7	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.41	0.35	0.69	0.73	0.89	0.43	0.36	5.38	0.25	0.43	<0.02	%	TM21/PM24
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	<1	2	2	<1	11	<1	1	7	1	3	<1	mg/kg	TM108/PM114
Loss on Ignition #	2.1	1.8	2.0	2.4	4.6	2.3	1.9	5.2	<1.0	1.9	<1.0	%	TM22/PM0
pH #	8.80	8.49	8.76	8.78	8.42	8.70	8.76	8.38	8.83	8.87	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.0971	0.1016	0.1013	0.1034	0.1067	0.1018	0.1002	0.1043	0.0979	0.1021		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13660

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	31-33	34-36									LOD/LOR	Units	Method No.
Sample ID	WS49	WS49											
Depth	0.70-0.90	0.00-0.90											
COC No / misc													
Containers	V J T	V J T											
Sample Date	01/10/2020	01/10/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	06/10/2020	06/10/2020											
Antimony	2	2									<1	mg/kg	TM30/PM15
Arsenic #	11.1	45.3									<0.5	mg/kg	TM30/PM15
Barium #	75	134									<1	mg/kg	TM30/PM15
Cadmium #	1.7	4.1									<0.1	mg/kg	TM30/PM15
Chromium #	45.0	51.4									<0.5	mg/kg	TM30/PM15
Copper #	25	28									<1	mg/kg	TM30/PM15
Lead #	37	49									<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1									<0.1	mg/kg	TM30/PM15
Molybdenum #	4.3	4.0									<0.1	mg/kg	TM30/PM15
Nickel #	27.0	39.3									<0.7	mg/kg	TM30/PM15
Selenium #	<1	1									<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	1893	699									<50	mg/kg	TM50/PM29
Water Soluble Boron #	1.2	1.2									<0.1	mg/kg	TM74/PM32
Zinc #	79	115									<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.03	<0.03									<0.03	mg/kg	TM4/PM8
Acenaphthene #	0.08	<0.05									<0.05	mg/kg	TM4/PM8
Fluorene #	0.09	0.05									<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.87	0.50									<0.03	mg/kg	TM4/PM8
Anthracene #	0.14	0.09									<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.89	0.60									<0.03	mg/kg	TM4/PM8
Pyrene #	0.78	0.52									<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.36	0.27									<0.06	mg/kg	TM4/PM8
Chrysene #	0.38	0.31									<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	0.55	0.41									<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.25	0.20									<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	0.13	0.10									<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.17	0.15									<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
PAH 6 Total #	1.99	1.46									<0.22	mg/kg	TM4/PM8
PAH 17 Total	4.72	3.20									<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.40	0.30									<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.15	0.11									<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1									<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	97	92									<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30									<30	mg/kg	TM5/PM8/PM16

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All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13660

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	31-33	34-36									LOD/LOR	Units	Method No.
Sample ID	WS49	WS49											
Depth	0.70-0.90	0.00-0.90											
COC No / misc													
Containers	V J T	V J T											
Sample Date	01/10/2020	01/10/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	06/10/2020	06/10/2020											
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1 SV	<0.1									<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1 SV	<0.1									<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1 SV	<0.1									<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2									<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4									<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7									<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7									<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7									<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26									<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1 SV	<0.1									<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10									<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10									<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 #	<0.1 SV	<0.1									<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1 SV	<0.1									<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1 SV	<0.1									<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2									<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4									<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7									<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7									<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7									<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26									<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52									<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1 SV	<0.1									<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10									<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10									<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005 SV	<0.005									<0.005	mg/kg	TM36/PM12
Benzene #	<0.005 SV	<0.005									<0.005	mg/kg	TM36/PM12
Toluene #	<0.005 SV	<0.005									<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005 SV	<0.005									<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005 SV	<0.005									<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005 SV	<0.005									<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005									<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035									<0.035	mg/kg	TM17/PM8

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13660

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	31-33	34-36											
Sample ID	WS49	WS49											
Depth	0.70-0.90	0.00-0.90											
COC No / misc													
Containers	V J T	V J T											
Sample Date	01/10/2020	01/10/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	06/10/2020	06/10/2020											

Please see attached notes for all abbreviations and acronyms

			LOD/LOR	Units	Method No.
Phenol #	<0.01	0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	9.0	13.3	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	8.2	11.7	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	45.0	51.4	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.49	1.11	<0.02	%	TM21/PM24
Sulphide	<10	<10	<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	1	1	<1	mg/kg	TM108/PM114
Loss on Ignition #	2.8	4.1	<1.0	%	TM22/PM0
pH #	8.91	8.33	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.0992	0.1041		kg	NONE/PM17
Mass of dried test portion	0.09	0.09		kg	NONE/PM17

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13660

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30	LOD/LOR	Units	Method No.
Sample ID	WS51	WS51	WS51	WS50	WS50	WS50	WS48	WS48	WS48	WS48			
Depth	0.80-1.00	0.00-1.00	1.00-1.70	0.80-1.00	0.00-1.00	1.00-2.00	0.80-1.00	0.00-1.00	1.30-2.00	2.40-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020	06/10/2020			
Dissolved Antimony #	<0.002	<0.002	0.005	0.005	<0.002	<0.002	<0.002	0.002	<0.002	0.004	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	0.05	0.05	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	<0.003	0.003	<0.003	0.003	0.004	0.004	<0.003	0.011	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	<0.03	<0.03	<0.03	0.03	0.04	0.04	<0.03	0.11	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	<0.012	<0.012	0.017	<0.012	0.016	0.017	0.019	<0.012	<0.012	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	<0.12	<0.12	0.17	<0.12	0.16	0.17	0.19	<0.12	<0.12	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	0.0024	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	0.024	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.012	0.005	0.016	0.002	0.005	0.012	0.014	0.008	0.005	0.010	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.12	0.05	0.16	0.02	0.05	0.12	0.14	0.08	0.05	0.10	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	0.00004	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	0.0004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3	<0.3	<0.3	0.5	<0.3	<0.3	0.3	<0.3	0.3	<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	<3	<3	5	<3	<3	<3	<3	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	2.5	1.1	2.8	3.1	1.9	1.6	1.6	5.6	0.9	0.9	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	25	11	28	31	19	16	16	56	9	9	<5	mg/kg	TM38/PM0
Chloride #	<0.3	<0.3	0.7	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/l	TM38/PM0
Chloride #	<3	<3	7	<3	<3	<3	<3	<3	<3	<3	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	3	<2	2	4	5	3	<2	4	<2	<2	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	30	<20	20	40	50	30	<20	40	<20	<20	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	36	63	45	61	75	51	43	78	<35	38	<35	mg/l	TM20/PM0
Total Dissolved Solids #	360	630	450	610	750	510	430	780	<350	380	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

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All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/13660

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	31-33	34-36									LOD/LOR	Units	Method No.
Sample ID	WS49	WS49											
Depth	0.70-0.90	0.00-0.90											
COC No / misc													
Containers	V J T	V J T											
Sample Date	01/10/2020	01/10/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	06/10/2020	06/10/2020											
Dissolved Antimony #	<0.002	<0.002									<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02									<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	0.0094									<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	0.094									<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.006	0.004									<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.06	0.04									<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	<0.012									<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	<0.12									<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005									<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005									<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	0.0017	<0.0015									<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	0.017	<0.015									<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007									<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07									<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005									<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05									<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.008	0.004									<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.08	0.04									<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002									<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02									<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003									<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03									<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	0.004	0.003									<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	0.04	0.03									<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	0.00001	<0.00001									<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001									<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01									<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1									<0.1	mg/kg	TM26/PM0
Fluoride	0.3	0.3									<0.3	mg/l	TM173/PM0
Fluoride	<3	3									<3	mg/kg	TM173/PM0
Sulphate as SO4 #	5.3	2.4									<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	53	24									<5	mg/kg	TM38/PM0
Chloride #	<0.3	<0.3									<0.3	mg/l	TM38/PM0
Chloride #	<3	<3									<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	<0.03	<0.03									<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	<0.3	<0.3									<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	4	6									<2	mg/l	TM60/PM0
Dissolved Organic Carbon	40	60									<20	mg/kg	TM60/PM0
Total Dissolved Solids #	64	75									<35	mg/l	TM20/PM0
Total Dissolved Solids #	640	750									<350	mg/kg	TM20/PM0

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	92.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13660**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**3**			
Client Sample No	**WS51**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**01/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.41	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.12	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	25	1000	20000	50000
Total Dissolved Solids	360	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13660**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**6**			
Client Sample No	**WS51**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**01/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.35	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	1.94	-	-	-
PAH Sum of 17 (mg/kg)	4.12	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	11	1000	20000	50000
Total Dissolved Solids	630	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13660**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**9**			
Client Sample No	**WS51**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-1.70**			
Sample Date	**01/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.69	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.16	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.05	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	7	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	28	1000	20000	50000
Total Dissolved Solids	450	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13660**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**12**			
Client Sample No	**WS50**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**01/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.73	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	0.024	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0004	0.01	0.2	2
Molybdenum	0.02	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.05	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	31	1000	20000	50000
Total Dissolved Solids	610	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	84.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13660**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**15**			
Client Sample No	**WS50**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**01/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.89	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.33	-	-	-
PAH Sum of 17 (mg/kg)	0.69	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	5	10	150	500
Sulphate as SO4	19	1000	20000	50000
Total Dissolved Solids	750	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

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Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13660**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**18**			
Client Sample No	**WS50**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**01/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.43	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.12	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	16	1000	20000	50000
Total Dissolved Solids	510	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13660**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**21**			
Client Sample No	**WS48**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**01/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.36	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.14	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	16	1000	20000	50000
Total Dissolved Solids	430	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	20/13660	Landfill Waste Acceptance Criteria Limits		
Sample No	24			
Client Sample No	WS48	Inert	Stable Non-reactive	Hazardous
Depth/Other	0.00-1.00			
Sample Date	01/10/2020			
Batch No	1			
Solid Waste Analysis				
Total Organic Carbon (%)	5.38	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.95	-	-	-
PAH Sum of 17 (mg/kg)	1.79	100	-	-

Eluate Analysis	10:1 concn leached A10 mg/kg	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg mg/kg		
Arsenic	<0.025	0.5	2	25
Barium	0.11	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.08	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	56	1000	20000	50000
Total Dissolved Solids	780	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13660**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**27**			
Client Sample No	**WS48**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.30-2.00**			
Sample Date	**01/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.25	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	9	1000	20000	50000
Total Dissolved Solids	<350	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13660**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**30**			
Client Sample No	**WS48**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.40-3.00**			
Sample Date	**01/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.43	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.10	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.04	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	9	1000	20000	50000
Total Dissolved Solids	380	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13660**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**33**			
Client Sample No	**WS49**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.70-0.90**			
Sample Date	**01/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.49	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	1.99	-	-	-
PAH Sum of 17 (mg/kg)	4.72	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.06	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	0.017	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.08	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	53	1000	20000	50000
Total Dissolved Solids	640	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	86.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/13660**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**36**			
Client Sample No	**WS49**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-0.90**			
Sample Date	**01/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.11	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	1.46	-	-	-
PAH Sum of 17 (mg/kg)	3.20	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.094	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.04	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	24	1000	20000	50000
Total Dissolved Solids	750	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	60	500	800	1000

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/13660	1	WS51	0.80-1.00	1-3	No interpretation possible
20/13660	1	WS51	0.00-1.00	4-6	No interpretation possible
20/13660	1	WS51	1.00-1.70	7-9	No interpretation possible
20/13660	1	WS50	0.80-1.00	10-12	PAH's
20/13660	1	WS50	0.00-1.00	13-15	No interpretation possible
20/13660	1	WS50	1.00-2.00	16-18	No interpretation possible
20/13660	1	WS48	0.80-1.00	19-21	No interpretation possible
20/13660	1	WS48	0.00-1.00	22-24	PAH's
20/13660	1	WS48	1.30-2.00	25-27	No interpretation possible
20/13660	1	WS48	2.40-3.00	28-30	No interpretation possible
20/13660	1	WS49	0.70-0.90	31-33	No interpretation possible
20/13660	1	WS49	0.00-0.90	34-36	No interpretation possible

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
20/13660	1	WS51	0.80-1.00	1-3	TM160/PM110	pH > 4.00
20/13660	1	WS51	0.80-1.00	1-3	TM160/PM110	pH < 10.00
20/13660	1	WS51	0.00-1.00	4-6	TM160/PM110	pH > 4.00
20/13660	1	WS51	0.00-1.00	4-6	TM160/PM110	pH < 10.00
20/13660	1	WS51	1.00-1.70	7-9	TM160/PM110	pH > 4.00
20/13660	1	WS51	1.00-1.70	7-9	TM160/PM110	pH < 10.00
20/13660	1	WS50	0.80-1.00	10-12	TM160/PM110	pH > 4.00
20/13660	1	WS50	0.80-1.00	10-12	TM160/PM110	pH < 10.00
20/13660	1	WS50	0.00-1.00	13-15	TM160/PM110	pH > 4.00
20/13660	1	WS50	0.00-1.00	13-15	TM160/PM110	pH < 10.00
20/13660	1	WS50	1.00-2.00	16-18	TM160/PM110	pH > 4.00
20/13660	1	WS50	1.00-2.00	16-18	TM160/PM110	pH < 10.00
20/13660	1	WS48	0.80-1.00	19-21	TM160/PM110	pH > 4.00
20/13660	1	WS48	0.80-1.00	19-21	TM160/PM110	pH < 10.00
20/13660	1	WS48	0.00-1.00	22-24	TM160/PM110	pH > 4.00
20/13660	1	WS48	0.00-1.00	22-24	TM160/PM110	pH < 10.00
20/13660	1	WS48	1.30-2.00	25-27	TM160/PM110	pH > 4.00
20/13660	1	WS48	1.30-2.00	25-27	TM160/PM110	pH < 10.00
20/13660	1	WS48	2.40-3.00	28-30	TM160/PM110	pH > 4.00
20/13660	1	WS48	2.40-3.00	28-30	TM160/PM110	pH < 10.00
20/13660	1	WS49	0.70-0.90	31-33	TM160/PM110	pH > 4.00
20/13660	1	WS49	0.70-0.90	31-33	TM160/PM110	pH < 10.00
20/13660	1	WS49	0.00-0.90	34-36	TM160/PM110	pH > 4.00
20/13660	1	WS49	0.00-0.90	34-36	TM160/PM110	pH < 10.00

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 20/13660						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/13660

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/13660

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/13660

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21	As received solid samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes

EMT Job No: 20/13660

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes
TM160	Titrimetric determination of acid reserve to pH 4.0 or alkali reserve to pH 10.0 based on method C14.2 Canadian Government (2013).	PM110	Preparation of a 10% (w/w) aqueous solution of soil in distilled water			AR	No
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes

EMT Job No: 20/13660

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

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O'Connor Sutton Cronin & Assoc. Ltd
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Attention :	Richard Thompson
Date :	27th October, 2020
Your reference :	B967/1
Our reference :	Test Report 20/14108 Batch 1
Location :	Emmet Road
Date samples received :	14th October, 2020
Status :	Final report
Issue :	1.2

Twenty eight samples were received for analysis on 14th October, 2020 of which twenty six were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Lucas Halliwell
Project Co-ordinator

Please include all sections of this report if it is reproduced

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	16-18	19-21	22-24	25-27	28-30	31-33	LOD/LOR	Units	Method No.
Sample ID	TP19	TP19	TP19	TP19	TP27	TP27	TP27	TP27	TP35	TP35			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	0.80-1.00	1.50-2.00	2.00-3.00	3.00-3.20	0.00-0.85	0.80-0.85			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020			
Antimony	-	-	2	2	2	3	2	2	2	2	<1	mg/kg	TM30/PM15
Arsenic #	-	-	14.2	7.9	7.0	20.9	10.0	12.2	8.4	7.8	<0.5	mg/kg	TM30/PM15
Barium #	-	-	99	20	59	139	69	246	60	54	<1	mg/kg	TM30/PM15
Cadmium #	-	-	1.7	1.4	2.0	2.5	2.4	2.5	1.2	0.7	<0.1	mg/kg	TM30/PM15
Chromium #	-	-	43.1	46.0	42.6	36.9	34.6	34.5	50.2	53.4	<0.5	mg/kg	TM30/PM15
Copper #	-	-	25	21	25	40	34	36	85	159	<1	mg/kg	TM30/PM15
Lead #	-	-	20	12	15	18	128	18	24	25	<5	mg/kg	TM30/PM15
Mercury #	-	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	-	-	4.9	4.7	4.4	13.1	6.5	6.0	3.3	3.7	<0.1	mg/kg	TM30/PM15
Nickel #	-	-	32.4	21.1	25.6	45.8	34.8	42.6	27.4	19.0	<0.7	mg/kg	TM30/PM15
Selenium #	-	-	<1	<1	<1	10	3	3	<1	<1	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	-	-	252	217	291	1990	2787	1177	300	281	<50	mg/kg	TM50/PM29
Water Soluble Boron #	-	-	0.6	0.5	0.5	0.7	0.5	0.5	0.7	0.6	<0.1	mg/kg	TM74/PM32
Zinc #	-	-	86	66	78	105	75	95	90	79	<5	mg/kg	TM30/PM15
Antimony	1	1	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Arsenic	62.2	27.7	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Barium	111	84	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Cadmium	1.6	1.3	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Chromium	21.2	22.1	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Copper	39	39	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Lead	103	97	-	-	-	-	-	-	-	-	<5	mg/kg	TM30/PM62
Mercury	0.2	0.4	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Molybdenum	2.1	1.6	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Nickel	39.2	30.9	-	-	-	-	-	-	-	-	<0.7	mg/kg	TM30/PM62
Selenium	1	1	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Total Sulphate as SO4	1048	716	-	-	-	-	-	-	-	-	<50	mg/kg	TM50/PM129
Water Soluble Boron	1.2	1.2	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM74/PM61
Zinc	143	132	-	-	-	-	-	-	-	-	<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	16-18	19-21	22-24	25-27	28-30	31-33	LOD/LOR	Units	Method No.
Sample ID	TP19	TP19	TP19	TP19	TP27	TP27	TP27	TP27	TP35	TP35			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	0.80-1.00	1.50-2.00	2.00-3.00	3.00-3.20	0.00-0.85	0.80-0.85			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020			
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.19	0.19	<0.03	<0.03	0.04	<0.03	<0.03	<0.03	<0.03	0.26	<0.03	mg/kg	TM4/PM8
Anthracene #	0.05	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.34	0.39	0.05	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	0.36	<0.03	mg/kg	TM4/PM8
Pyrene #	0.30	0.35	0.05	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	0.33	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.16	0.21	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.20	<0.06	mg/kg	TM4/PM8
Chrysene #	0.19	0.23	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	0.21	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	0.31	0.39	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.32	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.16	0.20	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.16	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	0.10	0.12	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.10	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.12	0.12	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.12	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	1.03	1.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	1.06	<0.22	mg/kg	TM4/PM8
PAH 17 Total	1.92	2.25	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	2.13	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.22	0.28	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.23	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.09	0.11	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.09	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	99	99	96	97	93	102	89	89	96	93	<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	<30	46	<30	<30	<30	<30	<30	mg/kg	TM5/PM8/PM16
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	0.4	0.3 SV	<0.1 SV	0.7 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	1.5	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	9	21	10	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	8	23	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	13	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	<26	46	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	<0.1	<0.1	<0.1	0.4	0.3 SV	<0.1 SV	0.7 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	18	50	13	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	<10	<10	<10	<10	<10	<10	<10	13	<10	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	16-18	19-21	22-24	25-27	28-30	31-33	LOD/LOR	Units	Method No.
Sample ID	TP19	TP19	TP19	TP19	TP27	TP27	TP27	TP27	TP35	TP35			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	0.80-1.00	1.50-2.00	2.00-3.00	3.00-3.20	0.00-0.85	0.80-0.85			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020			
TPH CWG													
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	21	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	<7	<7	<7	<7	19	133	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	30	39	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26	<26	<26	<26	<26	<26	<26	49	193	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	<52	<52	<52	<52	<52	193	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	<10	<10	66	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10	<10	<10	<10	<10	<10	<10	18	126	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	0.007 SV	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	0.008 SV	<0.005	<0.005	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	16.1	17.0	17.7	18.4	10.2	14.7	8.8	11.2	10.3	9.3	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	13.8	14.6	15.0	15.6	9.2	12.8	8.1	10.0	9.4	8.5	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	-	-	43.1	46.0	42.6	36.9	34.6	34.5	50.2	53.4	<0.5	mg/kg	NONE/NONE
Chromium III	21.2	22.1	-	-	-	-	-	-	-	-	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	NDP	NDP	0.40	0.41	0.39	0.81	0.76	0.75	0.96	0.61	<0.02	%	TM21/PM24

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	16-18	19-21	22-24	25-27	28-30	31-33	LOD/LOR	Units	Method No.
Sample ID	TP19	TP19	TP19	TP19	TP27	TP27	TP27	TP27	TP35	TP35			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	0.80-1.00	1.50-2.00	2.00-3.00	3.00-3.20	0.00-0.85	0.80-0.85			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020			
Total Organic Carbon	1.80	1.36	-	-	-	-	-	-	-	-	<0.02	%	TM21/PM89
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	-	-	<1	<1	2	3	33	12	<1	3	<1	mg/kg	TM108/PM114
Elemental Sulphur	<1	<1	-	-	-	-	-	-	-	-	<1	mg/kg	TM108/PM8
Loss on Ignition #	NDP	NDP	1.8	1.4	1.4	1.6	1.2	1.9	2.7	1.9	<1.0	%	TM22/PM0
Loss on Ignition	3.1	2.9	-	-	-	-	-	-	-	-	<1.0	%	TM22/PM0
pH #	8.44	8.20	8.73	8.45	8.57	8.39	8.33	8.48	8.46	8.70	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1074	0.1088	0.1067	0.1148	0.1004	0.1046	0.0991	0.098	0.1028	0.0998		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	61-63	LOD/LOR	Units	Method No.
Sample ID	TP35	TP35	TP35	TP33	TP33	TP33	TP33	TP33	TP28	TP28			
Depth	1.00-2.00	2.00-3.00	3.00-3.20	0.20-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.20	1.00-2.00	2.00-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020			
Antimony	2	2	2	2	1	2	2	1	2	2	<1	mg/kg	TM30/PM15
Arsenic #	10.6	9.1	10.0	10.0	6.9	9.9	7.7	8.1	11.4	9.2	<0.5	mg/kg	TM30/PM15
Barium #	71	56	59	85	39	95	53	81	68	48	<1	mg/kg	TM30/PM15
Cadmium #	2.2	2.4	2.5	2.5	2.2	2.6	2.1	1.8	2.3	2.1	<0.1	mg/kg	TM30/PM15
Chromium #	35.9	43.6	33.2	43.2	36.1	41.6	37.3	38.4	38.2	36.4	<0.5	mg/kg	TM30/PM15
Copper #	29	35	32	24	21	29	27	24	35	31	<1	mg/kg	TM30/PM15
Lead #	13	18	14	18	67	14	12	16	17	17	<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	3.7	4.2	3.3	4.4	4.3	4.9	4.7	4.0	5.7	4.9	<0.1	mg/kg	TM30/PM15
Nickel #	32.6	37.4	34.1	32.2	27.5	35.4	29.6	32.6	38.3	36.1	<0.7	mg/kg	TM30/PM15
Selenium #	1	4	3	1	<1	2	3	2	<1	3	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	240	1228	1198	388	354	232	1122	1035	293	1600	<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.7	0.7	0.7	0.7	0.4	0.5	0.4	0.5	0.7	0.7	<0.1	mg/kg	TM74/PM32
Zinc #	75	84	79	77	82	95	76	60	84	86	<5	mg/kg	TM30/PM15
Antimony	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Arsenic	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Barium	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Cadmium	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Chromium	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	TM30/PM62
Copper	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Lead	-	-	-	-	-	-	-	-	-	-	<5	mg/kg	TM30/PM62
Mercury	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Molybdenum	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM30/PM62
Nickel	-	-	-	-	-	-	-	-	-	-	<0.7	mg/kg	TM30/PM62
Selenium	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM30/PM62
Total Sulphate as SO4	-	-	-	-	-	-	-	-	-	-	<50	mg/kg	TM50/PM129
Water Soluble Boron	-	-	-	-	-	-	-	-	-	-	<0.1	mg/kg	TM74/PM61
Zinc	-	-	-	-	-	-	-	-	-	-	<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	61-63	LOD/LOR	Units	Method No.
Sample ID	TP35	TP35	TP35	TP33	TP33	TP33	TP33	TP33	TP28	TP28			
Depth	1.00-2.00	2.00-3.00	3.00-3.20	0.20-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.20	1.00-2.00	2.00-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020			
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	0.16	0.21	0.14	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	0.17	<0.03	<0.03	<0.03	<0.03	0.44	0.17	0.09	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	0.11	<0.05	<0.05	<0.05	<0.05	0.32	0.15	0.09	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	0.56	<0.04	<0.04	<0.04	<0.04	1.32	0.61	0.34	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.94	<0.03	<0.03	<0.03	<0.03	2.65	1.15	0.66	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	0.11	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	<0.03	<0.03	<0.03	<0.03	0.11	0.06	0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Pyrene #	0.07	<0.03	<0.03	<0.03	<0.03	0.17	0.09	0.07	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	<0.02	<0.02	<0.02	<0.02	0.06	<0.02	0.02	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	mg/kg	TM4/PM8
PAH 17 Total	1.85	<0.64	<0.64	<0.64	<0.64	5.34	2.44	1.44	<0.64	<0.64	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	84	88	91	90	89	95	86	93	90	85	<0	%	TM4/PM8
Mineral Oil (C10-C40)	1185	<30	73	<30	199	1499	511	844	<30	<30	<30	mg/kg	TM5/PM8/PM16
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C6-C8 #	0.3	<0.1 SV	<0.1 SV	<0.1	<0.1	1.0	0.2 SV	<0.1 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C8-C10	5.2	<0.1 SV	<0.1 SV	<0.1	<0.1	15.1	4.5 SV	1.7 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C12 #	109.4	<0.2	6.0	<0.2	1.3	165.4	55.7	69.8	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	414	<4	29	<4	56	533	180	293	<4	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	457	<7	28	11	105	612	206	348	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	205	<7	10	<7	37	189	69	133	<7	<7	<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	1191	<26	73	<26	199	1516	515	846	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	5.5	<0.1 SV	<0.1 SV	<0.1	<0.1	16.1	4.7 SV	1.7 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>C10-C25	1088	<10	88	<10	213	1627	541	820	<10	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35	172	<10	<10	<10	<10	42	11	25	<10	<10	<10	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	61-63	LOD/LOR	Units	Method No.
Sample ID	TP35	TP35	TP35	TP33	TP33	TP33	TP33	TP33	TP28	TP28			
Depth	1.00-2.00	2.00-3.00	3.00-3.20	0.20-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.20	1.00-2.00	2.00-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020			
TPH CWG													
Aromatics													
>C5-EC7 #	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	0.2	<0.1 SV	<0.1 SV	<0.1	<0.1	0.7	0.2 SV	<0.1 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	45.0	<0.2	<0.2	<0.2	<0.2	67.8	24.2	27.8	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	264	<4	16	<4	7	403	145	207	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	340	<7	18	<7	56	501	183	277	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	155	<7	<7	<7	36	157	66	103	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	804	<26	34	<26	99	1130	418	615	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	1995	<52	107	<52	298	2646	933	1461	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	0.2	<0.1 SV	<0.1 SV	<0.1	<0.1	0.7	0.2 SV	<0.1 SV	<0.1	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC25	878	<10	33	<10	106	1178	422	592	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	25	<10	<10	<10	<10	18	<10	27	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	0.025	<0.005 SV	<0.005 SV	<0.005	<0.005	0.104	0.028 SV	0.007 SV	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	0.108	<0.005 SV	<0.005 SV	<0.005	<0.005	0.329	0.090 SV	0.020 SV	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
o-Xylene #	0.096	<0.005 SV	<0.005 SV	<0.005	<0.005	0.256	0.074 SV	0.021 SV	<0.005	<0.005 SV	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	12.0	11.5	11.6	12.0	11.3	14.6	10.7	13.1	12.5	13.2	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	10.7	10.3	10.4	10.7	10.2	12.7	9.7	11.6	11.1	11.7	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	35.9	43.6	33.2	43.2	36.1	41.6	37.3	38.4	38.2	36.4	<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	-	-	-	-	-	-	-	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.54	0.70	0.67	0.37	0.28	0.44	0.57	0.67	0.38	0.69	<0.02	%	TM21/PM24

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	61-63	LOD/LOR	Units	Method No.
Sample ID	TP35	TP35	TP35	TP33	TP33	TP33	TP33	TP33	TP28	TP28			
Depth	1.00-2.00	2.00-3.00	3.00-3.20	0.20-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.20	1.00-2.00	2.00-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020			
Total Organic Carbon	-	-	-	-	-	-	-	-	-	-	<0.02	%	TM21/PM89
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	-	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	-	NDP	NDP	<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	7	41	56	2	2	9	5	6	1	22	<1	mg/kg	TM108/PM114
Elemental Sulphur	-	-	-	-	-	-	-	-	-	-	<1	mg/kg	TM108/PM8
Loss on Ignition #	1.8	1.4	1.3	1.8	1.3	1.8	1.4	1.5	2.0	1.9	<1.0	%	TM22/PM0
Loss on Ignition	-	-	-	-	-	-	-	-	-	-	<1.0	%	TM22/PM0
pH #	8.33	8.74	8.67	8.46	8.24	7.97	8.13	8.21	8.30	8.31	<0.01	pH units	TM73/PM11
Mass of raw test portion	0.102	0.1005	0.1012	0.1023	0.1002	0.1024	0.0996	0.0991	0.105	0.1009		kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

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All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	67-69	70-72	73-75	76-78	79-81	82-84					LOD/LOR	Units	Method No.
Sample ID	TP49	TP49	TP49	TP50	TP51	TP51							
Depth	1.00-2.00	2.00-3.00	3.00-3.20	2.00-2.70	1.70-3.00	2.90-3.00							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	12/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020							
Antimony	2	2	2	2	2	2					<1	mg/kg	TM30/PM15
Arsenic #	12.8	14.7	12.4	12.8	10.7	11.6					<0.5	mg/kg	TM30/PM15
Barium #	64	72	67	63	50	39					<1	mg/kg	TM30/PM15
Cadmium #	2.3	2.4	2.5	2.4	2.0	2.2					<0.1	mg/kg	TM30/PM15
Chromium #	38.3	32.5	40.2	33.3	67.1	40.0					<0.5	mg/kg	TM30/PM15
Copper #	37	38	34	34	31	39					<1	mg/kg	TM30/PM15
Lead #	29	19	16	17	15	15					<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					<0.1	mg/kg	TM30/PM15
Molybdenum #	5.1	4.7	5.3	5.1	4.5	5.0					<0.1	mg/kg	TM30/PM15
Nickel #	41.8	41.3	42.2	40.6	53.2	37.3					<0.7	mg/kg	TM30/PM15
Selenium #	<1	3	6	4	4	7					<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	340	862	1744	3717	1117	2434					<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.7	0.8	0.7	0.5	0.5	0.6					<0.1	mg/kg	TM74/PM32
Zinc #	101	102	89	97	93	88					<5	mg/kg	TM30/PM15
Antimony	-	-	-	-	-	-					<1	mg/kg	TM30/PM62
Arsenic	-	-	-	-	-	-					<0.5	mg/kg	TM30/PM62
Barium	-	-	-	-	-	-					<1	mg/kg	TM30/PM62
Cadmium	-	-	-	-	-	-					<0.1	mg/kg	TM30/PM62
Chromium	-	-	-	-	-	-					<0.5	mg/kg	TM30/PM62
Copper	-	-	-	-	-	-					<1	mg/kg	TM30/PM62
Lead	-	-	-	-	-	-					<5	mg/kg	TM30/PM62
Mercury	-	-	-	-	-	-					<0.1	mg/kg	TM30/PM62
Molybdenum	-	-	-	-	-	-					<0.1	mg/kg	TM30/PM62
Nickel	-	-	-	-	-	-					<0.7	mg/kg	TM30/PM62
Selenium	-	-	-	-	-	-					<1	mg/kg	TM30/PM62
Total Sulphate as SO4	-	-	-	-	-	-					<50	mg/kg	TM50/PM129
Water Soluble Boron	-	-	-	-	-	-					<0.1	mg/kg	TM74/PM61
Zinc	-	-	-	-	-	-					<5	mg/kg	TM30/PM62

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	67-69	70-72	73-75	76-78	79-81	82-84					LOD/LOR	Units	Method No.
Sample ID	TP49	TP49	TP49	TP50	TP51	TP51							
Depth	1.00-2.00	2.00-3.00	3.00-3.20	2.00-2.70	1.70-3.00	2.90-3.00							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	12/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020							
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.24	0.03	<0.03	<0.03	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Anthracene #	0.05	<0.04	<0.04	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.20	0.03	<0.03	<0.03	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Pyrene #	0.18	0.03	<0.03	<0.03	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	0.10	<0.06	<0.06	<0.06	<0.06	<0.06					<0.06	mg/kg	TM4/PM8
Chrysene #	0.09	<0.02	<0.02	<0.02	<0.02	<0.02					<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	0.11	<0.07	<0.07	<0.07	<0.07	<0.07					<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.07	<0.04	<0.04	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
PAH 6 Total #	0.38	<0.22	<0.22	<0.22	<0.22	<0.22					<0.22	mg/kg	TM4/PM8
PAH 17 Total	1.04	<0.64	<0.64	<0.64	<0.64	<0.64					<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.08	<0.05	<0.05	<0.05	<0.05	<0.05					<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.03	<0.02	<0.02	<0.02	<0.02	<0.02					<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1					<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	89	92	93	99	87	91					<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	<30	<30	<30	<30	<30					<30	mg/kg	TM5/PM8/PM16
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2					<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4					<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	<7	<7					<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	<7	<7					<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7					<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	<26	<26	<26	<26	<26					<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C10-C25	<10	<10	<10	<10	<10	<10					<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	<10	<10	<10	<10					<10	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	67-69	70-72	73-75	76-78	79-81	82-84	LOD/LOR	Units	Method No.
Sample ID	TP49	TP49	TP49	TP50	TP51	TP51			
Depth	1.00-2.00	2.00-3.00	3.00-3.20	2.00-2.70	1.70-3.00	2.90-3.00			
COC No / misc									
Containers	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	12/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1			
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020			
TPH CWG									
Aromatics									
>C5-EC7 #	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	<26	<26	<26	<26	<26	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	<52	<52	<52	<52	<52	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV	<0.1 SV	<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	<10	<10	<10	<10	<10	<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	<0.005 SV	<0.005 SV	<0.005 SV	<0.005 SV	<0.005 SV	<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	mg/kg	TM17/PM8
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	TM26/PM21
Natural Moisture Content	13.3	14.7	10.0	8.3	10.0	8.3	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	11.8	12.8	9.1	7.7	9.1	7.7	<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	mg/kg	TM38/PM20
Chromium III	38.3	32.5	40.2	33.3	67.1	40.0	<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	-	-	-	<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.52	0.68	0.72	0.72	0.47	0.73	<0.02	%	TM21/PM24

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Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	67-69	70-72	73-75	76-78	79-81	82-84					LOD/LOR	Units	Method No.
Sample ID	TP49	TP49	TP49	TP50	TP51	TP51							
Depth	1.00-2.00	2.00-3.00	3.00-3.20	2.00-2.70	1.70-3.00	2.90-3.00							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	12/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020							
Total Organic Carbon	-	-	-	-	-	-					<0.02	%	TM21/PM89
Sulphide	<10	<10	<10	<10	<10	<10					<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	-	-	-	NDP					<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	-	-	-	NDP					<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	<1	<1	5	6	11	24					<1	mg/kg	TM108/PM114
Elemental Sulphur	-	-	-	-	-	-					<1	mg/kg	TM108/PM8
Loss on Ignition #	2.2	2.0	1.7	1.2	1.4	1.3					<1.0	%	TM22/PM0
Loss on Ignition	-	-	-	-	-	-					<1.0	%	TM22/PM0
pH #	8.65	8.70	8.55	8.41	8.45	8.37					<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1038	0.1009	0.1014	0.0984	0.0973	0.0992						kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09						kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	16-18	19-21	22-24	25-27	28-30	31-33	LOD/LOR	Units	Method No.
Sample ID	TP19	TP19	TP19	TP19	TP27	TP27	TP27	TP27	TP35	TP35			
Depth	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	0.80-1.00	1.50-2.00	2.00-3.00	3.00-3.20	0.00-0.85	0.80-0.85			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020			
Dissolved Antimony #	0.005	0.002	<0.002	<0.002	<0.002	<0.002	0.005	0.005	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.05	0.02	<0.02	<0.02	<0.02	<0.02	0.05	0.05	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	0.0062	0.0113	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0028	<0.0025	0.0072	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	0.062	0.113	<0.025	<0.025	<0.025	<0.025	<0.025	0.028	<0.025	0.072	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.006	0.004	<0.003	<0.003	0.026	0.015	0.091	0.056	0.006	0.006	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.06	0.04	<0.03	<0.03	0.26	0.15	0.91	0.56	0.06	0.06	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	0.0018	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	0.018	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	0.010	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.10	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.005	0.004	0.010	0.006	0.012	0.026	0.029	0.027	0.006	0.005	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.05	0.04	0.10	0.06	0.12	0.26	0.29	0.27	0.06	0.05	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.021	0.019	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.21	0.19	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	0.004	0.004	0.004	0.003	<0.003	0.003	0.004	<0.003	0.004	0.004	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	0.04	0.04	0.04	<0.03	<0.03	<0.03	0.04	<0.03	0.04	0.04	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3	0.3	<0.3	0.3	0.5	0.4	0.4	0.4	0.3	<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	3	<3	3	5	4	4	4	3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	1.7	2.0	4.6	0.9	2.4	<0.5	28.9	20.3	1.5	12.2	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	17	20	46	9	24	<5	289	203	15	122	<5	mg/kg	TM38/PM0
Chloride #	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	6.4	7.2	<0.3	<0.3	<0.3	mg/l	TM38/PM0
Chloride #	3	<3	<3	<3	<3	<3	64	72	<3	<3	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.13	<0.03	<0.03	0.03	<0.03	0.06	0.32	0.47	<0.03	0.07	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	1.3	<0.3	<0.3	<0.3	<0.3	0.6	3.2	4.7	<0.3	0.7	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	4	2	<2	<2	4	<2	<2	<2	5	4	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	40	20	<20	<20	40	<20	<20	<20	50	40	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	87	77	62	48	68	58	119	92	79	79	<35	mg/l	TM20/PM0
Total Dissolved Solids #	870	770	620	480	680	580	1190	920	790	790	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

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All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	34-36	37-39	40-42	43-45	46-48	49-51	52-54	55-57	58-60	61-63	LOD/LOR	Units	Method No.
Sample ID	TP35	TP35	TP35	TP33	TP33	TP33	TP33	TP33	TP28	TP28			
Depth	1.00-2.00	2.00-3.00	3.00-3.20	0.20-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.20	1.00-2.00	2.00-3.00			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020			
Dissolved Antimony #	0.004	0.017	0.013	<0.002	<0.002	0.003	0.010	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.04	0.17	0.13	<0.02	<0.02	0.03	0.10	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.114	0.057	0.062	0.006	0.017	0.105	0.072	0.103	0.007	0.017	<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	1.14	0.57	0.62	0.06	0.17	1.05	0.72	1.03	0.07	0.17	<0.03	mg/kg	TM30/PM17
Dissolved Boron #	0.014	<0.012	<0.012	<0.012	0.012	<0.012	<0.012	<0.012	0.021	0.014	<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	0.14	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	0.21	0.14	<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.055	0.009	0.012	0.005	0.007	0.023	0.014	0.014	0.036	0.022	<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.55	0.09	0.12	0.05	0.07	0.23	0.14	0.14	0.36	0.22	<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	0.028	0.029	<0.003	<0.003	<0.003	0.023	0.018	0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	0.28	0.29	<0.03	<0.03	<0.03	0.23	0.18	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	0.004	0.004	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	0.04	0.04	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM26/PM0
Fluoride	2.0	1.0	0.9	<0.3	<0.3	<0.3	<0.3	<0.3	0.4	<0.3	<0.3	mg/l	TM173/PM0
Fluoride	20	10	9	<3	<3	<3	<3	<3	4	<3	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	0.8	15.0	17.7	1.7	3.2	1.2	5.4	14.9	7.3	22.3	<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	8	150	177	17	32	12	54	149	73	223	<5	mg/kg	TM38/PM0
Chloride #	<0.3	18.3	18.8	<0.3	<0.3	0.6	3.4	5.2	<0.3	5.5	<0.3	mg/l	TM38/PM0
Chloride #	<3	183	188	<3	<3	6	34	52	<3	55	<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.08	0.28	0.25	<0.03	<0.03	<0.03	0.05	<0.03	0.05	0.05	<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.8	2.8	2.5	<0.3	<0.3	<0.3	0.5	<0.3	0.5	0.5	<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	<2	<2	<2	<2	2	3	2	2	<2	<2	<2	mg/l	TM60/PM0
Dissolved Organic Carbon	<20	<20	<20	<20	<20	30	<20	20	<20	<20	<20	mg/kg	TM60/PM0
Total Dissolved Solids #	84	97	130	63	62	86	96	103	65	104	<35	mg/l	TM20/PM0
Total Dissolved Solids #	840	970	1300	630	620	860	960	1031	650	1040	<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14108

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	67-69	70-72	73-75	76-78	79-81	82-84					LOD/LOR	Units	Method No.
Sample ID	TP49	TP49	TP49	TP50	TP51	TP51							
Depth	1.00-2.00	2.00-3.00	3.00-3.20	2.00-2.70	1.70-3.00	2.90-3.00							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	12/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020	14/10/2020							
Dissolved Antimony #	<0.002	<0.002	<0.002	0.004	<0.002	<0.002					<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	<0.02	0.04	<0.02	<0.02					<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025					<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025					<0.025	mg/kg	TM30/PM17
Dissolved Barium #	<0.003	0.004	0.008	0.018	0.007	0.014					<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	<0.03	0.04	0.08	0.18	0.07	0.14					<0.03	mg/kg	TM30/PM17
Dissolved Boron #	0.021	0.019	0.018	<0.012	<0.012	<0.012					<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	0.21	0.19	0.18	<0.12	<0.12	<0.12					<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005					<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015					<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015					<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007					<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07					<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.011	0.029	0.032	0.022	0.025	0.016					<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.11	0.29	0.32	0.22	0.25	0.16					<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002					<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02					<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	0.015	0.026	0.010	0.014					<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	0.15	0.26	0.10	0.14					<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	0.003	<0.003	<0.003	<0.003	<0.003					<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	0.03	<0.03	<0.03	<0.03	<0.03					<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	0.00004	0.00001	0.00004					<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	0.0004	<0.0001	0.0004					<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					<0.1	mg/kg	TM26/PM0
Fluoride	0.4	<0.3	<0.3	<0.3	<0.3	<0.3					<0.3	mg/l	TM173/PM0
Fluoride	4	<3	<3	<3	<3	<3					<3	mg/kg	TM173/PM0
Sulphate as SO4 #	1.8	2.8	11.4	24.1	21.8	25.7					<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	18	28	114	241	218	257					<5	mg/kg	TM38/PM0
Chloride #	<0.3	0.7	5.9	11.4	8.2	10.1					<0.3	mg/l	TM38/PM0
Chloride #	<3	7	59	114	82	101					<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.03	0.03	0.03	0.05	0.04	0.05					<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.3	0.3	<0.3	0.5	0.4	0.5					<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	<2	2	<2	<2	<2	<2					<2	mg/l	TM60/PM0
Dissolved Organic Carbon	<20	20	<20	<20	<20	<20					<20	mg/kg	TM60/PM0
Total Dissolved Solids #	57	58	80	110	93	118					<35	mg/l	TM20/PM0
Total Dissolved Solids #	570	580	800	1100	930	1180					<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	83.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**3**			
Client Sample No	**TP19**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-1.00**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.80	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	1.03	-	-	-
PAH Sum of 17 (mg/kg)	1.92	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.062	0.5	2	25
Barium	0.06	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	0.018	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.05	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	17	1000	20000	50000
Total Dissolved Solids	870	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	82.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**6**			
Client Sample No	**TP19**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.36	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	1.22	-	-	-
PAH Sum of 17 (mg/kg)	2.25	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.113	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.04	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	20	1000	20000	50000
Total Dissolved Solids	770	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	84.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**9**			
Client Sample No	**TP19**			
Depth/Other	**1.00-2.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.40	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.10	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	46	1000	20000	50000
Total Dissolved Solids	620	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	78.3
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**12**			
Client Sample No	**TP19**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.41	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.06	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	9	1000	20000	50000
Total Dissolved Solids	480	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**18**			
Client Sample No	**TP27**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.39	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.26	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.12	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	24	1000	20000	50000
Total Dissolved Solids	680	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

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Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**21**			
Client Sample No	**TP27**			
Depth/Other	**1.50-2.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.81	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	46	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.15	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.26	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	5	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	580	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

		Landfill Waste Acceptance Criteria Limits		
EMT Job No	**20/14108**			
Sample No	**24**			
Client Sample No	**TP27**			
Depth/Other	**2.00-3.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.76	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.91	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0001	0.01	0.2	2
Molybdenum	0.29	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.05	0.06	0.7	5
Selenium	0.21	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	64	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	289	1000	20000	50000
Total Dissolved Solids	1190	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**27**			
Client Sample No	**TP27**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.20**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.75	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.028	0.5	2	25
Barium	0.56	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.27	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.05	0.06	0.7	5
Selenium	0.19	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	72	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	203	1000	20000	50000
Total Dissolved Solids	920	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**36**			
Client Sample No	**TP35**			
Depth/Other	**1.00-2.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.54	3	5	6
Sum of BTEX (mg/kg)	0.229	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	1185	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	1.85	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	1.14	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.55	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.04	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	20	10	150	500
Sulphate as SO4	8	1000	20000	50000
Total Dissolved Solids	840	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**39**			
Client Sample No	**TP35**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.70	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.57	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.09	0.5	10	30
Nickel	0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.17	0.06	0.7	5
Selenium	0.28	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	183	800	15000	25000
Fluoride	10	10	150	500
Sulphate as SO4	150	1000	20000	50000
Total Dissolved Solids	970	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

		Landfill Waste Acceptance Criteria Limits		
EMT Job No	**20/14108**			
Sample No	**42**			
Client Sample No	**TP35**			
Depth/Other	**3.00-3.20**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.67	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	73	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.62	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.12	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.13	0.06	0.7	5
Selenium	0.29	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	188	800	15000	25000
Fluoride	9	10	150	500
Sulphate as SO4	177	1000	20000	50000
Total Dissolved Solids	1300	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**45**			
Client Sample No	**TP33**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.20-1.00**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.37	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.06	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	17	1000	20000	50000
Total Dissolved Solids	630	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**48**			
Client Sample No	**TP33**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.28	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	199	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.17	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.07	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	32	1000	20000	50000
Total Dissolved Solids	620	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**51**			
Client Sample No	**TP33**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.44	3	5	6
Sum of BTEX (mg/kg)	0.689	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	1499	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	5.34	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	1.05	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.23	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.03	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	6	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	12	1000	20000	50000
Total Dissolved Solids	860	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**54**			
Client Sample No	**TP33**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.57	3	5	6
Sum of BTEX (mg/kg)	0.192	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	511	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	2.44	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.72	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.14	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.10	0.06	0.7	5
Selenium	0.23	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	34	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	54	1000	20000	50000
Total Dissolved Solids	960	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

		Landfill Waste Acceptance Criteria Limits		
EMT Job No	**20/14108**			
Sample No	**57**			
Client Sample No	**TP33**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.20**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.67	3	5	6
Sum of BTEX (mg/kg)	0.048	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	844	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	1.44	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	1.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.14	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.18	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	52	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	149	1000	20000	50000
Total Dissolved Solids	1031	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.9
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**60**			
Client Sample No	**TP28**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.38	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.07	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.36	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	73	1000	20000	50000
Total Dissolved Solids	650	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**63**			
Client Sample No	**TP28**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.69	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.17	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.22	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	55	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	223	1000	20000	50000
Total Dissolved Solids	1040	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**69**			
Client Sample No	**TP49**			
Depth/Other	**1.00-2.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**12/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.52	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	0.38	-	-	-
PAH Sum of 17 (mg/kg)	1.04	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.11	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	18	1000	20000	50000
Total Dissolved Solids	570	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**72**			
Client Sample No	**TP49**			
Depth/Other	**2.00-3.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**12/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.68	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.04	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.29	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.03	4	50	200
Chloride	7	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	28	1000	20000	50000
Total Dissolved Solids	580	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**75**			
Client Sample No	**TP49**			
Depth/Other	**3.00-3.20**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**12/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.72	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.08	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.32	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.15	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	59	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	114	1000	20000	50000
Total Dissolved Solids	800	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**78**			
Client Sample No	**TP50**			
Depth/Other	**2.00-2.70**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**12/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.72	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.18	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0004	0.01	0.2	2
Molybdenum	0.22	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.04	0.06	0.7	5
Selenium	0.26	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	114	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	241	1000	20000	50000
Total Dissolved Solids	1100	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	92.2
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**81**			
Client Sample No	**TP51**			
Depth/Other	**1.70-3.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**12/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.47	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.07	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.25	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.10	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	82	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	218	1000	20000	50000
Total Dissolved Solids	930	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Please include all sections of this report if it is reproduced

All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**84**			
Client Sample No	**TP51**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.90-3.00**			
Sample Date	**12/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.73	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.14	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	0.0004	0.01	0.2	2
Molybdenum	0.16	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	0.14	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	101	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	257	1000	20000	50000
Total Dissolved Solids	1180	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Please include all sections of this report if it is reproduced

All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.3
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**30**			
Client Sample No	**TP35**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.00-0.85**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.96	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.06	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.06	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	15	1000	20000	50000
Total Dissolved Solids	790	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	50	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	89.8
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14108**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**33**			
Client Sample No	**TP35**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-0.85**			
Sample Date	**09/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.61	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	1.06	-	-	-
PAH Sum of 17 (mg/kg)	2.13	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.072	0.5	2	25
Barium	0.06	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	0.10	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.04	4	50	200
Chloride	<3	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	122	1000	20000	50000
Total Dissolved Solids	790	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Please include all sections of this report if it is reproduced

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/14108	1	TP19	0.00-1.00	1-3	No interpretation possible
20/14108	1	TP19	0.80-1.00	4-6	No interpretation possible
20/14108	1	TP19	1.00-2.00	7-9	No interpretation possible
20/14108	1	TP19	2.00-3.00	10-12	No interpretation possible
20/14108	1	TP27	0.80-1.00	16-18	Possible trace of degraded diesel
20/14108	1	TP27	1.50-2.00	19-21	Possible trace of degraded diesel
20/14108	1	TP27	2.00-3.00	22-24	Possible slight trace of degraded diesel
20/14108	1	TP27	3.00-3.20	25-27	No interpretation possible
20/14108	1	TP35	0.00-0.85	28-30	Lubricating oil & Possible tarmac/bitumen
20/14108	1	TP35	0.80-0.85	31-33	Lubricating oil, PAH's & Possible tarmac/bitumen
20/14108	1	TP35	1.00-2.00	34-36	Degraded diesel
20/14108	1	TP35	2.00-3.00	37-39	No interpretation possible
20/14108	1	TP35	3.00-3.20	40-42	Degraded diesel
20/14108	1	TP33	0.20-1.00	43-45	No interpretation possible
20/14108	1	TP33	0.80-1.00	46-48	Degraded diesel
20/14108	1	TP33	1.00-2.00	49-51	Degraded diesel
20/14108	1	TP33	2.00-3.00	52-54	Degraded diesel
20/14108	1	TP33	3.00-3.20	55-57	Degraded diesel
20/14108	1	TP28	1.00-2.00	58-60	No interpretation possible
20/14108	1	TP28	2.00-3.00	61-63	No interpretation possible
20/14108	1	TP49	1.00-2.00	67-69	No interpretation possible
20/14108	1	TP49	2.00-3.00	70-72	No interpretation possible
20/14108	1	TP49	3.00-3.20	73-75	No interpretation possible
20/14108	1	TP50	2.00-2.70	76-78	No interpretation possible
20/14108	1	TP51	1.70-3.00	79-81	No interpretation possible
20/14108	1	TP51	2.90-3.00	82-84	No interpretation possible

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
20/14108	1	TP19	0.00-1.00	1-3	TM21/PM24	Asbestos detected in sample
20/14108	1	TP19	0.00-1.00	1-3	TM160/PM110	pH > 4.00
20/14108	1	TP19	0.00-1.00	1-3	TM160/PM110	pH < 10.00
20/14108	1	TP19	0.00-1.00	1-3	TM22/PM0	Asbestos detected in sample
20/14108	1	TP19	0.80-1.00	4-6	TM21/PM24	Asbestos detected in sample
20/14108	1	TP19	0.80-1.00	4-6	TM160/PM110	pH > 4.00
20/14108	1	TP19	0.80-1.00	4-6	TM160/PM110	pH < 10.00
20/14108	1	TP19	0.80-1.00	4-6	TM22/PM0	Asbestos detected in sample
20/14108	1	TP19	1.00-2.00	7-9	TM160/PM110	pH > 4.00
20/14108	1	TP19	1.00-2.00	7-9	TM160/PM110	pH < 10.00
20/14108	1	TP19	2.00-3.00	10-12	TM160/PM110	pH > 4.00
20/14108	1	TP19	2.00-3.00	10-12	TM160/PM110	pH < 10.00
20/14108	1	TP27	0.80-1.00	16-18	TM160/PM110	pH > 4.00
20/14108	1	TP27	0.80-1.00	16-18	TM160/PM110	pH < 10.00
20/14108	1	TP27	1.50-2.00	19-21	TM160/PM110	pH > 4.00
20/14108	1	TP27	1.50-2.00	19-21	TM160/PM110	pH < 10.00
20/14108	1	TP27	2.00-3.00	22-24	TM160/PM110	pH > 4.00
20/14108	1	TP27	2.00-3.00	22-24	TM160/PM110	pH < 10.00
20/14108	1	TP27	3.00-3.20	25-27	TM160/PM110	pH > 4.00
20/14108	1	TP27	3.00-3.20	25-27	TM160/PM110	pH < 10.00
20/14108	1	TP35	0.00-0.85	28-30	TM160/PM110	pH > 4.00
20/14108	1	TP35	0.00-0.85	28-30	TM160/PM110	pH < 10.00
20/14108	1	TP35	0.80-0.85	31-33	TM160/PM110	pH > 4.00
20/14108	1	TP35	0.80-0.85	31-33	TM160/PM110	pH < 10.00
20/14108	1	TP35	1.00-2.00	34-36	TM160/PM110	pH > 4.00
20/14108	1	TP35	1.00-2.00	34-36	TM160/PM110	pH < 10.00
20/14108	1	TP35	2.00-3.00	37-39	TM160/PM110	pH > 4.00
20/14108	1	TP35	2.00-3.00	37-39	TM160/PM110	pH < 10.00
20/14108	1	TP35	3.00-3.20	40-42	TM160/PM110	pH > 4.00
20/14108	1	TP35	3.00-3.20	40-42	TM160/PM110	pH < 10.00
20/14108	1	TP33	0.20-1.00	43-45	TM160/PM110	pH > 4.00
20/14108	1	TP33	0.20-1.00	43-45	TM160/PM110	pH < 10.00
20/14108	1	TP33	0.80-1.00	46-48	TM160/PM110	pH > 4.00
20/14108	1	TP33	0.80-1.00	46-48	TM160/PM110	pH < 10.00
20/14108	1	TP33	1.00-2.00	49-51	TM160/PM110	pH > 4.00

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
20/14108	1	TP33	1.00-2.00	49-51	TM160/PM110	pH < 10.00
20/14108	1	TP33	2.00-3.00	52-54	TM160/PM110	pH > 4.00
20/14108	1	TP33	2.00-3.00	52-54	TM160/PM110	pH < 10.00
20/14108	1	TP28	1.00-2.00	58-60	TM160/PM110	pH > 4.00
20/14108	1	TP28	1.00-2.00	58-60	TM160/PM110	pH < 10.00
20/14108	1	TP28	2.00-3.00	61-63	TM160/PM110	pH > 4.00
20/14108	1	TP28	2.00-3.00	61-63	TM160/PM110	pH < 10.00
20/14108	1	TP49	1.00-2.00	67-69	TM160/PM110	pH > 4.00
20/14108	1	TP49	1.00-2.00	67-69	TM160/PM110	pH < 10.00
20/14108	1	TP49	2.00-3.00	70-72	TM160/PM110	pH > 4.00
20/14108	1	TP49	2.00-3.00	70-72	TM160/PM110	pH < 10.00
20/14108	1	TP51	2.90-3.00	82-84	TM160/PM110	pH > 4.00
20/14108	1	TP51	2.90-3.00	82-84	TM160/PM110	pH < 10.00

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 20/14108						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/14108

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/14108

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/14108

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM89	Preparation of positive asbestos samples for Eltra analysis			AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.			AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21	As received solid samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

EMT Job No: 20/14108

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM129	A hot hydrochloric acid digest is performed on an as received sample, and the resulting liquor is analysed.			AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248 First edition (2006)	PM42	Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes

EMT Job No: 20/14108

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM61	As received solid samples are extracted with hot water in a 20:1 ratio of water to soil ready for analysis by ICP.			AR	Yes
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM160	Titrimetric determination of acid reserve to pH 4.0 or alkali reserve to pH 10.0 based on method C14.2 Canadian Government (2013).	PM110	Preparation of a 10% (w/w) aqueous solution of soil in distilled water			AR	No
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	

EMT Job No: 20/14108

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

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Attention :	Richard Thompson
Date :	28th October, 2020
Your reference :	B967/1
Our reference :	Test Report 20/14178 Batch 1
Location :	Emmet Road
Date samples received :	15th October, 2020
Status :	Final report
Issue :	2

Ten samples were received for analysis on 15th October, 2020 of which nine were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Phil Sommerton BSc
Senior Project Manager

Please include all sections of this report if it is reproduced

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14178

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	19-21	22-24	25-27	28-30		LOD/LOR	Units	Method No.
Sample ID	TP 37	TP 37	TP 37	TP 40	TP 40	TP 09	TP 17	TP 22	TP 25				
Depth	1.00-2.00	2.00-3.00	3.00-3.20	2.40-3.00	3.00-3.20	0.80-1.00	0.80-1.00	0.80-1.00	0.80-1.00				
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T				
Sample Date	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020				
Antimony	1	1	<1	2	1	2	2	-	1		<1	mg/kg	TM30/PM15
Arsenic #	10.2	7.5	7.4	13.4	8.7	7.8	10.4	-	7.3		<0.5	mg/kg	TM30/PM15
Barium #	105	99	77	85	48	84	66	-	67		<1	mg/kg	TM30/PM15
Cadmium #	2.5	1.4	1.1	2.3	1.4	3.6	2.2	-	1.3		<0.1	mg/kg	TM30/PM15
Chromium #	38.3	35.9	35.0	43.0	38.3	55.7	44.2	-	46.8		<0.5	mg/kg	TM30/PM15
Copper #	21	20	17	29	26	23	25	-	16		<1	mg/kg	TM30/PM15
Lead #	12	12	11	59	22	17	16	-	18		<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1		<0.1	mg/kg	TM30/PM15
Molybdenum #	4.6	3.5	3.0	5.6	4.4	5.4	3.7	-	3.4		<0.1	mg/kg	TM30/PM15
Nickel #	36.2	26.7	32.2	40.8	36.9	37.6	38.8	-	30.2		<0.7	mg/kg	TM30/PM15
Selenium #	<1	2	1	1	2	1	<1	-	<1		<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	502	919	2466	782	564	482	413	-	410		<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.5	0.9	1.0	1.9	1.3	1.0	0.8	-	0.7		<0.1	mg/kg	TM74/PM32
Zinc #	79	57	46	107	65	80	84	-	66		<5	mg/kg	TM30/PM15
Antimony	-	-	-	-	-	-	-	4	-		<1	mg/kg	TM30/PM62
Arsenic	-	-	-	-	-	-	-	17.3	-		<0.5	mg/kg	TM30/PM62
Barium	-	-	-	-	-	-	-	145	-		<1	mg/kg	TM30/PM62
Cadmium	-	-	-	-	-	-	-	1.3	-		<0.1	mg/kg	TM30/PM62
Chromium	-	-	-	-	-	-	-	22.5	-		<0.5	mg/kg	TM30/PM62
Copper	-	-	-	-	-	-	-	52	-		<1	mg/kg	TM30/PM62
Lead	-	-	-	-	-	-	-	160	-		<5	mg/kg	TM30/PM62
Mercury	-	-	-	-	-	-	-	<0.1	-		<0.1	mg/kg	TM30/PM62
Molybdenum	-	-	-	-	-	-	-	2.3	-		<0.1	mg/kg	TM30/PM62
Nickel	-	-	-	-	-	-	-	28.2	-		<0.7	mg/kg	TM30/PM62
Selenium	-	-	-	-	-	-	-	1	-		<1	mg/kg	TM30/PM62
Total Sulphate as SO4	-	-	-	-	-	-	-	33273$_{AA}$	-		<50	mg/kg	TM50/PM129
Water Soluble Boron	-	-	-	-	-	-	-	1.7	-		<0.1	mg/kg	TM74/PM61
Zinc	-	-	-	-	-	-	-	237	-		<5	mg/kg	TM30/PM62

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14178

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	19-21	22-24	25-27	28-30		LOD/LOR	Units	Method No.
Sample ID	TP 37	TP 37	TP 37	TP 40	TP 40	TP 09	TP 17	TP 22	TP 25				
Depth	1.00-2.00	2.00-3.00	3.00-3.20	2.40-3.00	3.00-3.20	0.80-1.00	0.80-1.00	0.80-1.00	0.80-1.00				
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T				
Sample Date	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020				
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.12	<0.04		<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	0.05	<0.03	<0.03	<0.03	<0.03		<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	0.23	0.07	0.06	0.31	<0.04	<0.04	<0.04	<0.04		<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	0.15	0.07	0.10	0.49	<0.03	<0.03	0.09	<0.03		<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	0.04	<0.03	0.06	0.05	<0.03	<0.03	0.24	<0.03		<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	0.08	<0.03	0.05	0.07	<0.03	<0.03	0.24	<0.03		<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.15	<0.06		<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	0.03	<0.02	<0.02	0.04	<0.02	<0.02	0.17	<0.02		<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.33	<0.07		<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.17	<0.04		<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.08	<0.04		<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.12	<0.04		<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	0.94	<0.22		<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64	<0.64	<0.64	1.01	<0.64	<0.64	1.71	<0.64		<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.24	<0.05		<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.09	<0.02		<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1		<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	97	113	102	88	98	90	87	84	90		<0	%	TM4/PM8
Mineral Oil (C10-C40)	<30	704	526	439	1467	<30	<30	89	<30		<30	mg/kg	TM5/PM8/PM16
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1		<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1		<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	2.3 SV	0.7 SV	0.4	2.0 SV	<0.1	<0.1	<0.1 SV	<0.1		<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	71.3	44.3	54.5	158.5	<0.2	<0.2	<0.2	<0.2		<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 #	<4	265	194	161	537	<4	<4	<4	<4		<4	mg/kg	TM5/PM8/PM16
>C16-C21 #	<7	263	203	161	547	<7	<7	<7	<7		<7	mg/kg	TM5/PM8/PM16
>C21-C35 #	<7	105	85	62	224	<7	<7	89	<7		<7	mg/kg	TM5/PM8/PM16
>C35-C40	<7	<7	<7	<7	<7	<7	<7	<7	<7		<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40	<26	707	527	439	1469	<26	<26	89	<26		<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10	<0.1	2.3 SV	0.7 SV	0.4	2.0 SV	<0.1	<0.1	<0.1 SV	<0.1		<0.1	mg/kg	TM36/PM12
>C10-C25	<10	706	522	432	1477	<10	<10	<10	<10		<10	mg/kg	TM5/PM8/PM16
>C25-C35	<10	<10	<10	<10	33	<10	<10	72	<10		<10	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14178

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	19-21	22-24	25-27	28-30		LOD/LOR	Units	Method No.
Sample ID	TP 37	TP 37	TP 37	TP 40	TP 40	TP 09	TP 17	TP 22	TP 25				
Depth	1.00-2.00	2.00-3.00	3.00-3.20	2.40-3.00	3.00-3.20	0.80-1.00	0.80-1.00	0.80-1.00	0.80-1.00				
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T				
Sample Date	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020				
TPH CWG													
Aromatics													
>C5-EC7 #	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1		<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1 SV	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1		<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	0.1 SV	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1		<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	15.5	11.8	0.6	17.9	<0.2	<0.2	<0.2	<0.2		<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 #	<4	150	87	57	224	<4	<4	<4	<4		<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 #	<7	248	147	107	433	<7	<7	<7	<7		<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 #	<7	107	57	40	240	<7	<7	<7	<7		<7	mg/kg	TM5/PM8/PM16
>EC35-EC40	<7	<7	<7	<7	<7	<7	<7	<7	<7		<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40	<26	521	303	205	915	<26	<26	<26	<26		<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40)	<52	1228	830	644	2384	<52	<52	89	<52		<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 #	<0.1	0.1 SV	<0.1 SV	<0.1	<0.1 SV	<0.1	<0.1	<0.1 SV	<0.1		<0.1	mg/kg	TM36/PM12
>EC10-EC25	<10	537	305	216	900	<10	<10	<10	<10		<10	mg/kg	TM5/PM8/PM16
>EC25-EC35	<10	13	<10	<10	49	<10	<10	<10	<10		<10	mg/kg	TM5/PM8/PM16
MTBE #	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005		<0.005	mg/kg	TM36/PM12
Benzene #	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005		<0.005	mg/kg	TM36/PM12
Toluene #	<0.005	<0.005 SV	<0.005 SV	<0.005	<0.005 SV	<0.005	<0.005	<0.005 SV	<0.005		<0.005	mg/kg	TM36/PM12
Ethylbenzene #	<0.005	0.017 SV	<0.005 SV	<0.005	0.012 SV	<0.005	<0.005	<0.005 SV	<0.005		<0.005	mg/kg	TM36/PM12
m/p-Xylene #	<0.005	0.048 SV	0.011 SV	0.006	0.039 SV	<0.005	<0.005	0.015 SV	<0.005		<0.005	mg/kg	TM36/PM12
o-Xylene #	<0.005	0.046 SV	0.014 SV	<0.005	0.035 SV	<0.005	<0.005	<0.005 SV	<0.005		<0.005	mg/kg	TM36/PM12
PCB 28 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	mg/kg	TM17/PM8
PCB 52 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	mg/kg	TM17/PM8
PCB 101 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005		<0.005	mg/kg	TM17/PM8
PCB 118 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	mg/kg	TM17/PM8
PCB 138 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	mg/kg	TM17/PM8
PCB 153 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	mg/kg	TM17/PM8
PCB 180 #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	mg/kg	TM17/PM8
Total 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035		<0.035	mg/kg	TM17/PM8
Phenol #	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	mg/kg	TM26/PM21
Natural Moisture Content	11.5	10.1	9.6	21.6	22.4	16.0	16.8	33.2	13.1		<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	10.3	9.2	8.8	17.7	18.3	13.8	14.4	24.9	11.6		<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3		<0.3	mg/kg	TM38/PM20
Chromium III	38.3	35.9	35.0	43.0	38.3	55.7	44.2	-	46.8		<0.5	mg/kg	NONE/NONE
Chromium III	-	-	-	-	-	-	-	22.5	-		<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.34	0.56	0.55	1.35	1.09	0.54	0.34	NDP	0.38		<0.02	%	TM21/PM24

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14178

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	19-21	22-24	25-27	28-30				
Sample ID	TP 37	TP 37	TP 37	TP 40	TP 40	TP 09	TP 17	TP 22	TP 25				
Depth	1.00-2.00	2.00-3.00	3.00-3.20	2.40-3.00	3.00-3.20	0.80-1.00	0.80-1.00	0.80-1.00	0.80-1.00		Please see attached notes for all abbreviations and acronyms		
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T				
Sample Date	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020				
Total Organic Carbon	-	-	-	-	-	-	-	NDP	-		<0.02	%	TM21/PM89
Sulphide	<10	<10	<10	<10	<10	<10	<10	<10	<10		<10	mg/kg	TM107/PM45
Acid Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP		<0.000	gNaOH/100g	TM160/PM110
Alkali Reserve	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP		<0.000	gNaOH/100g	TM160/PM110
Elemental Sulphur	2	27	11	141	98	3	3	-	5		<1	mg/kg	TM108/PM114
Elemental Sulphur	-	-	-	-	-	-	-	164	-		<1	mg/kg	TM108/PM8
Loss on Ignition #	1.5	1.8	1.9	3.8	3.0	2.6	2.3	NDP	2.0		<1.0	%	TM22/PM0
Loss on Ignition	-	-	-	-	-	-	-	NDP	-		<1.0	%	TM22/PM0
pH #	8.67	8.16	8.26	8.16	7.99	8.64	8.55	7.44	8.69		<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1056	0.099	0.0976	0.1078	0.1122	0.1028	0.1037	0.1095	0.1021			kg	NONE/PM17
Mass of dried test portion	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09			kg	NONE/PM17

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson
EMT Job No: 20/14178

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6	7-9	10-12	13-15	19-21	22-24	25-27	28-30		LOD/LOR	Units	Method No.
Sample ID	TP 37	TP 37	TP 37	TP 40	TP 40	TP 09	TP 17	TP 22	TP 25				
Depth	1.00-2.00	2.00-3.00	3.00-3.20	2.40-3.00	3.00-3.20	0.80-1.00	0.80-1.00	0.80-1.00	0.80-1.00				
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T				
Sample Date	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020				
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil				
Batch Number	1	1	1	1	1	1	1	1	1				
Date of Receipt	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020	15/10/2020				
Dissolved Antimony #	<0.002	<0.002	<0.002	<0.002	0.008	0.002	<0.002	0.005	0.002		<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	0.05	<0.02		<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0056	<0.0025		<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.056	<0.025		<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.006	0.295	0.064	0.008	0.026	<0.003	<0.003	0.030	<0.003		<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.06	2.95	0.64	0.08	0.26	<0.03	<0.03	0.30	<0.03		<0.03	mg/kg	TM30/PM17
Dissolved Boron #	0.013	0.016	<0.012	0.036	0.052	0.014	0.016	0.048	<0.012		<0.012	mg/l	TM30/PM17
Dissolved Boron (A10) #	0.13	0.16	<0.12	0.36	0.52	0.14	0.16	0.48	<0.12		<0.12	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005		<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015		<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015		<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007		<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07		<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005		<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.013	0.016	0.018	0.049	0.082	0.005	0.003	0.009	0.003		<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.13	0.16	0.18	0.49	0.82	0.05	0.03	0.09	0.03		<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	0.002	0.006	<0.002	<0.002	0.006	<0.002		<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	0.02	0.06	<0.02	<0.02	0.06	<0.02		<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003		<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03		<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.014	<0.003		<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.14	<0.03		<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3	<0.3	0.3	<0.3	<0.3	<0.3	0.4	<0.3		<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	<3	3	<3	<3	<3	4	<3		<3	mg/kg	TM173/PM0
Sulphate as SO4 #	3.7	5.4	5.2	5.4	7.3	<0.5	4.5	1362.9	4.6		<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	37	54	52	54	73	<5	45	13625	46		<5	mg/kg	TM38/PM0
Chloride #	<0.3	1.6	2.8	1.3	0.4	<0.3	<0.3	<0.3	<0.3		<0.3	mg/l	TM38/PM0
Chloride #	<3	16	28	13	4	<3	<3	<3	<3		<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	<0.03	0.06	0.05	0.09	0.32	<0.03	<0.03	<0.03	<0.03		<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	<0.3	0.6	0.5	0.9	3.2	<0.3	<0.3	<0.3	<0.3		<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	<2	<2	2	3	4	2	2	<2	<2		<2	mg/l	TM60/PM0
Dissolved Organic Carbon	<20	<20	20	30	40	<20	20	<20	<20		<20	mg/kg	TM60/PM0
Total Dissolved Solids #	49	88	83	109	133	54	59	2288	64		<35	mg/l	TM20/PM0
Total Dissolved Solids #	490	880	830	1090	1330	540	590	22873	640		<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	85.3
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14178**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**3**			
Client Sample No	**TP 37**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**1.00-2.00**			
Sample Date	**13/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.34	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.025	0.5	2	25
Barium	0.06	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.13	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	37	1000	20000	50000
Total Dissolved Solids	490	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	90.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14178**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**6**			
Client Sample No	**TP 37**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.00-3.00**			
Sample Date	**13/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.56	3	5	6
Sum of BTEX (mg/kg)	0.111	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	704	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	2.95	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.16	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	16	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	54	1000	20000	50000
Total Dissolved Solids	880	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

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All solid results are expressed on a dry weight basis unless stated otherwise.

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	91.7
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14178**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**9**			
Client Sample No	**TP 37**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**3.00-3.20**			
Sample Date	**13/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.55	3	5	6
Sum of BTEX (mg/kg)	0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	526	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.64	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.18	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	28	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	52	1000	20000	50000
Total Dissolved Solids	830	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	83.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14178**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**12**			
Client Sample No	**TP 40**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**2.40-3.00**			
Sample Date	**13/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.35	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	439	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.08	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.49	0.5	10	30
Nickel	0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	13	800	15000	25000
Fluoride	3	10	150	500
Sulphate as SO4	54	1000	20000	50000
Total Dissolved Solids	1090	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	30	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	80.4
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14178**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**15**			
Client Sample No	**TP 40**			
Depth/Other	**3.00-3.20**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**13/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	1.09	3	5	6
Sum of BTEX (mg/kg)	0.086	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	1467	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	1.01	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	0.26	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.82	0.5	10	30
Nickel	0.06	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.08	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	4	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	73	1000	20000	50000
Total Dissolved Solids	1330	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	40	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.6
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14178**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**21**			
Client Sample No	**TP 09**			
Depth/Other	**0.80-1.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**13/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.54	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.05	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	<5	1000	20000	50000
Total Dissolved Solids	540	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	87.0
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14178**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**24**			
Client Sample No	**TP 17**			
Depth/Other	**0.80-1.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**13/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.34	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-
Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.03	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	45	1000	20000	50000
Total Dissolved Solids	590	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	82.1
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14178**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**27**			
Client Sample No	**TP 22**			
Depth/Other	**0.80-1.00**	**Inert**	**Stable Non-reactive**	**Hazardous**
Sample Date	**13/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	NDP	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	89	500	-	-
PAH Sum of 6 (mg/kg)	0.94	-	-	-
PAH Sum of 17 (mg/kg)	1.71	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	0.056	0.5	2	25
Barium	0.30	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.09	0.5	10	30
Nickel	0.06	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	0.05	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	0.14	4	50	200
Chloride	<3	800	15000	25000
Fluoride	4	10	150	500
Sulphate as SO4	13625	1000	20000	50000
Total Dissolved Solids	22873	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Mass of sample taken (kg)	-	Dry Matter Content Ratio (%) =	88.5
Mass of dry sample (kg) =	0.09	Leachant Volume (l)	-
Particle Size <4mm =	>95%		

EMT Job No	**20/14178**	**Landfill Waste Acceptance Criteria Limits**		
Sample No	**30**			
Client Sample No	**TP 25**	**Inert**	**Stable Non-reactive**	**Hazardous**
Depth/Other	**0.80-1.00**			
Sample Date	**13/10/2020**			
Batch No	**1**			
Solid Waste Analysis				
Total Organic Carbon (%)	0.38	3	5	6
Sum of BTEX (mg/kg)	<0.025	6	-	-
Sum of 7 PCBs (mg/kg)	<0.035	1	-	-
Mineral Oil (mg/kg)	<30	500	-	-
PAH Sum of 6 (mg/kg)	<0.22	-	-	-
PAH Sum of 17 (mg/kg)	<0.64	100	-	-

Eluate Analysis	**10:1 concn leached**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
	A10			
	mg/kg	**mg/kg**		
Arsenic	<0.025	0.5	2	25
Barium	<0.03	20	100	300
Cadmium	<0.005	0.04	1	5
Chromium	<0.015	0.5	10	70
Copper	<0.07	2	50	100
Mercury	<0.0001	0.01	0.2	2
Molybdenum	0.03	0.5	10	30
Nickel	<0.02	0.4	10	40
Lead	<0.05	0.5	10	50
Antimony	<0.02	0.06	0.7	5
Selenium	<0.03	0.1	0.5	7
Zinc	<0.03	4	50	200
Chloride	<3	800	15000	25000
Fluoride	<3	10	150	500
Sulphate as SO4	46	1000	20000	50000
Total Dissolved Solids	640	4000	60000	100000
Phenol	<0.1	1	-	-
Dissolved Organic Carbon	<20	500	800	1000

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/14178	1	TP 37	1.00-2.00	1-3	No interpretation possible
20/14178	1	TP 37	2.00-3.00	4-6	Degraded diesel
20/14178	1	TP 37	3.00-3.20	7-9	Degraded diesel
20/14178	1	TP 40	2.40-3.00	10-12	Degraded diesel
20/14178	1	TP 40	3.00-3.20	13-15	Degraded diesel
20/14178	1	TP 09	0.80-1.00	19-21	No interpretation possible
20/14178	1	TP 17	0.80-1.00	22-24	No interpretation possible
20/14178	1	TP 22	0.80-1.00	25-27	Possible lubricating oil
20/14178	1	TP 25	0.80-1.00	28-30	No interpretation possible

Client Name: O'Connor Sutton Cronin & Assoc. Ltd

Matrix : Solid

Reference: B967/1

Location: Emmet Road

Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Method No.	NDP Reason
20/14178	1	TP 37	1.00-2.00	1-3	TM160/PM110	pH > 4.00
20/14178	1	TP 37	1.00-2.00	1-3	TM160/PM110	pH < 10.00
20/14178	1	TP 37	2.00-3.00	4-6	TM160/PM110	pH > 4.00
20/14178	1	TP 37	2.00-3.00	4-6	TM160/PM110	pH < 10.00
20/14178	1	TP 37	3.00-3.20	7-9	TM160/PM110	pH > 4.00
20/14178	1	TP 37	3.00-3.20	7-9	TM160/PM110	pH < 10.00
20/14178	1	TP 40	2.40-3.00	10-12	TM160/PM110	pH > 4.00
20/14178	1	TP 40	2.40-3.00	10-12	TM160/PM110	pH < 10.00
20/14178	1	TP 40	3.00-3.20	13-15	TM160/PM110	pH > 4.00
20/14178	1	TP 40	3.00-3.20	13-15	TM160/PM110	pH < 10.00
20/14178	1	TP 09	0.80-1.00	19-21	TM160/PM110	pH > 4.00
20/14178	1	TP 09	0.80-1.00	19-21	TM160/PM110	pH < 10.00
20/14178	1	TP 17	0.80-1.00	22-24	TM160/PM110	pH > 4.00
20/14178	1	TP 17	0.80-1.00	22-24	TM160/PM110	pH < 10.00
20/14178	1	TP 22	0.80-1.00	25-27	TM21/PM24	Asbestos detected in sample
20/14178	1	TP 22	0.80-1.00	25-27	TM21/PM89	Too much Asbestos detected in sample foralternative method
20/14178	1	TP 22	0.80-1.00	25-27	TM160/PM110	pH > 4.00
20/14178	1	TP 22	0.80-1.00	25-27	TM22/PM0	Too much Asbestos detected in sample foralternative method
20/14178	1	TP 25	0.80-1.00	28-30	TM160/PM110	pH > 4.00

Client Name: O'Connor Sutton Cronin & Assoc. Ltd
Reference: B967/1
Location: Emmet Road
Contact: Richard Thompson

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
No deviating sample report results for job 20/14178						

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.
Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/14178

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range
AA	x5 Dilution

EMT Job No: 20/14178

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/14178

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM89	Preparation of positive asbestos samples for Eltra analysis			AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.			AD	Yes
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21	As received solid samples are extracted in Methanol: Sodium Hydroxide (0.1M NaOH) (60:40) by orbital shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM62	Acid digestion of as received solid samples using Aqua Regia refluxed at 112.5 °C.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

EMT Job No: 20/14178

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM129	A hot hydrochloric acid digest is performed on an as received sample, and the resulting liquor is analysed.			AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM61	As received solid samples are extracted with hot water in a 20:1 ratio of water to soil ready for analysis by ICP.			AR	Yes

EMT Job No: 20/14178

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM160	Titrimetric determination of acid reserve to pH 4.0 or alkali reserve to pH 10.0 based on method C14.2 Canadian Government (2013).	PM110	Preparation of a 10% (w/w) aqueous solution of soil in distilled water			AR	No
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	NONE	No Method Code			AR	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

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Ground Investigations Ireland
Catherinestown House
Hazelhatch Road
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Co. Dublin
Ireland

Attention :	Conor Finnerty
Date :	16th November, 2020
Your reference :	9897-08-20
Our reference :	Test Report 20/14172 Batch 1
Location :	Emmet Road
Date samples received :	15th October, 2020
Status :	Final report
Issue :	2

Two samples were received for analysis on 15th October, 2020 of which two were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Bruce Leslie
Project Manager

Please include all sections of this report if it is reproduced

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Conor Finnerty
EMT Job No: 20/14172

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-3	4-6									LOD/LOR	Units	Method No.
Sample ID	BH03	BH03											
Depth	0.80-1.00	3.00-3.40											
COC No / misc													
Containers	V J T	V J T											
Sample Date	09/10/2020	09/10/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	15/10/2020	15/10/2020											
Antimony	<1	2									<1	mg/kg	TM30/PM15
Arsenic #	5.8	11.8									<0.5	mg/kg	TM30/PM15
Barium #	27	40									<1	mg/kg	TM30/PM15
Cadmium #	0.7	1.9									<0.1	mg/kg	TM30/PM15
Chromium #	44.4	43.5									<0.5	mg/kg	TM30/PM15
Copper #	13	31									<1	mg/kg	TM30/PM15
Lead #	20	16									<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1									<0.1	mg/kg	TM30/PM15
Molybdenum #	3.8	5.9									<0.1	mg/kg	TM30/PM15
Nickel #	15.7	39.3									<0.7	mg/kg	TM30/PM15
Selenium #	<1	3									<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	671	2996									<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.4	0.4									<0.1	mg/kg	TM74/PM32
Zinc #	38	73									<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03									<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05									<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	0.08									<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	<0.03									<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03									<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06									<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	0.04									<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07									<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	<0.22									<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64									<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05									<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02									<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1									<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	90	83									<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_Total)	<30	<30									<30	mg/kg	TM5/PM8/PM16

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Conor Finnerty
EMT Job No: 20/14172

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6									LOD/LOR	Units	Method No.
Sample ID	BH03	BH03											
Depth	0.80-1.00	3.00-3.40											
COC No / misc													
Containers	V J T	V J T											
Sample Date	09/10/2020	09/10/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	15/10/2020	15/10/2020											
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL) #	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL) #	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_1D_AL) #	<0.2	<0.2									<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_1D_AL) #	<4	<4									<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_1D_AL) #	<7	<7									<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_1D_AL) #	<7	<7									<7	mg/kg	TM5/PM8/PM16
>C35-C40 (EH_1D_AL)	<7	<7									<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40 (EH+HS_1D_AL)	<26	<26									<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10 (HS_1D_AL)	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>C10-C25 (EH_1D_AL)	<10	<10									<10	mg/kg	TM5/PM8/PM16
>C25-C35 (EH_1D_AL)	<10	<10									<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 (HS_1D_AR) #	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR) #	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR) #	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_1D_AR) #	<0.2	<0.2									<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_1D_AR) #	<4	<4									<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_1D_AR) #	<7	<7									<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_1D_AR) #	<7	<7									<7	mg/kg	TM5/PM8/PM16
>EC35-EC40 (EH_1D_AR)	<7	<7									<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40 (EH+HS_1D_AR)	<26	<26									<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40) (EH+HS_CU_1D_Total)	<52	<52									<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 (HS_1D_AR) #	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>EC10-EC25 (EH_1D_AR)	<10	<10									<10	mg/kg	TM5/PM8/PM16
>EC25-EC35 (EH_1D_AR)	<10	<10									<10	mg/kg	TM5/PM8/PM16
MTBE #	<5	<5 SV									<5	ug/kg	TM36/PM12
Benzene #	<5	<5 SV									<5	ug/kg	TM36/PM12
Toluene #	<5	<5 SV									<5	ug/kg	TM36/PM12
Ethylbenzene #	<5	<5 SV									<5	ug/kg	TM36/PM12
m/p-Xylene #	<5	<5 SV									<5	ug/kg	TM36/PM12
o-Xylene #	<5	<5 SV									<5	ug/kg	TM36/PM12
PCB 28 #	<5	<5									<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5									<5	ug/kg	TM17/PM8
PCB 101 #	<5	<5									<5	ug/kg	TM17/PM8
PCB 118 #	<5	<5									<5	ug/kg	TM17/PM8
PCB 138 #	<5	<5									<5	ug/kg	TM17/PM8
PCB 153 #	<5	<5									<5	ug/kg	TM17/PM8
PCB 180 #	<5	<5									<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	<35									<35	ug/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Conor Finnerty
EMT Job No: 20/14172

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6									LOD/LOR	Units	Method No.
Sample ID	BH03	BH03											
Depth	0.80-1.00	3.00-3.40											
COC No / misc													
Containers	V J T	V J T											
Sample Date	09/10/2020	09/10/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	15/10/2020	15/10/2020											
Phenol #	<0.01	<0.01									<0.01	mg/kg	TM26/PM21B
Natural Moisture Content	11.1	9.0									<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	10.0	8.2									<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3									<0.3	mg/kg	TM38/PM20
Chromium III	44.4	43.5									<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5									<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.55	0.79									<0.02	%	TM21/PM24
Sulphide	<10	<10									<10	mg/kg	TM107/PM45
Elemental Sulphur	<1	5									<1	mg/kg	TM108/PM114
Loss on Ignition #	1.5	2.2									<1.0	%	TM22/PM0
pH #	8.09	8.09									<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1095	0.0993										kg	NONE/PM17
Mass of dried test portion	0.09	0.09										kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Conor Finnerty
EMT Job No: 20/14172

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-3	4-6									LOD/LOR	Units	Method No.
Sample ID	BH03	BH03											
Depth	0.80-1.00	3.00-3.40											
COC No / misc													
Containers	V J T	V J T											
Sample Date	09/10/2020	09/10/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	15/10/2020	15/10/2020											
Dissolved Antimony #	<0.002	<0.002									<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02									<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025									<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025									<0.025	mg/kg	TM30/PM17
Dissolved Barium #	<0.003	0.016									<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	<0.03	0.16									<0.03	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005									<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005									<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015									<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015									<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007									<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07									<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005									<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05									<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.011	0.023									<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.11	0.23									<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002									<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02									<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	0.021	0.023									<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	0.21	0.23									<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	0.003	<0.003									<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	0.03	<0.03									<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	0.00005									<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	0.0005									<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01									<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1									<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3									<0.3	mg/l	TM173/PM0
Fluoride	<3	<3									<3	mg/kg	TM173/PM0
Sulphate as SO4 #	1.3	37.7									<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	13	377									<5	mg/kg	TM38/PM0
Chloride #	0.4	13.0									<0.3	mg/l	TM38/PM0
Chloride #	4	130									<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.03	0.06									<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.3	0.6									<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	4	3									<2	mg/l	TM60/PM0
Dissolved Organic Carbon	40	30									<20	mg/kg	TM60/PM0
pH	9.00	7.89									<0.01	pH units	TM73/PM0
Total Dissolved Solids #	62	116									<35	mg/l	TM20/PM0
Total Dissolved Solids #	620	1160									<350	mg/kg	TM20/PM0

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Conor Finnerty
EMT Job No: 20/14172

Report : **EN12457_2**

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-3	4-6														
Sample ID	BH03	BH03														
Depth	0.80-1.00	3.00-3.40														
COC No / misc																
Containers	V J T	V J T														
Sample Date	09/10/2020	09/10/2020														
Sample Type	Soil	Soil														
Batch Number	1	1														
Date of Receipt	15/10/2020	15/10/2020														
Solid Waste Analysis												Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.
Total Organic Carbon #	0.55	0.79										3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	<0.025	<0.025 [SV]										6	-	-	<0.025	mg/kg	TM36/PM12
Sum of 7 PCBs #	<0.035	<0.035										1	-	-	<0.035	mg/kg	TM17/PM8
Mineral Oil	<30	<30										500	-	-	<30	mg/kg	TM5/PM8/PM16
PAH Sum of 6 #	<0.22	<0.22										-	-	-	<0.22	mg/kg	TM4/PM8
PAH Sum of 17	<0.64	<0.64										100	-	-	<0.64	mg/kg	TM4/PM8
CEN 10:1 Leachate																	
Arsenic #	<0.025	<0.025										0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	<0.03	0.16										20	100	300	<0.03	mg/kg	TM30/PM17
Cadmium #	<0.005	<0.005										0.04	1	5	<0.005	mg/kg	TM30/PM17
Chromium #	<0.015	<0.015										0.5	10	70	<0.015	mg/kg	TM30/PM17
Copper #	<0.07	<0.07										2	50	100	<0.07	mg/kg	TM30/PM17
Mercury #	<0.0001	0.0005										0.01	0.2	2	<0.0001	mg/kg	TM61/PM0
Molybdenum #	0.11	0.23										0.5	10	30	<0.02	mg/kg	TM30/PM17
Nickel #	<0.02	<0.02										0.4	10	40	<0.02	mg/kg	TM30/PM17
Lead #	<0.05	<0.05										0.5	10	50	<0.05	mg/kg	TM30/PM17
Antimony #	<0.02	<0.02										0.06	0.7	5	<0.02	mg/kg	TM30/PM17
Selenium #	0.21	0.23										0.1	0.5	7	<0.03	mg/kg	TM30/PM17
Zinc #	0.03	<0.03										4	50	200	<0.03	mg/kg	TM30/PM17
Total Dissolved Solids #	620	1160										4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	40	30										500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.1095	0.0993										-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	82.4	90.2										-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.881	0.89										-	-	-		l	NONE/PM17
Eluate Volume	0.8	0.85										-	-	-		l	NONE/PM17
pH #	8.09	8.09										-	-	-	<0.01	pH units	TM73/PM11
Phenol	<0.1	<0.1										1	-	-	<0.1	mg/kg	TM26/PM0
Fluoride	<3	<3										-	-	-	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	13	377										1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	4	130										800	15000	25000	<3	mg/kg	TM38/PM0

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: Ground Investigations Ireland

Reference: 9897-08-20

Location: Emmet Road

Contact: Conor Finnerty

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/14172	1	BH03	0.80-1.00	1-3	No interpretation possible
20/14172	1	BH03	3.00-3.40	4-6	No interpretation possible

Client Name: Ground Investigations Ireland
Reference: 20/08/9897
Location: Emmet Road
Contact: Conor Finnerty

Note:

Asbestos Screen analysis is carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Detailed Gravimetric Quantification and PCOM Fibre Analysis is carried out in accordance with our documented in-house methods PM042 and TM131 and HSG 248 using Stereo and Polarised Light Microscopy and Phase Contrast Optical Microscopy (PCOM). Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions, including ACM type and Asbestos level less than 0.1%, lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Element Materials Technology consultant, Element Materials Technology cannot be responsible for inaccurate or unrepresentative sampling.

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
20/14172	1	BH03	0.80-1.00	2	23/10/2020	**General Description (Bulk Analysis)**	soil.stones
					23/10/2020	**Asbestos Fibres**	NAD
					23/10/2020	**Asbestos ACM**	NAD
					23/10/2020	**Asbestos Type**	NAD
					23/10/2020	**Asbestos Level Screen**	NAD
20/14172	1	BH03	3.00-3.40	5	23/10/2020	**General Description (Bulk Analysis)**	soil.stones
					23/10/2020	**Asbestos Fibres**	NAD
					23/10/2020	**Asbestos ACM**	NAD
					23/10/2020	**Asbestos Type**	NAD
					23/10/2020	**Asbestos Level Screen**	NAD

Client Name: Ground Investigations Ireland

Reference: 9897-08-20

Location: Emmet Road

Contact: Conor Finnerty

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
20/14172	1	BH03	0.80-1.00	1-3	Cyanide, LOI, Phenols, Tot SO4	Sample holding time exceeded
20/14172	1	BH03	3.00-3.40	4-6	Cyanide, LOI, Phenols, Tot SO4	Sample holding time exceeded

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.

Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/14172

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/14172

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/14172

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21B	As Received samples are extracted in Methanol: Water (60:40) by reciprocal shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes

EMT Job No: 20/14172

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248 First edition (2006)	PM42	Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes

EMT Job No: 20/14172

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

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Ireland

Attention :	Diarmaid MagLochlainn
Date :	26th November, 2020
Your reference :	9897-08-20
Our reference :	Test Report 20/14656 Batch 1
Location :	Emmet Road
Date samples received :	23rd October, 2020
Status :	Final report
Issue :	2

Sixteen samples were received for analysis on 23rd October, 2020 of which sixteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Phil Sommerton BSc
Senior Project Manager

Please include all sections of this report if it is reproduced

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1	2	3	4	5-7	8	9	10-12	13	14-16	LOD/LOR	Units	Method No.
Sample ID	BH02	BH02	BH03	BH04	BH04	BH06	BH07	BH07	BH07	BH08			
Depth	2.50-2.80	7.00-7.30	3.50-4.00	2.50	3.00-3.40	0.20-0.60	2.50	3.00-3.40	5.00-5.50	1.00-2.00			
COC No / misc													
Containers	T	T	T	T	V J T	T	T	V J T	T	V J T			
Sample Date	15/10/2020	15/10/2020	07/10/2020	07/10/2020	07/10/2020	09/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020			
Antimony	-	-	-	-	2	-	-	2	-	<1	<1	mg/kg	TM30/PM15
Arsenic #	-	-	-	-	11.1	-	-	9.9	-	5.6	<0.5	mg/kg	TM30/PM15
Barium #	-	-	-	-	77	-	-	72	-	31	<1	mg/kg	TM30/PM15
Cadmium #	-	-	-	-	2.5	-	-	2.0	-	0.3	<0.1	mg/kg	TM30/PM15
Chromium #	-	-	-	-	40.7	-	-	34.8	-	44.4	<0.5	mg/kg	TM30/PM15
Copper #	-	-	-	-	43	-	-	34	-	10	<1	mg/kg	TM30/PM15
Lead #	-	-	-	-	15	-	-	15	-	6	<5	mg/kg	TM30/PM15
Mercury #	-	-	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	-	-	-	-	5.6	-	-	4.6	-	2.4	<0.1	mg/kg	TM30/PM15
Nickel #	-	-	-	-	42.9	-	-	39.0	-	8.8	<0.7	mg/kg	TM30/PM15
Selenium #	-	-	-	-	4	-	-	3	-	<1	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	-	-	-	-	3164	-	-	2626	-	203	<50	mg/kg	TM50/PM29
Water Soluble Boron #	-	-	-	-	0.5	-	-	0.5	-	0.3	<0.1	mg/kg	TM74/PM32
Zinc #	-	-	-	-	87	-	-	89	-	68	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	-	-	-	-	<0.04	-	-	<0.04	-	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	-	-	-	-	<0.03	-	-	<0.03	-	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	-	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	-	-	-	-	<0.04	-	-	<0.04	-	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	-	-	-	-	0.06	-	-	<0.03	-	0.09	<0.03	mg/kg	TM4/PM8
Anthracene #	-	-	-	-	<0.04	-	-	<0.04	-	0.05	<0.04	mg/kg	TM4/PM8
Fluoranthene #	-	-	-	-	<0.03	-	-	<0.03	-	0.10	<0.03	mg/kg	TM4/PM8
Pyrene #	-	-	-	-	<0.03	-	-	<0.03	-	0.11	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	-	-	-	-	<0.06	-	-	<0.06	-	0.08	<0.06	mg/kg	TM4/PM8
Chrysene #	-	-	-	-	0.03	-	-	<0.02	-	0.06	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	-	-	-	-	<0.07	-	-	<0.07	-	0.11	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	-	-	-	-	<0.04	-	-	<0.04	-	0.07	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	-	-	-	-	<0.04	-	-	<0.04	-	0.05	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	-	-	-	-	<0.04	-	-	<0.04	-	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	-	-	-	-	<0.04	-	-	<0.04	-	0.06	<0.04	mg/kg	TM4/PM8
Coronene	-	-	-	-	<0.04	-	-	<0.04	-	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	-	-	-	-	<0.22	-	-	<0.22	-	0.39	<0.22	mg/kg	TM4/PM8
PAH 17 Total	-	-	-	-	<0.64	-	-	<0.64	-	0.78	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	-	-	-	-	<0.05	-	-	<0.05	-	0.08	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	-	-	-	-	<0.02	-	-	<0.02	-	0.03	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	-	-	-	-	<1	-	-	<1	-	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	-	-	-	-	74	-	-	61 SV	-	82	<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_Total)	-	-	-	-	<30	-	-	<30	-	66	<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced

All solid results are expressed on a dry weight basis unless stated otherwise.

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1	2	3	4	5-7	8	9	10-12	13	14-16	LOD/LOR	Units	Method No.
Sample ID	BH02	BH02	BH03	BH04	BH04	BH06	BH07	BH07	BH07	BH08			
Depth	2.50-2.80	7.00-7.30	3.50-4.00	2.50	3.00-3.40	0.20-0.60	2.50	3.00-3.40	5.00-5.50	1.00-2.00			
COC No / misc													
Containers	T	T	T	T	V J T	T	T	V J T	T	V J T			
Sample Date	15/10/2020	15/10/2020	07/10/2020	07/10/2020	07/10/2020	09/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020			
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL) #	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL) #	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_1D_AL) #	-	-	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_1D_AL) #	-	-	-	-	<4	-	-	<4	-	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_1D_AL) #	-	-	-	-	<7	-	-	<7	-	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_1D_AL) #	-	-	-	-	<7	-	-	<7	-	56	<7	mg/kg	TM5/PM8/PM16
>C35-C40 (EH_1D_AL)	-	-	-	-	<7	-	-	<7	-	10	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40 (EH+HS_1D_AL)	-	-	-	-	<26	-	-	<26	-	66	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10 (HS_1D_AL)	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25 (EH_1D_AL)	-	-	-	-	<10	-	-	<10	-	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35 (EH_1D_AL)	-	-	-	-	<10	-	-	<10	-	48	<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 (HS_1D_AR) #	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR) #	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR) #	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_1D_AR) #	-	-	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_1D_AR) #	-	-	-	-	<4	-	-	<4	-	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_1D_AR) #	-	-	-	-	<7	-	-	<7	-	10	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_1D_AR) #	-	-	-	-	<7	-	-	<7	-	88	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40 (EH_1D_AR)	-	-	-	-	<7	-	-	<7	-	14	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40 (EH+HS_1D_AR)	-	-	-	-	<26	-	-	<26	-	112	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40) (EH+HS_CU_1D_Total)	-	-	-	-	<52	-	-	<52	-	178	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 (HS_1D_AR) #	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25 (EH_1D_AR)	-	-	-	-	<10	-	-	<10	-	31	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35 (EH_1D_AR)	-	-	-	-	<10	-	-	<10	-	67	<10	mg/kg	TM5/PM8/PM16
MTBE #	-	-	-	-	<5 SV	-	-	<5 SV	-	<5	<5	ug/kg	TM36/PM12
Benzene #	-	-	-	-	<5 SV	-	-	<5 SV	-	<5	<5	ug/kg	TM36/PM12
Toluene #	-	-	-	-	<5 SV	-	-	<5 SV	-	<5	<5	ug/kg	TM36/PM12
Ethylbenzene #	-	-	-	-	<5 SV	-	-	<5 SV	-	<5	<5	ug/kg	TM36/PM12
m/p-Xylene #	-	-	-	-	<5 SV	-	-	<5 SV	-	<5	<5	ug/kg	TM36/PM12
o-Xylene #	-	-	-	-	<5 SV	-	-	<5 SV	-	<5	<5	ug/kg	TM36/PM12
PCB 28 #	-	-	-	-	<5	-	-	<5	-	<5	<5	ug/kg	TM17/PM8
PCB 52 #	-	-	-	-	<5	-	-	<5	-	<5	<5	ug/kg	TM17/PM8
PCB 101 #	-	-	-	-	<5	-	-	<5	-	<5	<5	ug/kg	TM17/PM8
PCB 118 #	-	-	-	-	<5	-	-	<5	-	<5	<5	ug/kg	TM17/PM8
PCB 138 #	-	-	-	-	<5	-	-	<5	-	<5	<5	ug/kg	TM17/PM8
PCB 153 #	-	-	-	-	<5	-	-	<5	-	<5	<5	ug/kg	TM17/PM8
PCB 180 #	-	-	-	-	<5	-	-	<5	-	<5	<5	ug/kg	TM17/PM8
Total 7 PCBs #	-	-	-	-	<35	-	-	<35	-	<35	<35	ug/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1	2	3	4	5-7	8	9	10-12	13	14-16	LOD/LOR	Units	Method No.
Sample ID	BH02	BH02	BH03	BH04	BH04	BH06	BH07	BH07	BH07	BH08			
Depth	2.50-2.80	7.00-7.30	3.50-4.00	2.50	3.00-3.40	0.20-0.60	2.50	3.00-3.40	5.00-5.50	1.00-2.00			
COC No / misc													
Containers	T	T	T	T	V J T	T	T	V J T	T	V J T			
Sample Date	15/10/2020	15/10/2020	07/10/2020	07/10/2020	07/10/2020	09/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020			
Phenol #	-	-	-	-	<0.01	-	-	<0.01	-	<0.01	<0.01	mg/kg	TM26/PM21B
Natural Moisture Content	-	-	-	-	12.1	-	-	10.1	-	2.4	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	-	-	-	-	10.8	-	-	9.2	-	2.4	<0.1	%	PM4/PM0
Chloride (2:1 Ext BRE) #	0.007	0.021	0.019	0.007	-	0.008	0.009	-	0.017	-	<0.002	g/l	TM38/PM20
Hexavalent Chromium #	-	-	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) #	0.0184	0.0644	0.0849	0.0257	-	0.0172	0.0168	-	0.0701	-	<0.0015	g/l	TM38/PM20
Chromium III	-	-	-	-	40.7	-	-	34.8	-	44.4	<0.5	mg/kg	NONE/NONE
Total Cyanide #	-	-	-	-	<0.5	-	-	<0.5	-	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	-	-	-	-	0.76	-	-	0.74	-	0.13	<0.02	%	TM21/PM24
Sulphide	-	-	-	-	<10	-	-	<10	-	<10	<10	mg/kg	TM107/PM45
Elemental Sulphur	-	-	-	-	9	-	-	4	-	4	<1	mg/kg	TM108/PM114
Loss on Ignition #	-	-	-	-	2.1	-	-	1.9	-	<1.0	<1.0	%	TM22/PM0
pH #	8.54	8.47	8.45	8.67	8.22	8.94	8.29	8.38	8.40	9.15	<0.01	pH units	TM73/PM11
Mass of raw test portion	-	-	-	-	0.0978	-	-	0.1018	-	0.0958		kg	NONE/PM17
Mass of dried test portion	-	-	-	-	0.09	-	-	0.09	-	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

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Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	17-19	20	21	22	23-25	26-28					LOD/LOR	Units	Method No.
Sample ID	BH08	BH09	BH09	BH11	BH12	BH12							
Depth	3.00-3.40	0.50-0.80	2.20-2.50	0.35-1.05	1.85-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	T	T	T	V J T	V J T							
Sample Date	12/10/2020	12/10/2020	13/10/2020	13/10/2020	14/10/2020	14/10/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020							
Antimony	2	-	-	-	1	1					<1	mg/kg	TM30/PM15
Arsenic #	5.1	-	-	-	6.9	7.4					<0.5	mg/kg	TM30/PM15
Barium #	22	-	-	-	21	23					<1	mg/kg	TM30/PM15
Cadmium #	1.8	-	-	-	0.2	0.6					<0.1	mg/kg	TM30/PM15
Chromium #	28.7	-	-	-	28.7	27.1					<0.5	mg/kg	TM30/PM15
Copper #	20	-	-	-	22	24					<1	mg/kg	TM30/PM15
Lead #	9	-	-	-	12	10					<5	mg/kg	TM30/PM15
Mercury #	<0.1	-	-	-	<0.1	<0.1					<0.1	mg/kg	TM30/PM15
Molybdenum #	2.3	-	-	-	1.8	2.6					<0.1	mg/kg	TM30/PM15
Nickel #	20.8	-	-	-	39.1	40.5					<0.7	mg/kg	TM30/PM15
Selenium #	2	-	-	-	2	2					<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	1014	-	-	-	1316	1578					<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.5	-	-	-	0.8	1.0					<0.1	mg/kg	TM74/PM32
Zinc #	56	-	-	-	25	37					<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	-	-	-	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	-	-	-	<0.05	<0.05					<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	-	-	-	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	-	-	-	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	-	-	-	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	-	-	-	<0.06	<0.06					<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	-	-	-	<0.02	<0.02					<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	-	-	-	<0.07	<0.07					<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Coronene	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	-	-	-	<0.22	<0.22					<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	-	-	-	<0.64	<0.64					<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	-	-	-	<0.05	<0.05					<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	-	-	-	<0.02	<0.02					<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	-	-	-	<1	<1					<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	70	-	-	-	76	81					<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_Total)	<30	-	-	-	<30	<30					<30	mg/kg	TM5/PM8/PM16

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	17-19	20	21	22	23-25	26-28					LOD/LOR	Units	Method No.
Sample ID	BH08	BH09	BH09	BH11	BH12	BH12							
Depth	3.00-3.40	0.50-0.80	2.20-2.50	0.35-1.05	1.85-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	T	T	T	V J T	V J T							
Sample Date	12/10/2020	12/10/2020	13/10/2020	13/10/2020	14/10/2020	14/10/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020							
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL) #	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL) #	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_1D_AL) #	<0.2	-	-	-	<0.2	<0.2					<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_1D_AL) #	<4	-	-	-	<4	<4					<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_1D_AL) #	<7	-	-	-	<7	<7					<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_1D_AL) #	<7	-	-	-	<7	<7					<7	mg/kg	TM5/PM8/PM16
>C35-C40 (EH_1D_AL)	<7	-	-	-	<7	<7					<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40 (EH+HS_1D_AL)	<26	-	-	-	<26	<26					<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10 (HS_1D_AL)	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C10-C25 (EH_1D_AL)	<10	-	-	-	<10	<10					<10	mg/kg	TM5/PM8/PM16
>C25-C35 (EH_1D_AL)	<10	-	-	-	<10	<10					<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 (HS_1D_AR) #	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR) #	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR) #	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_1D_AR) #	<0.2	-	-	-	<0.2	<0.2					<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_1D_AR) #	<4	-	-	-	<4	<4					<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_1D_AR) #	<7	-	-	-	<7	<7					<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_1D_AR) #	<7	-	-	-	<7	<7					<7	mg/kg	TM5/PM8/PM16
>EC35-EC40 (EH_1D_AR)	<7	-	-	-	<7	<7					<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40 (EH+HS_1D_AR)	<26	-	-	-	<26	<26					<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40) (EH+HS_CU_1D_Total)	<52	-	-	-	<52	<52					<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 (HS_1D_AR) #	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC10-EC25 (EH_1D_AR)	<10	-	-	-	<10	<10					<10	mg/kg	TM5/PM8/PM16
>EC25-EC35 (EH_1D_AR)	<10	-	-	-	<10	<10					<10	mg/kg	TM5/PM8/PM16
MTBE #	<5 SV	-	-	-	<5 SV	<5 SV					<5	ug/kg	TM36/PM12
Benzene #	<5 SV	-	-	-	<5 SV	<5 SV					<5	ug/kg	TM36/PM12
Toluene #	<5 SV	-	-	-	<5 SV	<5 SV					<5	ug/kg	TM36/PM12
Ethylbenzene #	<5 SV	-	-	-	<5 SV	<5 SV					<5	ug/kg	TM36/PM12
m/p-Xylene #	<5 SV	-	-	-	<5 SV	<5 SV					<5	ug/kg	TM36/PM12
o-Xylene #	<5 SV	-	-	-	<5 SV	<5 SV					<5	ug/kg	TM36/PM12
PCB 28 #	<5	-	-	-	<5	<5					<5	ug/kg	TM17/PM8
PCB 52 #	<5	-	-	-	<5	<5					<5	ug/kg	TM17/PM8
PCB 101 #	<5	-	-	-	<5	<5					<5	ug/kg	TM17/PM8
PCB 118 #	<5	-	-	-	<5	<5					<5	ug/kg	TM17/PM8
PCB 138 #	<5	-	-	-	<5	<5					<5	ug/kg	TM17/PM8
PCB 153 #	<5	-	-	-	<5	<5					<5	ug/kg	TM17/PM8
PCB 180 #	<5	-	-	-	<5	<5					<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	-	-	-	<35	<35					<35	ug/kg	TM17/PM8

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	17-19	20	21	22	23-25	26-28					LOD/LOR	Units	Method No.
Sample ID	BH08	BH09	BH09	BH11	BH12	BH12							
Depth	3.00-3.40	0.50-0.80	2.20-2.50	0.35-1.05	1.85-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	T	T	T	V J T	V J T							
Sample Date	12/10/2020	12/10/2020	13/10/2020	13/10/2020	14/10/2020	14/10/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020							
Phenol #	<0.01	-	-	-	<0.01	<0.01					<0.01	mg/kg	TM26/PM21B
Natural Moisture Content	7.1	-	-	-	9.1	10.5					<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	6.6	-	-	-	8.3	9.5					<0.1	%	PM4/PM0
Chloride (2:1 Ext BRE) #	-	0.008	0.004	0.005	-	-					<0.002	g/l	TM38/PM20
Hexavalent Chromium #	<0.3	-	-	-	<0.3	<0.3					<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) #	-	0.0615	0.0262	0.0310	-	-					<0.0015	g/l	TM38/PM20
Chromium III	28.7	-	-	-	28.7	27.1					<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	-	-	-	<0.5	<0.5					<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.52	-	-	-	0.76	0.80					<0.02	%	TM21/PM24
Sulphide	<10	-	-	-	<10	<10					<10	mg/kg	TM107/PM45
Elemental Sulphur	22	-	-	-	4	3					<1	mg/kg	TM108/PM114
Loss on Ignition #	1.2	-	-	-	2.5	2.6					<1.0	%	TM22/PM0
pH #	8.18	8.17	8.23	8.42	8.49	8.47					<0.01	pH units	TM73/PM11
Mass of raw test portion	0.0975	-	-	-	0.1014	0.1004						kg	NONE/PM17
Mass of dried test portion	0.09	-	-	-	0.09	0.09						kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	5-7	10-12	14-16	17-19	23-25	26-28					LOD/LOR	Units	Method No.
Sample ID	BH04	BH07	BH08	BH08	BH12	BH12							
Depth	3.00-3.40	3.00-3.40	1.00-2.00	3.00-3.40	1.85-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	07/10/2020	12/10/2020	12/10/2020	12/10/2020	14/10/2020	14/10/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020							
Dissolved Antimony #	0.003	<0.002	<0.002	0.009	0.007	0.007					<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.03	<0.02	<0.02	0.09	0.07	0.07					<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025					<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025					<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.028	0.019	0.003	0.014	0.007	0.008					<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.28	0.19	0.03	0.14	0.07	0.08					<0.03	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005					<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015					<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015					<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007					<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07					<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.026	0.023	<0.002	0.005	0.004	0.007					<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.26	0.23	<0.02	0.05	0.04	0.07					<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	0.002	0.002	0.002					<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	0.02	0.02	<0.02					<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	0.041	0.023	<0.003	0.019	0.012	0.008					<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	0.41	0.23	<0.03	0.19	0.12	0.08					<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003	0.006	<0.003	<0.003	<0.003					<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	0.06	<0.03	<0.03	<0.03					<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	0.00012	0.00003	<0.00001	<0.00001	<0.00001	<0.00001					<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	0.0012	0.0003	<0.0001	<0.0001	<0.0001	<0.0001					<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3					<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	<3	<3	<3	<3					<3	mg/kg	TM173/PM0
Sulphate as SO4 #	40.4	22.1	<0.5	11.6	18.0	20.8					<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	404	221	<5	116	180	208					<5	mg/kg	TM38/PM0
Chloride #	10.5	6.2	<0.3	6.9	5.3	5.6					<0.3	mg/l	TM38/PM0
Chloride #	105	62	<3	69	53	56					<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.07	0.05	0.15	0.16	2.68	4.16					<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.7	0.5	1.5	1.6	26.8	41.6					<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	4	3	3	<2	2	2					<2	mg/l	TM60/PM0
Dissolved Organic Carbon	40	30	30	<20	20	<20					<20	mg/kg	TM60/PM0
pH	7.61	7.90	9.22	8.30	8.49	8.46					<0.01	pH units	TM73/PM0
Total Dissolved Solids #	133	89	<35	68	58	76					<35	mg/l	TM20/PM0
Total Dissolved Solids #	1330	890	<350	680	580	760					<350	mg/kg	TM20/PM0

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : EN12457_2

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	5-7	10-12	14-16	17-19	23-25	26-28										
Sample ID	BH04	BH07	BH08	BH08	BH12	BH12										
Depth	3.00-3.40	3.00-3.40	1.00-2.00	3.00-3.40	1.85-3.00	3.00-3.40										
COC No / misc																
Containers	V J T	V J T	V J T	V J T	V J T	V J T										
Sample Date	07/10/2020	12/10/2020	12/10/2020	12/10/2020	14/10/2020	14/10/2020										
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil										
Batch Number	1	1	1	1	1	1										
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020										
											Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.
Solid Waste Analysis																
Total Organic Carbon #	0.76	0.74	0.13	0.52	0.76	0.80					3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	<0.025 SV	<0.025 SV	<0.025	<0.025 SV	<0.025 SV	<0.025 SV					6	-	-	<0.025	mg/kg	TM36/PM12
Sum of 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035					1	-	-	<0.035	mg/kg	TM17/PM8
Mineral Oil	<30	<30	66	<30	<30	<30					500	-	-	<30	mg/kg	TM5/PM8/PM16
PAH Sum of 6 #	<0.22	<0.22	0.39	<0.22	<0.22	<0.22					-	-	-	<0.22	mg/kg	TM4/PM8
PAH Sum of 17	<0.64	<0.64	0.78	<0.64	<0.64	<0.64					100	-	-	<0.64	mg/kg	TM4/PM8
CEN 10:1 Leachate																
Arsenic #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025					0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	0.28	0.19	0.03	0.14	0.07	0.08					20	100	300	<0.03	mg/kg	TM30/PM17
Cadmium #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.04	1	5	<0.005	mg/kg	TM30/PM17
Chromium #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015					0.5	10	70	<0.015	mg/kg	TM30/PM17
Copper #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07					2	50	100	<0.07	mg/kg	TM30/PM17
Mercury #	0.0012	0.0003	<0.0001	<0.0001	<0.0001	<0.0001					0.01	0.2	2	<0.0001	mg/kg	TM61/PM0
Molybdenum #	0.26	0.23	<0.02	0.05	0.04	0.07					0.5	10	30	<0.02	mg/kg	TM30/PM17
Nickel #	<0.02	<0.02	<0.02	0.02	0.02	<0.02					0.4	10	40	<0.02	mg/kg	TM30/PM17
Lead #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					0.5	10	50	<0.05	mg/kg	TM30/PM17
Antimony #	0.03	<0.02	<0.02	0.09	0.07	0.07					0.06	0.7	5	<0.02	mg/kg	TM30/PM17
Selenium #	0.41	0.23	<0.03	0.19	0.12	0.08					0.1	0.5	7	<0.03	mg/kg	TM30/PM17
Zinc #	<0.03	<0.03	0.06	<0.03	<0.03	<0.03					4	50	200	<0.03	mg/kg	TM30/PM17
Total Dissolved Solids #	1330	890	<350	680	580	760					4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	40	30	30	<20	20	<20					500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.0978	0.1018	0.0958	0.0975	0.1014	0.1004					-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	91.9	88.7	93.6	92.3	88.8	89.4					-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.892	0.889	0.894	0.893	0.889	0.889					-	-	-		l	NONE/PM17
Eluate Volume	0.8	0.6	0.8	0.8	0.8	0.8					-	-	-		l	NONE/PM17
pH #	8.22	8.38	9.15	8.18	8.49	8.47					-	-	-	<0.01	pH units	TM73/PM11
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					1	-	-	<0.1	mg/kg	TM26/PM0
Fluoride	<3	<3	<3	<3	<3	<3					-	-	-	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	404	221	<5	116	180	208					1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	105	62	<3	69	53	56					800	15000	25000	<3	mg/kg	TM38/PM0

Client Name: Ground Investigations Ireland

Reference: 9897-08-20

Location: Emmet Road

Contact: Diarmaid MagLochlainn

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/14656	1	BH04	3.00-3.40	5-7	No interpretation possible
20/14656	1	BH07	3.00-3.40	10-12	No interpretation possible
20/14656	1	BH08	1.00-2.00	14-16	Possible lubricating oil
20/14656	1	BH08	3.00-3.40	17-19	No interpretation possible
20/14656	1	BH12	1.85-3.00	23-25	No interpretation possible
20/14656	1	BH12	3.00-3.40	26-28	No interpretation possible

Client Name: Ground Investigations Ireland

Reference: 9897-08-20

Location: Emmet Road

Contact: Diarmaid MagLochlainn

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
20/14656	1	BH04	3.00-3.40	5-7	Cyanide, EPH, GRO, PAH, PCB, Phenols	Sample holding time exceeded prior to receipt
20/14656	1	BH04	3.00-3.40	5-7	LOI, Tot SO4	Sample holding time exceeded
20/14656	1	BH07	3.00-3.40	10-12	Cyanide, Phenols	Sample holding time exceeded
20/14656	1	BH08	1.00-2.00	14-16	Cyanide, Phenols	Sample holding time exceeded
20/14656	1	BH08	3.00-3.40	17-19	Cyanide, Phenols	Sample holding time exceeded
20/14656	1	BH12	1.85-3.00	23-25	Cyanide, Phenols	Sample holding time exceeded
20/14656	1	BH12	3.00-3.40	26-28	Cyanide, Phenols	Sample holding time exceeded

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.

Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/14656

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/14656

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/14656

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21B	As Received samples are extracted in Methanol: Water (60:40) by reciprocal shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AD	Yes

EMT Job No: 20/14656

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes

EMT Job No: 20/14656

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

CERTIFICATE OF ANALYSIS

ANALYSIS REQUESTED BY: O'Connor Sutton Cronin
9 Prussia Street
Stoneybatter
Dublin 7
Ireland

CONTRACT NO: (see comments)

DATE OF ISSUE: 06.11.20

DATE SAMPLES RECEIVED: 22.09.20 – 26.10.20

DATE ANALYSIS COMPLETED: 29.09.20

DESCRIPTION: Two-hundred and sixteen soil/loose aggregate samples each weighing approximately 0.1-1.6kg.

ANALYSIS REQUESTED: Qualitative and quantitative analysis of soil/loose aggregate samples for mass determination of asbestos.

METHODS:

Qualitative - The samples were analysed qualitatively for asbestos by polarised light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative - The analysis was carried out using our documented in-house method based on HSE Contract Research Report No. 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies *et al*, 1996) and HSG 248. Our method includes initial examination of the entire sample, detailed analysis of a representative sub-sample and quantification by hand picking/weighing and/or fibre counting/sizing as appropriate.

RESULTS:

Initial Screening

Asbestos was detected in two of the soil samples by stereo-binocular and polarised light microscopy.

A summary of the qualitative and quantitative results are given in Tables 1 & 2 respectively.

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IOM CONSULTING LIMITED, registered in Scotland No. SC205670

UKAS TESTING
0374

CONTRACT NO: (see comments)
DATE OF ISSUE: 06.11.20

RESULTS: (cont.)

Table 1: Qualitative Results

Client Reference: B967/1 – Emmet Road

IOM sample number	Client sample number	ACM type detected	PLM result
S75988	WS05 0.075-1	-	No Asbestos Detected
S75989	WS05 1-2	-	No Asbestos Detected
S75990	WS05 2-2.9	-	No Asbestos Detected
S75992	WS01 0.02-1	-	No Asbestos Detected
S75993	WS01 1-2	-	No Asbestos Detected
S75994	WS01 2-2.7	-	No Asbestos Detected
S75996	WS09 0-1	-	No Asbestos Detected
S75997	WS09 1-2	-	No Asbestos Detected
S75998	WS09 2-3	-	No Asbestos Detected
S75999	WS09 3-3.30	-	No Asbestos Detected
S76000	WS02 0.085-1	-	No Asbestos Detected
S76001	WS02 1-2	-	No Asbestos Detected
S76002	WS02 2-2.75	-	No Asbestos Detected
S76004	WS13 0-1	Cement[1]	Chrysotile
S76005	WS13 1-2	-	No Asbestos Detected
S76006	WS10 0.09-1	-	No Asbestos Detected
S76007	WS10 1-2	-	No Asbestos Detected
S76008	WS10 2-3	-	No Asbestos Detected
S76009	WS10 3-3.4	-	No Asbestos Detected
S76010	WS14 0.13-1	-	No Asbestos Detected
S76011	WS14 1-2	-	No Asbestos Detected
S76012	WS14 2-3	-	No Asbestos Detected
S76013	WS14 3-3.4	-	No Asbestos Detected
S76014	WS04 0-1	-	No Asbestos Detected
S76015	WS04 1-2	-	No Asbestos Detected
S76016	WS04 2-3	-	No Asbestos Detected
S76017	WS04 3-3.4	-	No Asbestos Detected
S76018	WS17 0-1	-	No Asbestos Detected
S76019	WS17 1-2	-	No Asbestos Detected
S76020	WS17 2-3	-	No Asbestos Detected
S76021	WS17 3-3.4	-	No Asbestos Detected
S76022	WS15 0.03-1	-	No Asbestos Detected
S76023	WS15 1-2	-	No Asbestos Detected
S76024	WS15 2-3	-	No Asbestos Detected
S76025	WS15 3-3.4	-	No Asbestos Detected
S76026	WS18 0-1	-	No Asbestos Detected
S76027	WS18 1-2	-	No Asbestos Detected
S76028	WS18 2-3	-	No Asbestos Detected
S76029	WS18 3-3.4	-	No Asbestos Detected
S76191	WS24 0.8-1.0	-	No Asbestos Detected
S76192	WS24 0.0-1.0	-	No Asbestos Detected
S76193	WS24 1.0-2.0	-	No Asbestos Detected
S76194	WS24 2.0-3.0	-	No Asbestos Detected
S76195	WS30 2.0-3.0	-	No Asbestos Detected
S76196	WS30 0.8-1.0	-	No Asbestos Detected

Our detection limit for this method is 0.001%.

RESULTS: (cont.)

Table 1: Qualitative Results

Client Reference: B967/1 – Emmet Road

IOM sample number	Client sample number	ACM type detected	PLM result
S76197	WS08 0.15-1.0	-	No Asbestos Detected
S76198	WS08 1.0-2.0	-	No Asbestos Detected
S76199	WS08 2.0-3.0	-	No Asbestos Detected
S76200	WS27 0.0-1.0	-	No Asbestos Detected
S76201	WS27 1.0-1.5	-	No Asbestos Detected
S76202	WS26 0.0-1.0	-	No Asbestos Detected
S76203	WS26 1.0-2.0	-	No Asbestos Detected
S76204	WS26 2.0-2.8	-	No Asbestos Detected
S76205	WS16 0.0-1.0	-	No Asbestos Detected
S76206	WS16 1.0-2.0	-	No Asbestos Detected
S76207	WS16 2.0-3.0	-	No Asbestos Detected
S76208	WS22 0.0-1.0	-	No Asbestos Detected
S76209	WS22 1.0-2.0	-	No Asbestos Detected
S76210	WS22 2.0-3.0	-	No Asbestos Detected
S76211	WS31 0.0-1.0	-	No Asbestos Detected
S76212	WS31 1.0-1.6	-	No Asbestos Detected
S76213	WS32 0.0-1.0	-	No Asbestos Detected
S76214	WS32 1.0-2.0	-	No Asbestos Detected
S76215	WS32 2.0-3.0	-	No Asbestos Detected
S76216	WS32 0.8-1.0	-	No Asbestos Detected
S76217	WS34 0.0-1.0	-	No Asbestos Detected
S76218	WS34 1.0-2.0	-	No Asbestos Detected
S76219	WS34 2.0-3.0	-	No Asbestos Detected
S76220	WS34 3.0-3.4	-	No Asbestos Detected
S76221	WS34 0.8-1.0	-	No Asbestos Detected
S76222	WS34 1.3-1.5	-	No Asbestos Detected
S76349	WS36 0.8-1.0	-	No Asbestos Detected
S76350	WS36 0.0-0.1	-	No Asbestos Detected
S76351	WS36 1.0-2.0	-	No Asbestos Detected
S76352	WS36 2.0-2.5	-	No Asbestos Detected
S76353	WS37 0.8-1.0	-	No Asbestos Detected
S76354	WS37 0.0-1.0	-	No Asbestos Detected
S76355	WS38 0.0-1.0	-	No Asbestos Detected
S76356	WS38 0.8-1.0	-	No Asbestos Detected
S76357	WS38 2.0-3.0	-	No Asbestos Detected
S76358	WS38 3.0-3.4	-	No Asbestos Detected
S76359	WS39 0.8-1.0	-	No Asbestos Detected
S76360	WS39 0.0-1.0	-	No Asbestos Detected
S76361	WS39 1.0-2.0	-	No Asbestos Detected
S76362	WS39 2.0-3.0	-	No Asbestos Detected
S76363	WS39 3.0-3.2	-	No Asbestos Detected
S76364	WS39 1.2-1.45	-	No Asbestos Detected
S76365	WS43 0.8-1.0	-	No Asbestos Detected
S76366	WS43 0.0-1.0	-	No Asbestos Detected
S76367	WS43 1.0-2.0	-	No Asbestos Detected

Our detection limit for this method is 0.001%.

RESULTS: (cont.)

Table 1: Qualitative Results

Client Reference: B967/1 – Emmet Road

IOM sample number	Client sample number	ACM type detected	PLM result
S76368	WS43 2.0-2.5	-	No Asbestos Detected
S76369	WS42 0.8-1.0	-	No Asbestos Detected
S76370	WS42 1.0-2.0	-	No Asbestos Detected
S76371	WS42 2.0-2.5	-	No Asbestos Detected
S76372	WS42 0.0-1.0	-	No Asbestos Detected
S76373	WS41 0.8-1.0	-	No Asbestos Detected
S76374	WS41 0.0-1.0	-	No Asbestos Detected
S76375	WS41 1.0-1.5	-	No Asbestos Detected
S76376	WS41 2.0-2.5	-	No Asbestos Detected
S76377	WS40 0.8-1.0	-	No Asbestos Detected
S76378	WS40 0.0-1.0	-	No Asbestos Detected
S76379	WS40 1.0-2.0	-	No Asbestos Detected
S76380	WS40 2.0-2.4	-	No Asbestos Detected
S76381	WS44 0.8-1.0	-	No Asbestos Detected
S76382	WS44 0.0-1.0	-	No Asbestos Detected
S76383	WS44 1.0-2.0	-	No Asbestos Detected
S76384	WS44 2.0-3.0	-	No Asbestos Detected
S76385	WS45 0.8-1.0	-	No Asbestos Detected
S76386	WS45 0.0-1.0	-	No Asbestos Detected
S76387	WS45 1.0-2.0	-	No Asbestos Detected
S76388	WS45 2.0-3.0	-	No Asbestos Detected
S76389	WS45 3.0-3.4	-	No Asbestos Detected
S76390	WS46 0.8-1.0	-	No Asbestos Detected
S76391	WS46 1.0-2.0	-	No Asbestos Detected
S76392	WS46 2.0-2.5	-	No Asbestos Detected
S76393	WS46 0.0-1.0	-	No Asbestos Detected
S76394	WS47 0.8-1.0	-	No Asbestos Detected
S76395	WS47 0.0-1.0	-	No Asbestos Detected
S76396	WS47 1.0-1.85	-	No Asbestos Detected
S76397	WS51 0.8-1.0	-	No Asbestos Detected
S76398	WS51 0.0-1.0	-	No Asbestos Detected
S76399	WS51 1.0-1.7	-	No Asbestos Detected
S76400	WS48 0.8-1.0	-	No Asbestos Detected
S76401	WS48 0.0-1.0	-	No Asbestos Detected
S76402	WS48 1.3-2.0	-	No Asbestos Detected
S76403	WS48 2.4-3.0	-	No Asbestos Detected
S76404	WS49 0.7-0.9	-	No Asbestos Detected
S76405	WS49 0.0-0.9	-	No Asbestos Detected
S76406	WS50 0.8-1.0	-	No Asbestos Detected
S76407	WS50 0.0-1.0	-	No Asbestos Detected
S76408	WS50 1.0-2.0	-	No Asbestos Detected
S76493	WS28 0.0-1.0	-	No Asbestos Detected
S76494	WS28 0.8-1.0	-	No Asbestos Detected
S76495	WS29 0.0-1.0	-	No Asbestos Detected
S76496	WS29 1.0-2.0	-	No Asbestos Detected

Our detection limit for this method is 0.001%.

CONTRACT NO: (see comments)
DATE OF ISSUE: 06.11.20

RESULTS: (cont.)

Table 1: Qualitative Results

Client Reference: B967/1 – Emmet Road

IOM sample number	Client sample number	ACM type detected	PLM result
S76497	WS30 0.0-1.0	-	No Asbestos Detected
S76498	WS30 1.0-2.0	-	No Asbestos Detected
S76499	WS06 0.0-1.0	-	No Asbestos Detected
S76500	WS06 1.0-2.0	-	No Asbestos Detected
S76501	WS06 2.0-3.0	-	No Asbestos Detected
S76502	WS07 0.0-1.0	-	No Asbestos Detected
S76503	WS07 1.0-2.0	-	No Asbestos Detected
S76504	WS07 2.0-3.0	-	No Asbestos Detected
S76505	WS23 0.0-1.0	-	No Asbestos Detected
S76506	WS23 1.0-2.0	-	No Asbestos Detected
S76507	WS23 2.0-3.0	-	No Asbestos Detected
S76508	WS23 3.0-3.4	-	No Asbestos Detected
S76509	WS11 0.12-1.0	-	No Asbestos Detected
S76510	WS11 1.0-2.0	-	No Asbestos Detected
S76511	WS11 2.0-3.0	-	No Asbestos Detected
S76512	WS25.0.0-1.0	-	No Asbestos Detected
S76513	WS25 1.0-2.0	-	No Asbestos Detected
S76514	WS25 2.0-3.0	-	No Asbestos Detected
S76515	WS20 0.0-1.0	-	No Asbestos Detected
S76516	WS20 1.0-2.0	-	No Asbestos Detected
S76517	WS20 2.0-3.0	-	No Asbestos Detected
S76518	WS21 0.0-1.0	-	No Asbestos Detected
S76519	WS21 1.0-2.0	-	No Asbestos Detected
S76520	WS21 2.0-3.0	-	No Asbestos Detected
S76521	WS03 0.8-1.0	-	No Asbestos Detected
S76522	WS03 0.0-1.0	-	No Asbestos Detected
S76523	WS03 1.0-2.0	-	No Asbestos Detected
S76524	WS03 2.0-3.0	-	No Asbestos Detected
S76541	TP19 0.8-1.0	-	No Asbestos Detected
S76542	TP19 0.0-1.0	-	No Asbestos Detected
S76543	TP19 1.0-2.0	-	No Asbestos Detected
S76544	TP19 2.0-3.0	Loose Insulation[2]	Chrysotile
S76545	TP27 0.8-1.0	-	No Asbestos Detected
S76546	TP27 1.5-2.0	-	No Asbestos Detected
S76547	TP27 2.0-3.0	-	No Asbestos Detected
S76548	TP27 3.0-3.2	-	No Asbestos Detected
S76549	TP35 0.8-0.85	-	No Asbestos Detected
S76550	TP35 0.0-0.85	-	No Asbestos Detected
S76551	TP35 1.0-2.0	-	No Asbestos Detected
S76552	TP35 2.0-3.0	-	No Asbestos Detected
S76553	TP35 3.0-3.2	-	No Asbestos Detected
S76554	TP33 0.8-1.0	-	No Asbestos Detected
S76555	TP33 0.2-1.0	-	No Asbestos Detected
S76556	TP33 1.0-2.0	-	No Asbestos Detected
S76557	TP33 2.0-3.0	-	No Asbestos Detected

Our detection limit for this method is 0.001%.

CONTRACT NO: (see comments)
DATE OF ISSUE: 06.11.20

RESULTS: (cont.)

Table 1: Qualitative Results

Client Reference: B967/1 – Emmet Road

IOM sample number	Client sample number	ACM type detected	PLM result
S76558	TP28 1.0-2.0	-	No Asbestos Detected
S76559	TP28 2.0-3.0	-	No Asbestos Detected
S76560	TP49 1.0-2.0	-	No Asbestos Detected
S76561	TP49 2.0-3.0	-	No Asbestos Detected
S76562	TP49 3.0-3.2	-	No Asbestos Detected
S76563	TP50 2.0-2.7	-	No Asbestos Detected
S76564	TP51 1.7-3.0	-	No Asbestos Detected
S76565	TP51 2.9-3.0	-	No Asbestos Detected
S76566	TP37 1.0-2.0	-	No Asbestos Detected
S76567	TP37 2.0-3.0	-	No Asbestos Detected
S76568	TP37 3.0-3.2	-	No Asbestos Detected
S76569	TP40 2.4-3.0	-	No Asbestos Detected
S76570	TP40 3.0-3.2	-	No Asbestos Detected
S76571	TP09 0.8-1.0	-	No Asbestos Detected
S76572	TP17 0.8-1.0	-	No Asbestos Detected
S76573	TP22 0.8-1.0	-	No Asbestos Detected
S76574	TP25 0.8-1.0	-	No Asbestos Detected
S77092	TP33 3.0-3.2	-	No Asbestos Detected
S77093	WS01 2.5-2.7	-	No Asbestos Detected
S77094	WS02 2.5-2.75	-	No Asbestos Detected
S77095	WS03 3.0-3.4	-	No Asbestos Detected
S77096	WS05 2.7-2.9	-	No Asbestos Detected
S77097	WS06 2.7-3.0	-	No Asbestos Detected
S77098	WS07 3.0-3.4	-	No Asbestos Detected
S77099	WS08 3.0-3.4	-	No Asbestos Detected
S77100	WS11 3.0-3.4	-	No Asbestos Detected
S77101	WS13 0.0-1.0	-	No Asbestos Detected
S77102	WS16 2.7-3.0	-	No Asbestos Detected
S77103	WS20 3.0-3.4	-	No Asbestos Detected
S77104	WS21 3.0-3.4	-	No Asbestos Detected
S77105	WS22 3.0-3.4	-	No Asbestos Detected
S77106	WS24 3.0-3.4	-	No Asbestos Detected
S77107	WS25 3.0-3.2	-	No Asbestos Detected
S77108	WS29 3.0-3.4	-	No Asbestos Detected
S77109	WS30 3.0-3.4	-	No Asbestos Detected
S77110	WS44 3.0-3.4	-	No Asbestos Detected

Our detection limit for this method is 0.001%.

CONTRACT NO: (see comments)
DATE OF ISSUE: 06.11.20

RESULTS: (cont.)

Table 2: Quantitative Analysis Results

Client Sample Number	Sample Weight (g)	% Asbestos in Sample from ACM's	% Asbestos in Sample as Unbound Fibres	Total % Asbestos in Sample
WS013 0-1	819	0.176	-	0.176
TP19 2.0-3.0	726	-	0.003	0.003

Our limit of quantification for gravimetric analysis of soil samples is 0.001%.

COMMENTS:

[1] ACM was visible during initial examination of the sample.
[2] ACM was detected during microscopic examination of the sample

This certificate, produced at the client's request, is a composite of IOM contract numbers S14486, S14585, S14694, S14910, S14911 and S15068.

IOM Consulting cannot accept responsibility for samples that have been incorrectly collected or despatched by external clients.

Any opinions and interpretations expressed herein are outwith the scope of our UKAS accreditation.

AUTHORISED BY: .....
D Third
Scientific Technician

CERTIFICATE OF ANALYSIS

Replacement for IOM certificate S15228

ANALYSIS REQUESTED BY: Ground Investigations Ireland
Catherinestown House
Hazelhatch Road
Newcastle
Co. Dublin

CONTRACT NO: S15228-R1

DATE OF ISSUE: 24.11.20

DATE SAMPLES RECEIVED: 04.11.20

DATE ANALYSIS COMPLETED: 11.11.20

DESCRIPTION: Eight soil/loose aggregate samples each weighing approximately 1.1-1.6kg.

ANALYSIS REQUESTED: Qualitative and quantitative analysis of soil/loose aggregate samples for mass determination of asbestos.

METHODS:

Qualitative - The samples were analysed qualitatively for asbestos by polarised light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative - The analysis was carried out using our documented in-house method based on HSE Contract Research Report No. 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies *et al*, 1996) and HSG 248. Our method includes initial examination of the entire sample, detailed analysis of a representative sub-sample and quantification by hand picking/weighing and/or fibre counting/sizing as appropriate.

RESULTS:

Initial Screening

No asbestos was detected in any of the soil samples by stereo-binocular and polarised light microscopy.

A summary of the results is given in Table 1.

www.iom-world.org

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IOM CONSULTING LIMITED, registered in Scotland No. SC205670

UKAS TESTING
0374

CONTRACT NO: S15228-R1
DATE OF ISSUE: 24.11.20

RESULTS: (cont.)

Table 1: Qualitative Results

Client Ref: Emmet Road – 9897-08-20

IOM sample number	Client sample number	ACM type detected	PLM result
S77313	BH03 0.80-1.00m	-	No Asbestos Detected
S77314	BH03 3.00-3.40m	-	No Asbestos Detected
S77315	BH04 3.00-3.40m	-	No Asbestos Detected
S77316	BH07 3.00-3.40m	-	No Asbestos Detected
S77317	BH08 3.00-3.40m	-	No Asbestos Detected
S77318	BH08 1.00-2.00m	-	No Asbestos Detected
S77319	BH12 1.85-3.00m	-	No Asbestos Detected
S77320	BH12 3.00-3.40m	-	No Asbestos Detected

Our detection limit for this method is 0.001%.

COMMENTS:

IOM Consulting cannot accept responsibility for samples that have been incorrectly collected or despatched by external clients.

Any opinions and interpretations expressed herein are out with the scope of our UKAS accreditation.

AUTHORISED BY: .....
D Third
Scientific Technician

OCSC
O'CONNOR | SUTTON | CRONIN
Multidisciplinary
Consulting Engineers

Appendix E

HazWasteOnline (HWOL) Reports

Waste Classification Report

QMFJB-UNE5N-L8KQM

Job name

EMT-20-12733-Batch-1-File-2

Description/Comments

Soil Samples

Project

B967/1

Site

Emmet Road

Related Documents

#	Name	Description
1	EMT-20-12733-Batch-1-File-2.HWOL	.hwol file used to create the Job

Waste Stream Template

EJEL Rilta

Classified by

Name:
Kate Moraes dos Santos
Date:
19 Oct 2020 16:22 GMT
Telephone:

Company:
O'Connor Sutton Cronin & Assoc. Ltd.
OCSC

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	08 Apr 2020
Advanced Hazardous Waste Classification	09 Apr 2020

Report

Created by: Kate Moraes dos Santos
Created date: 19 Oct 2020 16:22 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS05-16/09/2020-0.075-1.00m		Non Hazardous		3
2	WS05-16/09/2020-1.00-2.00m		Non Hazardous		6
3	WS05-16/09/2020-2.00-2.90m		Non Hazardous		9
4	WS05-16/09/2020-2.70-2.90m		Non Hazardous		12
5	WS01-16/09/2020-0.02-1.00m		Non Hazardous		15
6	WS01-16/09/2020-1.00-2.00m		Non Hazardous		18
7	WS01-16/09/2020-2.00-2.70m		Non Hazardous		21
8	WS01-16/09/2020-2.50-2.70m		Non Hazardous		24
9	WS09-16/09/2020-0.00-1.00m		Non Hazardous		27
10	WS09-16/09/2020-1.00-2.00m		Non Hazardous		30
11	WS09-16/09/2020-2.00-3.00m		Non Hazardous		33
12	WS09-16/09/2020-3.00-3.30m		Non Hazardous		36
13	WS02-16/09/2020-0.085-1.00m		Non Hazardous		39

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
14	WS02-16/09/2020-1.00-2.00m		Non Hazardous		42
15	WS02-16/09/2020-2.00-2.75m		Non Hazardous		45
16	WS02-16/09/2020-2.50-2.75m		Non Hazardous		48

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	51
Appendix B: Rationale for selection of metal species	52
Appendix C: Version	53

Classification of sample: WS05-16/09/2020-0.075-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS05-16/09/2020-0.075-1.00m
Moisture content:
12.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	1	3 mg/kg		2.619 mg/kg	0.000262 %	✓	
	051-003-00-9							
2	arsenic { arsenic trioxide }		9.5 mg/kg	1.32	10.95 mg/kg	0.0011 %	✓	
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	barium { barium sulfate }		80 mg/kg	1.7	118.694 mg/kg	0.0119 %	✓	
	231-784-4 / 7727-43-7							
4	cadmium { cadmium sulfide }	1	1.7 mg/kg	1.285	1.907 mg/kg	0.000148 %	✓	
	048-010-00-4 / 215-147-8 / 1306-23-6							
5	copper { copper(II) oxide }		35 mg/kg	1.252	38.248 mg/kg	0.00382 %	✓	
	029-016-00-6 / 215-269-1 / 1317-38-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		30.4 mg/kg	1.462	38.789 mg/kg	0.00388 %	✓	
	215-160-9 / 1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
	024-001-00-0 / 215-607-8 / 1333-82-0							
8	lead { lead chromate }	1	82 mg/kg	1.56	111.661 mg/kg	0.00716 %	✓	
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		2.9 mg/kg	1.5	3.798 mg/kg	0.00038 %	✓	
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel dihydroxide }		28.9 mg/kg	1.579	39.85 mg/kg	0.00399 %	✓	
	028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		1 mg/kg	1.405	1.227 mg/kg	0.000123 %	✓	
	034-002-00-8							
13	zinc { zinc oxide }		92 mg/kg	1.245	99.97 mg/kg	0.01 %	✓	
	030-013-00-7 / 215-222-5 / 1314-13-2							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.405	mg/kg	0.000141 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.05	mg/kg		0.0437	mg/kg	0.00000436 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.05	mg/kg		0.0437	mg/kg	0.00000436 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.05	mg/kg		0.0437	mg/kg	0.00000436 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.06	mg/kg		0.0524	mg/kg	0.00000524 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.07	mg/kg		0.0611	mg/kg	0.00000611 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.08	mg/kg		0.0698	mg/kg	0.00000698 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.03	mg/kg		0.0262	mg/kg	0.00000262 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.68	pH		8.68	pH	8.68 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0484 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS05-16/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS05-16/09/2020-1.00-2.00m
Moisture content:
12%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.64 mg/kg	0.000264 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.4 mg/kg	1.32	13.246 mg/kg	0.00132 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		90 mg/kg	1.7	134.602 mg/kg	0.0135 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.488 mg/kg	0.000194 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		36 mg/kg	1.252	39.656 mg/kg	0.00397 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		49.1 mg/kg	1.462	63.151 mg/kg	0.00632 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	20.59 mg/kg	0.00132 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.1 mg/kg	1.5	8.053 mg/kg	0.000805 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		43.1 mg/kg	1.579	59.907 mg/kg	0.00599 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.473 mg/kg	0.000247 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		81 mg/kg	1.245	88.723 mg/kg	0.00887 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.9	mg/kg	3.22	2.55	mg/kg	0.000255 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.62	pH		8.62	pH	8.62 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0486 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS05-16/09/2020-2.00-2.90m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS05-16/09/2020-2.00-2.90m
Moisture content:
9.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.81 mg/kg	0.000181 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.2 mg/kg	1.32	13.383 mg/kg	0.00134 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		76 mg/kg	1.7	116.893 mg/kg	0.0117 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.7 mg/kg	1.285	3.141 mg/kg	0.000244 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		36 mg/kg	1.252	40.783 mg/kg	0.00408 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		47.4 mg/kg	1.462	62.696 mg/kg	0.00627 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	21.174 mg/kg	0.00136 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.8 mg/kg	1.5	7.874 mg/kg	0.000787 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		36.8 mg/kg	1.579	52.604 mg/kg	0.00526 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				5 mg/kg	1.405	6.358 mg/kg	0.000636 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		87 mg/kg	1.245	98.003 mg/kg	0.0098 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.04	mg/kg	0.000204 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.44	pH		8.44	pH	8.44 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0474 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS05-16/09/2020-2.70-2.90m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS05-16/09/2020-2.70-2.90m
Moisture content:
8.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.824 mg/kg	0.000182 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.3 mg/kg	1.32	13.607 mg/kg	0.00136 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		89 mg/kg	1.7	137.946 mg/kg	0.0138 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.6 mg/kg	1.285	3.048 mg/kg	0.000237 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		35 mg/kg	1.252	39.957 mg/kg	0.004 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		30 mg/kg	1.462	39.988 mg/kg	0.004 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	24.183 mg/kg	0.00155 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.8 mg/kg	1.5	6.567 mg/kg	0.000657 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		43.2 mg/kg	1.579	62.23 mg/kg	0.00622 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.844 mg/kg	0.000384 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		90 mg/kg	1.245	102.166 mg/kg	0.0102 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.175	mg/kg	0.000117 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0638	mg/kg	0.00000638 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.0274	mg/kg	0.00000274 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.64	pH		8.64	pH	8.64 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0483 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS01-16/09/2020-0.02-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS01-16/09/2020-0.02-1.00m
Moisture content:
13.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	1	3 mg/kg		2.586 mg/kg	0.000259 %	✓	
	051-003-00-9							
2	arsenic { arsenic trioxide }		14.2 mg/kg	1.32	16.161 mg/kg	0.00162 %	✓	
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	barium { barium sulfate }		91 mg/kg	1.7	133.314 mg/kg	0.0133 %	✓	
	231-784-4 / 7727-43-7							
4	cadmium { cadmium sulfide }	1	1.5 mg/kg	1.285	1.662 mg/kg	0.000129 %	✓	
	048-010-00-4 / 215-147-8 / 1306-23-6							
5	copper { copper(II) oxide }		55 mg/kg	1.252	59.347 mg/kg	0.00593 %	✓	
	029-016-00-6 / 215-269-1 / 1317-38-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		55.4 mg/kg	1.462	69.796 mg/kg	0.00698 %	✓	
	215-160-9 / 1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
	024-001-00-0 / 215-607-8 / 1333-82-0							
8	lead { lead chromate }	1	84 mg/kg	1.56	112.943 mg/kg	0.00724 %	✓	
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		6.7 mg/kg	1.5	8.664 mg/kg	0.000866 %	✓	
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel dihydroxide }		35.8 mg/kg	1.579	48.743 mg/kg	0.00487 %	✓	
	028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		1 mg/kg	1.405	1.211 mg/kg	0.000121 %	✓	
	034-002-00-8							
13	zinc { zinc oxide }		102 mg/kg	1.245	109.44 mg/kg	0.0109 %	✓	
	030-013-00-7 / 215-222-5 / 1314-13-2							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1	mg/kg	3.22	2.776	mg/kg	0.000278 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.07	mg/kg		0.0603	mg/kg	0.00000603 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.07	mg/kg		0.0603	mg/kg	0.00000603 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.27	mg/kg		0.233	mg/kg	0.0000233 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.09	mg/kg		0.0776	mg/kg	0.00000776 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.52	mg/kg		0.448	mg/kg	0.0000448 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.7	mg/kg		0.603	mg/kg	0.0000603 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.42	mg/kg		0.362	mg/kg	0.0000362 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.49	mg/kg		0.422	mg/kg	0.0000422 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.78	mg/kg		0.672	mg/kg	0.0000672 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.57	mg/kg		0.491	mg/kg	0.0000491 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.07	mg/kg		0.0603	mg/kg	0.00000603 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.61	mg/kg		0.526	mg/kg	0.0000526 %	✓	
			205-883-8	191-24-2									
29		coronene				0.07	mg/kg		0.0603	mg/kg	0.00000603 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.9	mg/kg		0.776	mg/kg	0.0000776 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.35	mg/kg		0.302	mg/kg	0.0000302 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.29	pH		8.29	pH	8.29 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				96	mg/kg		82.752	mg/kg	0.00828 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0616 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00828%)

Classification of sample: WS01-16/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS01-16/09/2020-1.00-2.00m
Moisture content:
12.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.622 mg/kg	0.000262 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.7 mg/kg	1.32	14.655 mg/kg	0.00147 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		76 mg/kg	1.7	112.889 mg/kg	0.0113 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.7 mg/kg	1.285	3.033 mg/kg	0.000236 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		43 mg/kg	1.252	47.044 mg/kg	0.0047 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		37.4 mg/kg	1.462	47.775 mg/kg	0.00478 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	27.266 mg/kg	0.00175 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.2 mg/kg	1.5	6.818 mg/kg	0.000682 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		55.1 mg/kg	1.579	76.065 mg/kg	0.00761 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.228 mg/kg	0.000123 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		115 mg/kg	1.245	125.106 mg/kg	0.0125 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.126	mg/kg	0.000113 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.42	pH		8.42	pH	8.42 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0511 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS01-16/09/2020-2.00-2.70m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS01-16/09/2020-2.00-2.70m
Moisture content:
9.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.808 mg/kg	0.000181 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11 mg/kg	1.32	13.129 mg/kg	0.00131 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		87 mg/kg	1.7	133.664 mg/kg	0.0134 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.905 mg/kg	0.000226 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		38 mg/kg	1.252	43.001 mg/kg	0.0043 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		36 mg/kg	1.462	47.565 mg/kg	0.00476 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	23.971 mg/kg	0.00154 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.9 mg/kg	1.5	8.001 mg/kg	0.0008 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		45.6 mg/kg	1.579	65.111 mg/kg	0.00651 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				5 mg/kg	1.405	6.351 mg/kg	0.000635 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		87 mg/kg	1.245	97.894 mg/kg	0.00979 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.3	mg/kg	3.22	0.873	mg/kg	0.0000873 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.38	pH		8.38	pH	8.38 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.049 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS01-16/09/2020-2.50-2.70m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS01-16/09/2020-2.50-2.70m
Moisture content:
9.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.727 mg/kg	0.000273 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.9 mg/kg	1.32	14.282 mg/kg	0.00143 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		168 mg/kg	1.7	259.537 mg/kg	0.026 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.4 mg/kg	1.285	2.804 mg/kg	0.000218 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		37 mg/kg	1.252	42.101 mg/kg	0.00421 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		29.9 mg/kg	1.462	39.724 mg/kg	0.00397 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	26.94 mg/kg	0.00173 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.3 mg/kg	1.5	7.227 mg/kg	0.000723 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		49.4 mg/kg	1.579	70.927 mg/kg	0.00709 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				10 mg/kg	1.405	12.771 mg/kg	0.00128 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		106 mg/kg	1.245	119.933 mg/kg	0.012 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.171	mg/kg	0.000117 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.42	pH		8.42	pH	8.42 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0645 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS09-16/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS09-16/09/2020-0.00-1.00m
Moisture content:
14.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	4 mg/kg		3.416 mg/kg	0.000342 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.5 mg/kg	1.32	17.477 mg/kg	0.00175 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		165 mg/kg	1.7	239.479 mg/kg	0.0239 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.6 mg/kg	1.285	2.854 mg/kg	0.000222 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		52 mg/kg	1.252	55.589 mg/kg	0.00556 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		61.4 mg/kg	1.462	76.638 mg/kg	0.00766 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	137 mg/kg	1.56	182.495 mg/kg	0.0117 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.5 mg/kg	1.5	8.328 mg/kg	0.000833 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		47.6 mg/kg	1.579	64.207 mg/kg	0.00642 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.2 mg/kg	0.00012 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		218 mg/kg	1.245	231.731 mg/kg	0.0232 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.2	mg/kg	3.22	3.3	mg/kg	0.00033 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.07	mg/kg		0.0598	mg/kg	0.00000598 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.49	mg/kg		0.418	mg/kg	0.0000418 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.15	mg/kg		0.128	mg/kg	0.0000128 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				1.17	mg/kg		0.999	mg/kg	0.0000999 %	✓	
			205-912-4	206-44-0									
22		pyrene				1.06	mg/kg		0.905	mg/kg	0.0000905 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.66	mg/kg		0.564	mg/kg	0.0000564 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.69	mg/kg		0.589	mg/kg	0.0000589 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.7	mg/kg		0.598	mg/kg	0.0000598 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.43	mg/kg		0.367	mg/kg	0.0000367 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.07	mg/kg		0.0598	mg/kg	0.00000598 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.48	mg/kg		0.41	mg/kg	0.000041 %	✓	
			205-883-8	191-24-2									
29		coronene				0.06	mg/kg		0.0512	mg/kg	0.00000512 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.94	mg/kg		0.803	mg/kg	0.0000803 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.37	mg/kg		0.316	mg/kg	0.0000316 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.4	pH		8.4	pH	8.4 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				206	mg/kg		175.924	mg/kg	0.0176 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.101 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0176%)

Classification of sample: WS09-16/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS09-16/09/2020-1.00-2.00m
Moisture content:
10.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.784 mg/kg	0.000178 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.4 mg/kg	1.32	12.248 mg/kg	0.00122 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		65 mg/kg	1.7	98.538 mg/kg	0.00985 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.3 mg/kg	1.285	2.637 mg/kg	0.000205 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		29 mg/kg	1.252	32.381 mg/kg	0.00324 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		29.5 mg/kg	1.462	38.459 mg/kg	0.00385 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	13 mg/kg	1.56	18.088 mg/kg	0.00116 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4 mg/kg	1.5	5.353 mg/kg	0.000535 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		35.1 mg/kg	1.579	49.453 mg/kg	0.00495 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.253 mg/kg	0.000125 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		83 mg/kg	1.245	92.154 mg/kg	0.00922 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.149	mg/kg	0.000115 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.61	pH		8.61	pH	8.61 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0402 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS09-16/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS09-16/09/2020-2.00-3.00m
Moisture content:
9.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.721 mg/kg	0.000272 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.2 mg/kg	1.32	14.61 mg/kg	0.00146 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		105 mg/kg	1.7	161.854 mg/kg	0.0162 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.6 mg/kg	1.285	3.031 mg/kg	0.000236 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		39 mg/kg	1.252	44.279 mg/kg	0.00443 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		55.2 mg/kg	1.462	73.175 mg/kg	0.00732 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	22.636 mg/kg	0.00145 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		7 mg/kg	1.5	9.525 mg/kg	0.000952 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		48.2 mg/kg	1.579	69.052 mg/kg	0.00691 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				6 mg/kg	1.405	7.646 mg/kg	0.000765 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		93 mg/kg	1.245	104.993 mg/kg	0.0105 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.336	mg/kg	0.000234 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.59	pH		8.59	pH	8.59 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0562 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS09-16/09/2020-3.00-3.30m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS09-16/09/2020-3.00-3.30m
Moisture content:
10.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.786 mg/kg	0.000179 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.8 mg/kg	1.32	11.555 mg/kg	0.00116 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		84 mg/kg	1.7	127.484 mg/kg	0.0127 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.8 mg/kg	1.285	2.066 mg/kg	0.000161 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		35 mg/kg	1.252	39.124 mg/kg	0.00391 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		58.1 mg/kg	1.462	75.83 mg/kg	0.00758 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	22.287 mg/kg	0.00143 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.9 mg/kg	1.5	7.904 mg/kg	0.00079 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		41.1 mg/kg	1.579	57.971 mg/kg	0.0058 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				5 mg/kg	1.405	6.273 mg/kg	0.000627 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		82 mg/kg	1.245	91.145 mg/kg	0.00911 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.725	mg/kg	0.000173 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0625	mg/kg	0.00000625 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.04	mg/kg		0.0357	mg/kg	0.00000357 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.41	pH		8.41	pH	8.41 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0492 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS02-16/09/2020-0.085-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS02-16/09/2020-0.085-1.00m
Moisture content:
10.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	1	3 mg/kg		2.691 mg/kg	0.000269 %	✓	
	051-003-00-9							
2	arsenic { arsenic trioxide }		10.1 mg/kg	1.32	11.962 mg/kg	0.0012 %	✓	
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	barium { barium sulfate }		89 mg/kg	1.7	135.678 mg/kg	0.0136 %	✓	
	231-784-4 / 7727-43-7							
4	cadmium { cadmium sulfide }	1	1.9 mg/kg	1.285	2.19 mg/kg	0.00017 %	✓	
	048-010-00-4 / 215-147-8 / 1306-23-6							
5	copper { copper(II) oxide }		35 mg/kg	1.252	39.3 mg/kg	0.00393 %	✓	
	029-016-00-6 / 215-269-1 / 1317-38-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		37.4 mg/kg	1.462	49.032 mg/kg	0.0049 %	✓	
	215-160-9 / 1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
	024-001-00-0 / 215-607-8 / 1333-82-0							
8	lead { lead chromate }	1	69 mg/kg	1.56	96.542 mg/kg	0.00619 %	✓	
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		3.9 mg/kg	1.5	5.248 mg/kg	0.000525 %	✓	
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel dihydroxide }		32.7 mg/kg	1.579	46.33 mg/kg	0.00463 %	✓	
	028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		2 mg/kg	1.405	2.521 mg/kg	0.000252 %	✓	
	034-002-00-8							
13	zinc { zinc oxide }		108 mg/kg	1.245	120.583 mg/kg	0.0121 %	✓	
	030-013-00-7 / 215-222-5 / 1314-13-2							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.444	mg/kg	0.000144 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.03	mg/kg		0.0269	mg/kg	0.00000269 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.27	mg/kg		0.242	mg/kg	0.0000242 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.06	mg/kg		0.0538	mg/kg	0.00000538 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.54	mg/kg		0.484	mg/kg	0.0000484 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.48	mg/kg		0.431	mg/kg	0.0000431 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.31	mg/kg		0.278	mg/kg	0.0000278 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.33	mg/kg		0.296	mg/kg	0.0000296 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.31	mg/kg		0.278	mg/kg	0.0000278 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.19	mg/kg		0.17	mg/kg	0.000017 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.21	mg/kg		0.188	mg/kg	0.0000188 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.42	mg/kg		0.377	mg/kg	0.0000377 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.17	mg/kg		0.152	mg/kg	0.0000152 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.44	pH		8.44	pH	8.44 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0536 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS02-16/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS02-16/09/2020-1.00-2.00m
Moisture content:
11.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.778 mg/kg	0.000178 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.4 mg/kg	1.32	13.381 mg/kg	0.00134 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		52 mg/kg	1.7	78.565 mg/kg	0.00786 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.3 mg/kg	1.285	2.628 mg/kg	0.000204 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		38 mg/kg	1.252	42.288 mg/kg	0.00423 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		33.6 mg/kg	1.462	43.657 mg/kg	0.00437 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	22.187 mg/kg	0.00142 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.5 mg/kg	1.5	6.002 mg/kg	0.0006 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		37.9 mg/kg	1.579	53.218 mg/kg	0.00532 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.498 mg/kg	0.00025 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		90 mg/kg	1.245	99.59 mg/kg	0.00996 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.431	mg/kg	0.000143 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.53	pH		8.53	pH	8.53 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0414 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS02-16/09/2020-2.00-2.75m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS02-16/09/2020-2.00-2.75m
Moisture content:
9.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.806 mg/kg	0.000181 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13.6 mg/kg	1.32	16.215 mg/kg	0.00162 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		86 mg/kg	1.7	131.981 mg/kg	0.0132 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2 mg/kg	1.285	2.321 mg/kg	0.000181 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		36 mg/kg	1.252	40.693 mg/kg	0.00407 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		39.4 mg/kg	1.462	52 mg/kg	0.0052 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	21.128 mg/kg	0.00135 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.8 mg/kg	1.5	6.502 mg/kg	0.00065 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		45.6 mg/kg	1.579	65.039 mg/kg	0.0065 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	5.075 mg/kg	0.000507 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		86 mg/kg	1.245	96.662 mg/kg	0.00967 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.163	mg/kg	0.000116 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.66	pH		8.66	pH	8.66 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				246	mg/kg		222.138	mg/kg	0.0222 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0658 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0222%)

Classification of sample: WS02-16/09/2020-2.50-2.75m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS02-16/09/2020-2.50-2.75m
Moisture content:
8.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.739 mg/kg	0.000274 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.8 mg/kg	1.32	14.224 mg/kg	0.00142 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		102 mg/kg	1.7	158.269 mg/kg	0.0158 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.8 mg/kg	1.285	3.286 mg/kg	0.000256 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		37 mg/kg	1.252	42.286 mg/kg	0.00423 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		32.6 mg/kg	1.462	43.501 mg/kg	0.00435 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	24.21 mg/kg	0.00155 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.4 mg/kg	1.5	7.396 mg/kg	0.00074 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		47.5 mg/kg	1.579	68.499 mg/kg	0.00685 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				9 mg/kg	1.405	11.545 mg/kg	0.00115 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		93 mg/kg	1.245	105.687 mg/kg	0.0106 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.176	mg/kg	0.000118 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0639	mg/kg	0.00000639 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.04	mg/kg		0.0365	mg/kg	0.00000365 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0529 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

barium sulfate (EC Number: 231-784-4, CAS Number: 7727-43-7)

Conversion factor: 1.7
Description/Comments: No hazard statements
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/89983 Sigma Aldrich SDS dated 15/4/19
Data source date: 02 Apr 2020
Hazard Statements: None.

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **coronene** (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source:
http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2 H371

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

- **polychlorobiphenyls; PCB** (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

- **pH** (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

arsenic {arsenic trioxide}

Worst case species based on Hazard Statement.

barium {barium sulfate}

conservative

cadmium {cadmium sulfide}

Worst case species based on Hazard Statements.

copper {copper(II) oxide}

Reasonable

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

oxide conversion factor included

chromium in chromium(VI) compounds {chromium(VI) oxide}

most conservative

lead {lead chromate}

Worst case species based on Hazard Statements.

mercury {mercury dichloride}

Worst case species based on Hazard Statements.

molybdenum {molybdenum(VI) oxide}

Worst case species based on Hazard Statements.

nickel {nickel dihydroxide}

Worst case species based on Hazard Statements.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on Hazard Statements.

zinc {zinc oxide}

Concentrations of chromium VI insufficient for zinc chormate to be present.

boron {diboron trioxide; boric oxide}

Reasonable

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.289.4500.8764 (15 Oct 2020)
HazWasteOnline Database: 2020.290.4501.8765 (16 Oct 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

Waste Classification Report

3VQFT-X44BS-VC4BR

Job name

EMT-20-12904-Batch-1-File-2

Description/Comments

Soil Samples

Project

B967/1

Site

Emmet Road

Related Documents

#	Name	Description
1	EMT-20-12904-Batch-1-File-2.hwol	.hwol file used to create the Job

Waste Stream Template

EJEL Rilta

Classified by

Name:
Kate Moraes dos Santos
Date:
19 Oct 2020 16:39 GMT
Telephone:

Company:
O'Connor Sutton Cronin & Assoc. Ltd.
OCSC

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	08 Apr 2020
Advanced Hazardous Waste Classification	09 Apr 2020

Report

Created by: Kate Moraes dos Santos
Created date: 19 Oct 2020 16:39 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS13-17/09/2020-0.00-1.00m		Non Hazardous		3
2	WS13-17/09/2020-1.00-2.00m		Non Hazardous		6
3	WS10-17/09/2020-0.09-1.00m		Non Hazardous		9
4	WS10-17/09/2020-1.00-2.00m		Non Hazardous		12
5	WS10-17/09/2020-2.00-3.00m		Non Hazardous		15
6	WS10-17/09/2020-3.00-3.40m		Non Hazardous		18
7	WS14-17/09/2020-0.13-1.00m		Non Hazardous		21
8	WS14-17/09/2020-1.00-2.00m		Non Hazardous		24
9	WS14-17/09/2020-2.00-3.00m		Non Hazardous		27
10	WS14-17/09/2020-3.00-3.40m		Non Hazardous		30
11	WS04-17/09/2020-0.00-1.00m		Non Hazardous		33
12	WS04-17/09/2020-1.00-2.00m		Non Hazardous		36
13	WS04-17/09/2020-2.00-3.00m		Non Hazardous		39

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
14	WS04-17/09/2020-3.00-3.40m		Non Hazardous		42
15	WS15-18/09/2020-0.03-1.00m		Non Hazardous		45
16	WS15-18/09/2020-1.00-2.00m		Non Hazardous		48
17	WS15-18/09/2020-2.00-3.00m		Non Hazardous		51
18	WS15-18/09/2020-3.00-3.40m		Non Hazardous		54
19	WS18-18/09/2020-0.00-1.00m		Non Hazardous		57
20	WS18-18/09/2020-1.00-2.00m		Non Hazardous		60
21	WS18-18/09/2020-2.00-3.00m		Non Hazardous		63
22	WS18-18/09/2020-3.00-3.40m		Non Hazardous		66
23	WS17-18/09/2020-0.00-1.00m		Non Hazardous		69
24	WS17-18/09/2020-1.00-2.00m		Non Hazardous		72
25	WS17-18/09/2020-2.00-3.00m		Non Hazardous		75
26	WS17-18/09/2020-3.00-3.40m		Non Hazardous		78

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	81
Appendix B: Rationale for selection of metal species	82
Appendix C: Version	83

Classification of sample: WS13-17/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS13-17/09/2020-0.00-1.00m
Moisture content:
14.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	4 mg/kg		3.42 mg/kg	0.000342 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15 mg/kg	1.32	16.933 mg/kg	0.00169 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		206 mg/kg	1.7	299.336 mg/kg	0.0299 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.747 mg/kg	0.000214 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		75 mg/kg	1.252	80.27 mg/kg	0.00803 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		25.5 mg/kg	1.462	31.866 mg/kg	0.00319 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	213 mg/kg	1.56	284.066 mg/kg	0.0182 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.2 mg/kg	1.353	0.231 mg/kg	0.0000231 %	✓	
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.2 mg/kg	1.5	4.105 mg/kg	0.00041 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		47.4 mg/kg	1.579	64.012 mg/kg	0.0064 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.403 mg/kg	0.00024 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		281 mg/kg	1.245	299.049 mg/kg	0.0299 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.8	mg/kg	3.22	4.955	mg/kg	0.000496 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.06	mg/kg		0.0513	mg/kg	0.00000513 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.37	mg/kg		0.316	mg/kg	0.0000316 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				0.09	mg/kg		0.0769	mg/kg	0.00000769 %	✓	
			201-469-6	83-32-9									
18		fluorene				0.18	mg/kg		0.154	mg/kg	0.0000154 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				1.58	mg/kg		1.351	mg/kg	0.000135 %	✓	
			201-581-5	85-01-8									
20		anthracene				1.03	mg/kg		0.881	mg/kg	0.0000881 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				4.43	mg/kg		3.788	mg/kg	0.000379 %	✓	
			205-912-4	206-44-0									
22		pyrene				3.88	mg/kg		3.317	mg/kg	0.000332 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				2.43	mg/kg		2.078	mg/kg	0.000208 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				2.57	mg/kg		2.197	mg/kg	0.00022 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				2.6	mg/kg		2.223	mg/kg	0.000222 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				1.45	mg/kg		1.24	mg/kg	0.000124 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.34	mg/kg		0.291	mg/kg	0.0000291 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				1.63	mg/kg		1.394	mg/kg	0.000139 %	✓	
			205-883-8	191-24-2									
29		coronene				0.25	mg/kg		0.214	mg/kg	0.0000214 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				3.27	mg/kg		2.796	mg/kg	0.00028 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				1.27	mg/kg		1.086	mg/kg	0.000109 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				1	mg/kg		0.855	mg/kg	0.0000855 %	✓	
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.47	pH		8.47	pH	8.47 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				107	mg/kg		91.485	mg/kg	0.00915 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.111 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00915%)

Classification of sample: WS13-17/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS13-17/09/2020-1.00-2.00m
Moisture content:
17.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.825 mg/kg	0.0000825 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.7 mg/kg	1.32	9.477 mg/kg	0.000948 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		127 mg/kg	1.7	178.067 mg/kg	0.0178 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.7 mg/kg	1.285	1.803 mg/kg	0.00014 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		41 mg/kg	1.252	42.341 mg/kg	0.00423 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		17.2 mg/kg	1.462	20.739 mg/kg	0.00207 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	136 mg/kg	1.56	175.011 mg/kg	0.0112 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.5 mg/kg	1.353	0.558 mg/kg	0.0000558 %	✓	
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		1.5 mg/kg	1.5	1.856 mg/kg	0.000186 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		36 mg/kg	1.579	46.911 mg/kg	0.00469 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		265 mg/kg	1.245	272.126 mg/kg	0.0272 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.125	mg/kg	0.000213 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.07	mg/kg		0.0578	mg/kg	0.00000578 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.1	mg/kg		0.0825	mg/kg	0.00000825 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.57	mg/kg		0.47	mg/kg	0.000047 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.23	mg/kg		0.19	mg/kg	0.000019 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				1.36	mg/kg		1.122	mg/kg	0.000112 %	✓	
			205-912-4	206-44-0									
22		pyrene				1.28	mg/kg		1.056	mg/kg	0.000106 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.78	mg/kg		0.644	mg/kg	0.0000644 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.84	mg/kg		0.693	mg/kg	0.0000693 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.79	mg/kg		0.652	mg/kg	0.0000652 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.44	mg/kg		0.363	mg/kg	0.0000363 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.08	mg/kg		0.066	mg/kg	0.0000066 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.46	mg/kg		0.38	mg/kg	0.000038 %	✓	
			205-883-8	191-24-2									
29		coronene				0.07	mg/kg		0.0578	mg/kg	0.00000578 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.99	mg/kg		0.817	mg/kg	0.0000817 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.39	mg/kg		0.322	mg/kg	0.0000322 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				100	mg/kg		82.5	mg/kg	0.00825 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0782 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00825%)

Classification of sample: WS10-17/09/2020-0.09-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS10-17/09/2020-0.09-1.00m
Moisture content:
14.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.556 mg/kg	0.000256 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9 mg/kg	1.32	10.124 mg/kg	0.00101 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		98 mg/kg	1.7	141.903 mg/kg	0.0142 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.6 mg/kg	1.285	1.752 mg/kg	0.000136 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		35 mg/kg	1.252	37.328 mg/kg	0.00373 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		76.7 mg/kg	1.462	95.51 mg/kg	0.00955 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	64 mg/kg	1.56	85.054 mg/kg	0.00545 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.1 mg/kg	1.5	7.797 mg/kg	0.00078 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		36 mg/kg	1.579	48.446 mg/kg	0.00484 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.197 mg/kg	0.00012 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		124 mg/kg	1.245	131.502 mg/kg	0.0132 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.2	mg/kg	3.22	3.292	mg/kg	0.000329 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.13	mg/kg		0.111	mg/kg	0.0000111 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.28	mg/kg		0.239	mg/kg	0.0000239 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.27	mg/kg		0.23	mg/kg	0.000023 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.22	mg/kg		0.187	mg/kg	0.0000187 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.18	mg/kg		0.153	mg/kg	0.0000153 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.18	mg/kg		0.153	mg/kg	0.0000153 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.11	mg/kg		0.0937	mg/kg	0.00000937 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.12	mg/kg		0.102	mg/kg	0.0000102 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.23	mg/kg		0.196	mg/kg	0.0000196 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.09	mg/kg		0.0767	mg/kg	0.00000767 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.32	pH		8.32	pH	8.32 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0592 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS10-17/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS10-17/09/2020-1.00-2.00m
Moisture content:
10.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.792 mg/kg	0.000179 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.2 mg/kg	1.32	12.067 mg/kg	0.00121 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		84 mg/kg	1.7	127.912 mg/kg	0.0128 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.3 mg/kg	1.285	2.649 mg/kg	0.000206 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		32 mg/kg	1.252	35.891 mg/kg	0.00359 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		54.2 mg/kg	1.462	70.978 mg/kg	0.0071 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14 mg/kg	1.56	19.566 mg/kg	0.00125 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.6 mg/kg	1.5	7.527 mg/kg	0.000753 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		38.8 mg/kg	1.579	54.911 mg/kg	0.00549 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.518 mg/kg	0.000252 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		94 mg/kg	1.245	104.835 mg/kg	0.0105 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.443	mg/kg	0.000144 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.06	mg/kg		0.0538	mg/kg	0.00000538 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.049 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS10-17/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS10-17/09/2020-2.00-3.00m
Moisture content:
8.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.836 mg/kg	0.000184 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.2 mg/kg	1.32	14.787 mg/kg	0.00148 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		75 mg/kg	1.7	117.012 mg/kg	0.0117 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.8 mg/kg	1.285	3.304 mg/kg	0.000257 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		43 mg/kg	1.252	49.413 mg/kg	0.00494 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		57.7 mg/kg	1.462	77.417 mg/kg	0.00774 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	28.638 mg/kg	0.00184 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.7 mg/kg	1.5	9.227 mg/kg	0.000923 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		49 mg/kg	1.579	71.049 mg/kg	0.0071 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	5.159 mg/kg	0.000516 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		106 mg/kg	1.245	121.121 mg/kg	0.0121 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.478	mg/kg	0.000148 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0643	mg/kg	0.00000643 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.04	mg/kg		0.0367	mg/kg	0.00000367 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.33	pH		8.33	pH	8.33 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				63	mg/kg		57.834	mg/kg	0.00578 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0551 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00578%)

Classification of sample: WS10-17/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS10-17/09/2020-3.00-3.40m
Moisture content:
9.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.816 mg/kg	0.000182 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.6 mg/kg	1.32	13.907 mg/kg	0.00139 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		83 mg/kg	1.7	128.082 mg/kg	0.0128 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.6 mg/kg	1.285	3.034 mg/kg	0.000236 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		41 mg/kg	1.252	46.601 mg/kg	0.00466 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		60.9 mg/kg	1.462	80.82 mg/kg	0.00808 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	24.077 mg/kg	0.00154 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		7.5 mg/kg	1.5	10.216 mg/kg	0.00102 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		45.5 mg/kg	1.579	65.255 mg/kg	0.00653 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.827 mg/kg	0.000383 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		90 mg/kg	1.245	101.718 mg/kg	0.0102 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.169	mg/kg	0.000117 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0636	mg/kg	0.00000636 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.0272	mg/kg	0.00000272 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.39	pH		8.39	pH	8.39 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0527 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS14-17/09/2020-0.13-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS14-17/09/2020-0.13-1.00m
Moisture content:
10.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.794 mg/kg	0.000179 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8 mg/kg	1.32	9.475 mg/kg	0.000947 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		94 mg/kg	1.7	143.3 mg/kg	0.0143 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.9 mg/kg	1.285	2.19 mg/kg	0.00017 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		26 mg/kg	1.252	29.194 mg/kg	0.00292 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		76 mg/kg	1.462	99.637 mg/kg	0.00996 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	76 mg/kg	1.56	106.336 mg/kg	0.00682 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.7 mg/kg	1.5	9.016 mg/kg	0.000902 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		31.4 mg/kg	1.579	44.488 mg/kg	0.00445 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		109 mg/kg	1.245	121.699 mg/kg	0.0122 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.022	mg/kg	0.000202 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.09	mg/kg		0.0807	mg/kg	0.00000807 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.21	mg/kg		0.188	mg/kg	0.0000188 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.2	mg/kg		0.179	mg/kg	0.0000179 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.14	mg/kg		0.126	mg/kg	0.0000126 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.14	mg/kg		0.126	mg/kg	0.0000126 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.13	mg/kg		0.117	mg/kg	0.0000117 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.09	mg/kg		0.0807	mg/kg	0.00000807 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.1	mg/kg		0.0897	mg/kg	0.00000897 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.19	mg/kg		0.17	mg/kg	0.000017 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.07	mg/kg		0.0628	mg/kg	0.00000628 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.26	pH		8.26	pH	8.26 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0588 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS14-17/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS14-17/09/2020-1.00-2.00m
Moisture content:
10.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.79 mg/kg	0.000179 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.4 mg/kg	1.32	11.108 mg/kg	0.00111 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		49 mg/kg	1.7	74.532 mg/kg	0.00745 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.1 mg/kg	1.285	2.416 mg/kg	0.000188 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		33 mg/kg	1.252	36.971 mg/kg	0.0037 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		59.2 mg/kg	1.462	77.439 mg/kg	0.00774 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	13 mg/kg	1.56	18.148 mg/kg	0.00116 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.1 mg/kg	1.5	8.19 mg/kg	0.000819 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		34.8 mg/kg	1.579	49.195 mg/kg	0.00492 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.257 mg/kg	0.000126 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		70 mg/kg	1.245	77.981 mg/kg	0.0078 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.153	mg/kg	0.000115 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.45	pH		8.45	pH	8.45 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0409 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS14-17/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS14-17/09/2020-2.00-3.00m
Moisture content:
14.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.71 mg/kg	0.000171 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13.8 mg/kg	1.32	15.579 mg/kg	0.00156 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		187 mg/kg	1.7	271.727 mg/kg	0.0272 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	3 mg/kg	1.285	3.297 mg/kg	0.000257 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		44 mg/kg	1.252	47.092 mg/kg	0.00471 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		54.7 mg/kg	1.462	68.355 mg/kg	0.00684 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	24.006 mg/kg	0.00154 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		7 mg/kg	1.5	8.979 mg/kg	0.000898 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		59.6 mg/kg	1.579	80.488 mg/kg	0.00805 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				5 mg/kg	1.405	6.006 mg/kg	0.000601 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		116 mg/kg	1.245	123.451 mg/kg	0.0123 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.376	mg/kg	0.000138 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.49	pH		8.49	pH	8.49 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0698 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS14-17/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS14-17/09/2020-3.00-3.40m
Moisture content:
8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.84 mg/kg	0.000184 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.2 mg/kg	1.32	14.819 mg/kg	0.00148 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		80 mg/kg	1.7	125.084 mg/kg	0.0125 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.3 mg/kg	1.285	2.72 mg/kg	0.000212 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		38 mg/kg	1.252	43.762 mg/kg	0.00438 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		52.4 mg/kg	1.462	70.459 mg/kg	0.00705 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	24.396 mg/kg	0.00156 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.6 mg/kg	1.5	9.109 mg/kg	0.000911 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		45.1 mg/kg	1.579	65.537 mg/kg	0.00655 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.878 mg/kg	0.000388 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		86 mg/kg	1.245	98.482 mg/kg	0.00985 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.481	mg/kg	0.000148 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.05	mg/kg		0.046	mg/kg	0.0000046 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.0276	mg/kg	0.00000276 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.45	pH		8.45	pH	8.45 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0508 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS04-17/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS04-17/09/2020-0.00-1.00m
Moisture content:
12.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.744 mg/kg	0.000174 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.1 mg/kg	1.32	12.78 mg/kg	0.00128 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		98 mg/kg	1.7	145.234 mg/kg	0.0145 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.3 mg/kg	1.285	1.457 mg/kg	0.000113 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		42 mg/kg	1.252	45.845 mg/kg	0.00458 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		68.9 mg/kg	1.462	87.811 mg/kg	0.00878 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	97 mg/kg	1.56	131.935 mg/kg	0.00846 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.1 mg/kg	1.353	0.118 mg/kg	0.0000118 %	✓	
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.1 mg/kg	1.5	6.672 mg/kg	0.000667 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		30.1 mg/kg	1.579	41.457 mg/kg	0.00415 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.225 mg/kg	0.000123 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		128 mg/kg	1.245	138.93 mg/kg	0.0139 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.9	mg/kg	3.22	2.527	mg/kg	0.000253 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.07	mg/kg		0.061	mg/kg	0.0000061 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.13	mg/kg		0.113	mg/kg	0.0000113 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				0.06	mg/kg		0.0523	mg/kg	0.00000523 %	✓	
			201-469-6	83-32-9									
18		fluorene				0.07	mg/kg		0.061	mg/kg	0.0000061 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.76	mg/kg		0.663	mg/kg	0.0000663 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.21	mg/kg		0.183	mg/kg	0.0000183 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				1.5	mg/kg		1.308	mg/kg	0.000131 %	✓	
			205-912-4	206-44-0									
22		pyrene				1.45	mg/kg		1.264	mg/kg	0.000126 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				1.03	mg/kg		0.898	mg/kg	0.0000898 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				1	mg/kg		0.872	mg/kg	0.0000872 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				1.02	mg/kg		0.889	mg/kg	0.0000889 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.6	mg/kg		0.523	mg/kg	0.0000523 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.13	mg/kg		0.113	mg/kg	0.0000113 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.65	mg/kg		0.567	mg/kg	0.0000567 %	✓	
			205-883-8	191-24-2									
29		coronene				0.11	mg/kg		0.0959	mg/kg	0.00000959 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				1.27	mg/kg		1.107	mg/kg	0.000111 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.5	mg/kg		0.436	mg/kg	0.0000436 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.4	pH		8.4	pH	8.4 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				175	mg/kg		152.6	mg/kg	0.0153 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0734 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0153%)

Classification of sample: WS04-17/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS04-17/09/2020-1.00-2.00m
Moisture content:
13.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.738 mg/kg	0.000174 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.3 mg/kg	1.32	9.523 mg/kg	0.000952 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		46 mg/kg	1.7	67.937 mg/kg	0.00679 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.8 mg/kg	1.285	2.01 mg/kg	0.000156 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		26 mg/kg	1.252	28.283 mg/kg	0.00283 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		54.1 mg/kg	1.462	68.712 mg/kg	0.00687 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	13 mg/kg	1.56	17.621 mg/kg	0.00113 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.7 mg/kg	1.5	6.127 mg/kg	0.000613 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		32.6 mg/kg	1.579	44.746 mg/kg	0.00447 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		68 mg/kg	1.245	73.553 mg/kg	0.00736 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.679	mg/kg	0.000168 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.03	mg/kg		0.0261	mg/kg	0.00000261 %	✓	
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.0261	mg/kg	0.00000261 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.45	pH		8.45	pH	8.45 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0372 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS04-17/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS04-17/09/2020-2.00-3.00m
Moisture content:
15.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.848 mg/kg	0.0000848 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.3 mg/kg	1.32	7.054 mg/kg	0.000705 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		59 mg/kg	1.7	85.03 mg/kg	0.0085 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.8 mg/kg	1.285	1.962 mg/kg	0.000153 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		21 mg/kg	1.252	22.292 mg/kg	0.00223 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		70 mg/kg	1.462	86.758 mg/kg	0.00868 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11 mg/kg	1.56	14.55 mg/kg	0.000933 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.8 mg/kg	1.5	7.379 mg/kg	0.000738 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		25 mg/kg	1.579	33.485 mg/kg	0.00335 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		49 mg/kg	1.245	51.72 mg/kg	0.00517 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.365	mg/kg	0.000137 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.55	pH		8.55	pH	8.55 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0364 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS04-17/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS04-17/09/2020-3.00-3.40m
Moisture content:
9.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.814 mg/kg	0.000181 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.8 mg/kg	1.32	14.131 mg/kg	0.00141 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		136 mg/kg	1.7	209.639 mg/kg	0.021 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	3.2 mg/kg	1.285	3.73 mg/kg	0.00029 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		40 mg/kg	1.252	45.414 mg/kg	0.00454 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		57.2 mg/kg	1.462	75.826 mg/kg	0.00758 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	24.051 mg/kg	0.00154 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.8 mg/kg	1.5	9.253 mg/kg	0.000925 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		46 mg/kg	1.579	65.9 mg/kg	0.00659 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.274 mg/kg	0.000127 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		92 mg/kg	1.245	103.864 mg/kg	0.0104 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.752	mg/kg	0.000175 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.58	pH		8.58	pH	8.58 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0603 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS15-18/09/2020-0.03-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS15-18/09/2020-0.03-1.00m
Moisture content:
16%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 16% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.68 mg/kg	0.000168 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		68.3 mg/kg	1.32	75.75 mg/kg	0.00757 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		170 mg/kg	1.7	242.691 mg/kg	0.0243 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.9 mg/kg	1.285	0.972 mg/kg	0.0000756 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		33 mg/kg	1.252	34.699 mg/kg	0.00347 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		72.1 mg/kg	1.462	88.518 mg/kg	0.00885 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	29 mg/kg	1.56	37.997 mg/kg	0.00244 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.9 mg/kg	1.5	6.175 mg/kg	0.000617 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		28 mg/kg	1.579	37.15 mg/kg	0.00371 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.18 mg/kg	0.000118 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		111 mg/kg	1.245	116.057 mg/kg	0.0116 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1	mg/kg	3.22	2.705	mg/kg	0.00027 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.06	mg/kg		0.0504	mg/kg	0.00000504 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.11	mg/kg		0.0924	mg/kg	0.00000924 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.11	mg/kg		0.0924	mg/kg	0.00000924 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.11	mg/kg		0.0924	mg/kg	0.00000924 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.08	mg/kg		0.0672	mg/kg	0.00000672 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.08	mg/kg		0.0672	mg/kg	0.00000672 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.05	mg/kg		0.042	mg/kg	0.0000042 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.06	mg/kg		0.0504	mg/kg	0.00000504 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.11	mg/kg		0.0924	mg/kg	0.00000924 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.04	mg/kg		0.0336	mg/kg	0.00000336 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.12	pH		8.12	pH	8.12 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				76	mg/kg		63.84	mg/kg	0.00638 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0699 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00638%)

Classification of sample: WS15-18/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS15-18/09/2020-1.00-2.00m
Moisture content:
13.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.736 mg/kg	0.000174 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.6 mg/kg	1.32	13.294 mg/kg	0.00133 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		130 mg/kg	1.7	191.774 mg/kg	0.0192 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.6 mg/kg	1.285	2.901 mg/kg	0.000226 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		37 mg/kg	1.252	40.202 mg/kg	0.00402 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		59.4 mg/kg	1.462	75.357 mg/kg	0.00754 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	21.663 mg/kg	0.00139 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.7 mg/kg	1.5	8.725 mg/kg	0.000872 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		46.2 mg/kg	1.579	63.34 mg/kg	0.00633 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.22 mg/kg	0.000122 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		91 mg/kg	1.245	98.317 mg/kg	0.00983 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.677	mg/kg	0.000168 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.39	pH		8.39	pH	8.39 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0567 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS15-18/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS15-18/09/2020-2.00-3.00m
Moisture content:
10.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.792 mg/kg	0.000179 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13.4 mg/kg	1.32	15.852 mg/kg	0.00159 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		142 mg/kg	1.7	216.233 mg/kg	0.0216 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.7 mg/kg	1.285	3.109 mg/kg	0.000242 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		40 mg/kg	1.252	44.864 mg/kg	0.00449 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		58.4 mg/kg	1.462	76.478 mg/kg	0.00765 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	22.362 mg/kg	0.00143 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.5 mg/kg	1.5	8.737 mg/kg	0.000874 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		45.2 mg/kg	1.579	63.968 mg/kg	0.0064 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	5.036 mg/kg	0.000504 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		112 mg/kg	1.245	124.91 mg/kg	0.0125 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.443	mg/kg	0.000144 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.26	pH		8.26	pH	8.26 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0631 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS15-18/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS15-18/09/2020-3.00-3.40m
Moisture content:
9.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.818 mg/kg	0.000182 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.7 mg/kg	1.32	12.842 mg/kg	0.00128 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		61 mg/kg	1.7	94.237 mg/kg	0.00942 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	3 mg/kg	1.285	3.505 mg/kg	0.000273 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		34 mg/kg	1.252	38.687 mg/kg	0.00387 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		55.3 mg/kg	1.462	73.469 mg/kg	0.00735 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	21.268 mg/kg	0.00136 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6 mg/kg	1.5	8.182 mg/kg	0.000818 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		37.9 mg/kg	1.579	54.415 mg/kg	0.00544 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.831 mg/kg	0.000383 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		82 mg/kg	1.245	92.778 mg/kg	0.00928 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.756	mg/kg	0.000176 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.04	mg/kg		0.0364	mg/kg	0.00000364 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.39	pH		8.39	pH	8.39 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0454 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS18-18/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS18-18/09/2020-0.00-1.00m
Moisture content:
12.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.746 mg/kg	0.000175 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		20.7 mg/kg	1.32	23.86 mg/kg	0.00239 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		128 mg/kg	1.7	189.911 mg/kg	0.019 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	3.5 mg/kg	1.285	3.927 mg/kg	0.000306 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		32 mg/kg	1.252	34.97 mg/kg	0.0035 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		70.8 mg/kg	1.462	90.336 mg/kg	0.00903 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	41 mg/kg	1.56	55.83 mg/kg	0.00358 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.9 mg/kg	1.5	7.727 mg/kg	0.000773 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		37.6 mg/kg	1.579	51.847 mg/kg	0.00518 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.227 mg/kg	0.000123 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		107 mg/kg	1.245	116.27 mg/kg	0.0116 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1	mg/kg	3.22	2.811	mg/kg	0.000281 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.05	mg/kg		0.0437	mg/kg	0.00000436 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.08	mg/kg		0.0698	mg/kg	0.00000698 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.08	mg/kg		0.0698	mg/kg	0.00000698 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.06	mg/kg		0.0524	mg/kg	0.00000524 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.06	mg/kg		0.0524	mg/kg	0.00000524 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.07	mg/kg		0.0611	mg/kg	0.00000611 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.03	mg/kg		0.0262	mg/kg	0.00000262 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.43	pH		8.43	pH	8.43 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				83	mg/kg		72.459	mg/kg	0.00725 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0636 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00725%)

Classification of sample: WS18-18/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS18-18/09/2020-1.00-2.00m
Moisture content:
9.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.907 mg/kg	0.0000907 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8 mg/kg	1.32	9.58 mg/kg	0.000958 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		70 mg/kg	1.7	107.902 mg/kg	0.0108 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.6 mg/kg	1.285	1.865 mg/kg	0.000145 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		21 mg/kg	1.252	23.843 mg/kg	0.00238 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		56.5 mg/kg	1.462	74.898 mg/kg	0.00749 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	8 mg/kg	1.56	11.318 mg/kg	0.000726 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.8 mg/kg	1.5	7.892 mg/kg	0.000789 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		27.7 mg/kg	1.579	39.683 mg/kg	0.00397 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.274 mg/kg	0.000127 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		59 mg/kg	1.245	66.608 mg/kg	0.00666 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.752	mg/kg	0.000175 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.62	pH		8.62	pH	8.62 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0398 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS18-18/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS18-18/09/2020-2.00-3.00m
Moisture content:
9.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.804 mg/kg	0.00018 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.8 mg/kg	1.32	11.671 mg/kg	0.00117 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		51 mg/kg	1.7	78.181 mg/kg	0.00782 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.1 mg/kg	1.285	2.435 mg/kg	0.000189 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		31 mg/kg	1.252	35.002 mg/kg	0.0035 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		52.1 mg/kg	1.462	68.685 mg/kg	0.00687 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	13 mg/kg	1.56	18.29 mg/kg	0.00117 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.2 mg/kg	1.5	7.036 mg/kg	0.000704 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		36 mg/kg	1.579	51.29 mg/kg	0.00513 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.802 mg/kg	0.00038 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		83 mg/kg	1.245	93.187 mg/kg	0.00932 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.033	mg/kg	0.000203 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0422 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS18-18/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS18-18/09/2020-3.00-3.40m
Moisture content:
10%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.8 mg/kg	0.00018 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.6 mg/kg	1.32	11.408 mg/kg	0.00114 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		63 mg/kg	1.7	96.363 mg/kg	0.00964 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.4 mg/kg	1.285	2.776 mg/kg	0.000216 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		42 mg/kg	1.252	47.317 mg/kg	0.00473 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		49.7 mg/kg	1.462	65.375 mg/kg	0.00654 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	25.269 mg/kg	0.00162 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.5 mg/kg	1.5	7.426 mg/kg	0.000743 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		40.9 mg/kg	1.579	58.141 mg/kg	0.00581 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.794 mg/kg	0.000379 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		93 mg/kg	1.245	104.183 mg/kg	0.0104 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.318	mg/kg	0.000232 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.06	mg/kg		0.054	mg/kg	0.0000054 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.027	mg/kg	0.0000027 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.19	pH		8.19	pH	8.19 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0472 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS17-18/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS17-18/09/2020-0.00-1.00m
Moisture content:
9.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.814 mg/kg	0.000181 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.5 mg/kg	1.32	11.377 mg/kg	0.00114 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		65 mg/kg	1.7	100.195 mg/kg	0.01 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2 mg/kg	1.285	2.331 mg/kg	0.000181 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		30 mg/kg	1.252	34.061 mg/kg	0.00341 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		75.3 mg/kg	1.462	99.82 mg/kg	0.00998 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	25.466 mg/kg	0.00163 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6 mg/kg	1.5	8.164 mg/kg	0.000816 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		38.6 mg/kg	1.579	55.299 mg/kg	0.00553 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		89 mg/kg	1.245	100.477 mg/kg	0.01 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.752	mg/kg	0.000175 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.67	pH		8.67	pH	8.67 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				156	mg/kg		141.492	mg/kg	0.0141 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0577 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0141%)

Classification of sample: WS17-18/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS17-18/09/2020-1.00-2.00m
Moisture content:
8.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.916 mg/kg	0.0000916 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		2.4 mg/kg	1.32	2.903 mg/kg	0.00029 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		36 mg/kg	1.7	56.043 mg/kg	0.0056 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.59 mg/kg	0.000202 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		16 mg/kg	1.252	18.346 mg/kg	0.00183 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		96.4 mg/kg	1.462	129.059 mg/kg	0.0129 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	7 mg/kg	1.56	10.002 mg/kg	0.000641 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		7.3 mg/kg	1.5	10.031 mg/kg	0.001 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		20.9 mg/kg	1.579	30.239 mg/kg	0.00302 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		54 mg/kg	1.245	61.569 mg/kg	0.00616 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.475	mg/kg	0.000147 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.57	pH		8.57	pH	8.57 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0376 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS17-18/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS17-18/09/2020-2.00-3.00m
Moisture content:
11.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.643 mg/kg	0.000264 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.5 mg/kg	1.32	12.214 mg/kg	0.00122 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		110 mg/kg	1.7	164.7 mg/kg	0.0165 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	5.8 mg/kg	1.285	6.567 mg/kg	0.000511 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		35 mg/kg	1.252	38.599 mg/kg	0.00386 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		55.6 mg/kg	1.462	71.592 mg/kg	0.00716 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	23.361 mg/kg	0.0015 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.4 mg/kg	1.5	8.459 mg/kg	0.000846 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		41.1 mg/kg	1.579	57.192 mg/kg	0.00572 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.713 mg/kg	0.000371 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		221 mg/kg	1.245	242.347 mg/kg	0.0242 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.418	mg/kg	0.000142 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.44	pH		8.44	pH	8.44 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0678 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS17-18/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS17-18/09/2020-3.00-3.40m
Moisture content:
8.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.739 mg/kg	0.000274 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.9 mg/kg	1.32	14.345 mg/kg	0.00143 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		105 mg/kg	1.7	162.924 mg/kg	0.0163 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	3.1 mg/kg	1.285	3.638 mg/kg	0.000283 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		46 mg/kg	1.252	52.572 mg/kg	0.00526 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		56.4 mg/kg	1.462	75.26 mg/kg	0.00753 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	27.058 mg/kg	0.00173 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.7 mg/kg	1.5	9.177 mg/kg	0.000918 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		50.6 mg/kg	1.579	72.969 mg/kg	0.0073 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	5.131 mg/kg	0.000513 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		99 mg/kg	1.245	112.506 mg/kg	0.0113 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.47	mg/kg	0.000147 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.09	mg/kg		0.0822	mg/kg	0.00000822 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.04	mg/kg		0.0365	mg/kg	0.00000365 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.32	pH		8.32	pH	8.32 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0585 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

barium sulfate (EC Number: 231-784-4, CAS Number: 7727-43-7)

Conversion factor: 1.7
Description/Comments: No hazard statements
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/89983 Sigma Aldrich SDS dated 15/4/19
Data source date: 02 Apr 2020
Hazard Statements: None.

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

coronene (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source:
http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2 H371

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

polychlorobiphenyls; PCB (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

arsenic {arsenic trioxide}

Worst case species based on Hazard Statement.

barium {barium sulfate}

conservative

cadmium {cadmium sulfide}

Worst case species based on Hazard Statements.

copper {copper(II) oxide}

Reasonable

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

oxide conversion factor included

chromium in chromium(VI) compounds {chromium(VI) oxide}

most conservative

lead {lead chromate}

Worst case species based on Hazard Statements.

mercury {mercury dichloride}

Worst case species based on Hazard Statements.

molybdenum {molybdenum(VI) oxide}

Worst case species based on Hazard Statements.

nickel {nickel dihydroxide}

Worst case species based on Hazard Statements.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on Hazard Statements.

zinc {zinc oxide}

Concentrations of chromium VI insufficient for zinc chormate to be present.

boron {diboron trioxide; boric oxide}

Reasonable

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.289.4500.8764 (15 Oct 2020)
HazWasteOnline Database: 2020.290.4501.8765 (16 Oct 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

Waste Classification Report

JZV3T-4BHYF-Q73E4

Job name

EMT-20-12992-Batch-1-File-2

Description/Comments

Soil Samples

Project

B967/1

Site

Emmet Road

Related Documents

#	Name	Description
1	EMT-20-12992-Batch-1-File-2.hwol	.hwol file used to create the Job

Waste Stream Template

EJEL Rilta

Classified by

Name:
Kate Moraes dos Santos
Date:
19 Oct 2020 16:41 GMT
Telephone:

Company:
O'Connor Sutton Cronin & Assoc. Ltd.
OCSC

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	08 Apr 2020
Advanced Hazardous Waste Classification	09 Apr 2020

Report

Created by: Kate Moraes dos Santos
Created date: 19 Oct 2020 16:41 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS 16-21/09/2020-0.00-1.00m		Non Hazardous		3
2	WS 16-21/09/2020-1.00-2.00m		Non Hazardous		6
3	WS 16-21/09/2020-2.00-3.00m		Non Hazardous		9
4	WS 20-21/09/2020-0.00-1.00m		Non Hazardous		12
5	WS 20-21/09/2020-1.00-2.00m		Non Hazardous		15
6	WS 20-21/09/2020-2.00-3.00m		Non Hazardous		18
7	WS 20-21/09/2020-3.00-3.30m		Non Hazardous		21
8	WS 21-21/09/2020-0.00-1.00m		Non Hazardous		24
9	WS 21-21/09/2020-1.00-2.00m		Non Hazardous		27
10	WS 21-21/09/2020-2.00-3.00m		Non Hazardous		30
11	WS 21-21/09/2020-3.00-3.40m		Non Hazardous		33
12	WS 22-21/09/2020-0.00-1.00m		Non Hazardous		36
13	WS 22-21/09/2020-1.00-2.00m		Non Hazardous		39

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
14	WS 22-21/09/2020-2.00-3.00m		Non Hazardous		42
15	WS 22-21/09/2020-3.00-3.40m		Non Hazardous		45

Appendices	Page
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Appendix C: Version	50

Classification of sample: WS 16-21/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 16-21/09/2020-0.00-1.00m
Moisture content:
12%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.76 mg/kg	0.000176 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		73.3 mg/kg	1.32	85.166 mg/kg	0.00852 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		90 mg/kg	1.7	134.602 mg/kg	0.0135 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.4 mg/kg	1.285	1.583 mg/kg	0.000123 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		33 mg/kg	1.252	36.352 mg/kg	0.00364 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		59.7 mg/kg	1.462	76.784 mg/kg	0.00768 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	60 mg/kg	1.56	82.358 mg/kg	0.00528 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.6 mg/kg	1.5	6.073 mg/kg	0.000607 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		33 mg/kg	1.579	45.869 mg/kg	0.00459 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.473 mg/kg	0.000247 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		102 mg/kg	1.245	111.726 mg/kg	0.0112 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.983	mg/kg	0.000198 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.15	mg/kg		0.132	mg/kg	0.0000132 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.19	mg/kg		0.167	mg/kg	0.0000167 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.19	mg/kg		0.167	mg/kg	0.0000167 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.14	mg/kg		0.123	mg/kg	0.0000123 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.14	mg/kg		0.123	mg/kg	0.0000123 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.11	mg/kg		0.0968	mg/kg	0.00000968 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.06	mg/kg		0.0528	mg/kg	0.00000528 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.08	mg/kg		0.0704	mg/kg	0.00000704 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.14	mg/kg		0.123	mg/kg	0.0000123 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.06	mg/kg		0.0528	mg/kg	0.00000528 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				9.67	pH		9.67	pH	9.67 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0613 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 16-21/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 16-21/09/2020-1.00-2.00m
Moisture content:
9.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.804 mg/kg	0.00018 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.4 mg/kg	1.32	14.768 mg/kg	0.00148 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		74 mg/kg	1.7	113.439 mg/kg	0.0113 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.7 mg/kg	1.285	3.13 mg/kg	0.000244 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		44 mg/kg	1.252	49.681 mg/kg	0.00497 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		38.5 mg/kg	1.462	50.755 mg/kg	0.00508 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	23.918 mg/kg	0.00153 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.8 mg/kg	1.5	6.495 mg/kg	0.00065 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		48.8 mg/kg	1.579	69.526 mg/kg	0.00695 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.535 mg/kg	0.000253 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		121 mg/kg	1.245	135.851 mg/kg	0.0136 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.323	mg/kg	0.000232 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.78	pH		8.78	pH	8.78 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.052 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 16-21/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 16-21/09/2020-2.00-3.00m
Moisture content:
8.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.828 mg/kg	0.000183 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.2 mg/kg	1.32	14.723 mg/kg	0.00147 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		83 mg/kg	1.7	128.929 mg/kg	0.0129 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.6 mg/kg	1.285	3.054 mg/kg	0.000238 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		43 mg/kg	1.252	49.197 mg/kg	0.00492 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		55.1 mg/kg	1.462	73.606 mg/kg	0.00736 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	28.513 mg/kg	0.00183 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		7 mg/kg	1.5	9.598 mg/kg	0.00096 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		48.3 mg/kg	1.579	69.729 mg/kg	0.00697 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				7 mg/kg	1.405	8.989 mg/kg	0.000899 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		109 mg/kg	1.245	124.006 mg/kg	0.0124 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.766	mg/kg	0.000177 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.08	mg/kg		0.0731	mg/kg	0.00000731 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.04	mg/kg		0.0366	mg/kg	0.00000366 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.42	pH		8.42	pH	8.42 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0558 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 20-21/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 20-21/09/2020-0.00-1.00m
Moisture content:
8.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.912 mg/kg	0.0000912 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		84.7 mg/kg	1.32	101.99 mg/kg	0.0102 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		65 mg/kg	1.7	100.747 mg/kg	0.0101 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.1 mg/kg	1.285	1.289 mg/kg	0.0001 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		31 mg/kg	1.252	35.39 mg/kg	0.00354 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		68.5 mg/kg	1.462	91.306 mg/kg	0.00913 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	24 mg/kg	1.56	34.141 mg/kg	0.00219 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.5 mg/kg	1.5	6.157 mg/kg	0.000616 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		40.2 mg/kg	1.579	57.908 mg/kg	0.00579 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.281 mg/kg	0.000128 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		95 mg/kg	1.245	107.842 mg/kg	0.0108 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.468	mg/kg	0.000147 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.09	mg/kg		0.0821	mg/kg	0.00000821 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.13	mg/kg		0.119	mg/kg	0.0000119 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.12	mg/kg		0.109	mg/kg	0.0000109 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.11	mg/kg		0.1	mg/kg	0.00001 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.09	mg/kg		0.0821	mg/kg	0.00000821 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.07	mg/kg		0.0638	mg/kg	0.00000638 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.04	mg/kg		0.0365	mg/kg	0.00000365 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.09	mg/kg		0.0821	mg/kg	0.00000821 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.04	mg/kg		0.0365	mg/kg	0.00000365 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.66	pH		8.66	pH	8.66 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0584 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 20-21/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 20-21/09/2020-1.00-2.00m
Moisture content:
9.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13 mg/kg	1.32	15.585 mg/kg	0.00156 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		65 mg/kg	1.7	100.306 mg/kg	0.01 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.3 mg/kg	1.285	1.517 mg/kg	0.000118 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		22 mg/kg	1.252	25.005 mg/kg	0.0025 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		85.8 mg/kg	1.462	113.865 mg/kg	0.0114 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	12 mg/kg	1.56	16.996 mg/kg	0.00109 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6 mg/kg	1.5	8.173 mg/kg	0.000817 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		32.1 mg/kg	1.579	46.037 mg/kg	0.0046 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		67 mg/kg	1.245	75.723 mg/kg	0.00757 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.169	mg/kg	0.000117 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.45	mg/kg		0.409	mg/kg	0.0000409 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				0.07	mg/kg		0.0636	mg/kg	0.00000636 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.5	mg/kg		0.454	mg/kg	0.0000454 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.75	mg/kg		0.681	mg/kg	0.0000681 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				3.02	mg/kg		2.742	mg/kg	0.000274 %	✓	
			205-912-4	206-44-0									
22		pyrene				4.65	mg/kg		4.222	mg/kg	0.000422 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				3.56	mg/kg		3.232	mg/kg	0.000323 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				3.48	mg/kg		3.16	mg/kg	0.000316 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				2.41	mg/kg		2.188	mg/kg	0.000219 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				1.1	mg/kg		0.999	mg/kg	0.0000999 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.29	mg/kg		0.263	mg/kg	0.0000263 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				1.3	mg/kg		1.18	mg/kg	0.000118 %	✓	
			205-883-8	191-24-2									
29		coronene				0.15	mg/kg		0.136	mg/kg	0.0000136 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				2.81	mg/kg		2.551	mg/kg	0.000255 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				1.09	mg/kg		0.99	mg/kg	0.000099 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.68	pH		8.68	pH	8.68 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0478 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 20-21/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 20-21/09/2020-2.00-3.00m
Moisture content:
11.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.652 mg/kg	0.000265 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14.4 mg/kg	1.32	16.807 mg/kg	0.00168 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		70 mg/kg	1.7	105.166 mg/kg	0.0105 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.7 mg/kg	1.285	3.068 mg/kg	0.000239 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		42 mg/kg	1.252	46.476 mg/kg	0.00465 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		53.9 mg/kg	1.462	69.64 mg/kg	0.00696 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	27.578 mg/kg	0.00177 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.6 mg/kg	1.5	8.753 mg/kg	0.000875 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		42.8 mg/kg	1.579	59.761 mg/kg	0.00598 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	4.968 mg/kg	0.000497 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		97 mg/kg	1.245	106.732 mg/kg	0.0107 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.708	mg/kg	0.000171 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.57	pH		8.57	pH	8.57 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0498 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 20-21/09/2020-3.00-3.30m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 20-21/09/2020-3.00-3.30m
Moisture content:
11.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.774 mg/kg	0.000177 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11 mg/kg	1.32	12.882 mg/kg	0.00129 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		63 mg/kg	1.7	94.971 mg/kg	0.0095 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	3 mg/kg	1.285	3.42 mg/kg	0.000266 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		37 mg/kg	1.252	41.082 mg/kg	0.00411 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		49.5 mg/kg	1.462	64.172 mg/kg	0.00642 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	26.288 mg/kg	0.00169 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.6 mg/kg	1.5	7.452 mg/kg	0.000745 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		40.6 mg/kg	1.579	56.881 mg/kg	0.00569 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	4.985 mg/kg	0.000498 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		116 mg/kg	1.245	128.071 mg/kg	0.0128 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.714	mg/kg	0.000171 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.61	pH		8.61	pH	8.61 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0489 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 21-21/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 21-21/09/2020-0.00-1.00m
Moisture content:
11%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.7 mg/kg	1.32	14.924 mg/kg	0.00149 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		50 mg/kg	1.7	75.629 mg/kg	0.00756 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.9 mg/kg	1.285	1.029 mg/kg	0.0000801 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		23 mg/kg	1.252	25.624 mg/kg	0.00256 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		58.8 mg/kg	1.462	76.486 mg/kg	0.00765 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	24 mg/kg	1.56	33.318 mg/kg	0.00214 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.4 mg/kg	1.5	5.875 mg/kg	0.000587 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		20 mg/kg	1.579	28.115 mg/kg	0.00281 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.25 mg/kg	0.000125 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		58 mg/kg	1.245	64.252 mg/kg	0.00643 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.433	mg/kg	0.000143 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.09	mg/kg		0.0801	mg/kg	0.00000801 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.1	mg/kg		0.089	mg/kg	0.0000089 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.09	mg/kg		0.0801	mg/kg	0.00000801 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.07	mg/kg		0.0623	mg/kg	0.00000623 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.07	mg/kg		0.0623	mg/kg	0.00000623 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.04	mg/kg		0.0356	mg/kg	0.00000356 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.07	mg/kg		0.0623	mg/kg	0.00000623 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.03	mg/kg		0.0267	mg/kg	0.00000267 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.61	pH		8.61	pH	8.61 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0372 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 21-21/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 21-21/09/2020-1.00-2.00m
Moisture content:
9.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.802 mg/kg	0.00018 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.9 mg/kg	1.32	14.156 mg/kg	0.00142 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		143 mg/kg	1.7	218.971 mg/kg	0.0219 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.895 mg/kg	0.000225 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		35 mg/kg	1.252	39.475 mg/kg	0.00395 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		47.5 mg/kg	1.462	62.551 mg/kg	0.00626 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	21.081 mg/kg	0.00135 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.5 mg/kg	1.5	8.786 mg/kg	0.000879 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		44 mg/kg	1.579	62.618 mg/kg	0.00626 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.532 mg/kg	0.000253 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		93 mg/kg	1.245	104.298 mg/kg	0.0104 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.741	mg/kg	0.000174 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.57	pH		8.57	pH	8.57 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0588 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 21-21/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 21-21/09/2020-2.00-3.00m
Moisture content:
9.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.727 mg/kg	0.000273 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.6 mg/kg	1.32	13.922 mg/kg	0.00139 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		72 mg/kg	1.7	111.23 mg/kg	0.0111 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.6 mg/kg	1.285	3.038 mg/kg	0.000236 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		37 mg/kg	1.252	42.101 mg/kg	0.00421 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		46.5 mg/kg	1.462	61.778 mg/kg	0.00618 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	22.686 mg/kg	0.00145 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.7 mg/kg	1.5	9.137 mg/kg	0.000914 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		42.5 mg/kg	1.579	61.02 mg/kg	0.0061 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	5.109 mg/kg	0.000511 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		87 mg/kg	1.245	98.436 mg/kg	0.00984 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.756	mg/kg	0.000176 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.04	mg/kg		0.0364	mg/kg	0.00000364 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.0273	mg/kg	0.00000273 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.53	pH		8.53	pH	8.53 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.048 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 21-21/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 21-21/09/2020-3.00-3.40m
Moisture content:
9.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.816 mg/kg	0.000182 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.1 mg/kg	1.32	14.506 mg/kg	0.00145 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		78 mg/kg	1.7	120.367 mg/kg	0.012 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.567 mg/kg	0.0002 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		28 mg/kg	1.252	31.825 mg/kg	0.00318 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		42.1 mg/kg	1.462	55.871 mg/kg	0.00559 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	22.661 mg/kg	0.00145 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.5 mg/kg	1.5	7.492 mg/kg	0.000749 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		31.7 mg/kg	1.579	45.464 mg/kg	0.00455 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.827 mg/kg	0.000383 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		66 mg/kg	1.245	74.593 mg/kg	0.00746 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.754	mg/kg	0.000175 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.04	mg/kg		0.0363	mg/kg	0.00000363 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.54	pH		8.54	pH	8.54 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0429 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 22-21/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 22-21/09/2020-0.00-1.00m
Moisture content:
13.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.736 mg/kg	0.000174 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		24.5 mg/kg	1.32	28.078 mg/kg	0.00281 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		105 mg/kg	1.7	154.894 mg/kg	0.0155 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.4 mg/kg	1.285	1.562 mg/kg	0.000122 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		46 mg/kg	1.252	49.981 mg/kg	0.005 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		19.5 mg/kg	1.462	24.738 mg/kg	0.00247 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	108 mg/kg	1.56	146.223 mg/kg	0.00937 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.5 mg/kg	1.5	3.255 mg/kg	0.000326 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		34.9 mg/kg	1.579	47.848 mg/kg	0.00478 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.439 mg/kg	0.000244 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		174 mg/kg	1.245	187.992 mg/kg	0.0188 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1	mg/kg	3.22	2.795	mg/kg	0.000279 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.38	mg/kg		0.33	mg/kg	0.000033 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.14	mg/kg		0.122	mg/kg	0.0000122 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.88	mg/kg		0.764	mg/kg	0.0000764 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.77	mg/kg		0.668	mg/kg	0.0000668 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.51	mg/kg		0.443	mg/kg	0.0000443 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.44	mg/kg		0.382	mg/kg	0.0000382 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.41	mg/kg		0.356	mg/kg	0.0000356 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.26	mg/kg		0.226	mg/kg	0.0000226 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.3	mg/kg		0.26	mg/kg	0.000026 %	✓	
			205-883-8	191-24-2									
29		coronene				0.05	mg/kg		0.0434	mg/kg	0.00000434 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.6	mg/kg		0.521	mg/kg	0.0000521 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.23	mg/kg		0.2	mg/kg	0.00002 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				7.67	pH		7.67	pH	7.67 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				258	mg/kg		223.944	mg/kg	0.0224 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.083 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0224%)

Classification of sample: WS 22-21/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 22-21/09/2020-1.00-2.00m
Moisture content:
21.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 21.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	4 mg/kg		3.14 mg/kg	0.000314 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19.2 mg/kg	1.32	19.9 mg/kg	0.00199 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		80 mg/kg	1.7	106.73 mg/kg	0.0107 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.9 mg/kg	1.285	0.908 mg/kg	0.0000706 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		33 mg/kg	1.252	32.427 mg/kg	0.00324 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		21.4 mg/kg	1.462	24.553 mg/kg	0.00246 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	97 mg/kg	1.56	118.772 mg/kg	0.00761 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		1.5 mg/kg	1.5	1.766 mg/kg	0.000177 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		31.5 mg/kg	1.579	39.057 mg/kg	0.00391 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		139 mg/kg	1.245	135.817 mg/kg	0.0136 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				3.6	mg/kg	3.22	9.099	mg/kg	0.00091 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.14	mg/kg		0.11	mg/kg	0.000011 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.06	mg/kg		0.0471	mg/kg	0.00000471 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.32	mg/kg		0.251	mg/kg	0.0000251 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.31	mg/kg		0.243	mg/kg	0.0000243 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.18	mg/kg		0.141	mg/kg	0.0000141 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.19	mg/kg		0.149	mg/kg	0.0000149 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.18	mg/kg		0.141	mg/kg	0.0000141 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.11	mg/kg		0.0863	mg/kg	0.00000863 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.14	mg/kg		0.11	mg/kg	0.000011 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.26	mg/kg		0.204	mg/kg	0.0000204 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.1	mg/kg		0.0785	mg/kg	0.00000785 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				7.73	pH		7.73	pH	7.73 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				209	mg/kg		164.065	mg/kg	0.0164 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0619 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0164%)

Classification of sample: WS 22-21/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 22-21/09/2020-2.00-3.00m
Moisture content:
11.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.766 mg/kg	0.000177 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.9 mg/kg	1.32	12.708 mg/kg	0.00127 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		51 mg/kg	1.7	76.534 mg/kg	0.00765 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.9 mg/kg	1.285	2.156 mg/kg	0.000168 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		27 mg/kg	1.252	29.844 mg/kg	0.00298 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		48.2 mg/kg	1.462	62.205 mg/kg	0.00622 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	23.414 mg/kg	0.0015 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.8 mg/kg	1.5	7.683 mg/kg	0.000768 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		30 mg/kg	1.579	41.841 mg/kg	0.00418 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				5 mg/kg	1.405	6.203 mg/kg	0.00062 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		70 mg/kg	1.245	76.936 mg/kg	0.00769 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.2	mg/kg	3.22	3.412	mg/kg	0.000341 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.05	mg/kg		0.0442	mg/kg	0.00000441 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.0265	mg/kg	0.00000265 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.1	pH		8.1	pH	8.1 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0391 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 22-21/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 22-21/09/2020-3.00-3.40m
Moisture content:
9.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.818 mg/kg	0.000182 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.2 mg/kg	1.32	12.242 mg/kg	0.00122 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		64 mg/kg	1.7	98.871 mg/kg	0.00989 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.1 mg/kg	1.285	2.453 mg/kg	0.000191 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		36 mg/kg	1.252	40.963 mg/kg	0.0041 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		51.5 mg/kg	1.462	68.421 mg/kg	0.00684 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	22.686 mg/kg	0.00145 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.2 mg/kg	1.5	7.091 mg/kg	0.000709 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		39.8 mg/kg	1.579	57.143 mg/kg	0.00571 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.831 mg/kg	0.000383 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		86 mg/kg	1.245	97.304 mg/kg	0.00973 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.341	mg/kg	0.000234 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.45	pH		8.45	pH	8.45 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0462 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

- **barium sulfate** (EC Number: 231-784-4, CAS Number: 7727-43-7)

Conversion factor: 1.7
Description/Comments: No hazard statements
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/89983 Sigma Aldrich SDS dated 15/4/19
Data source date: 02 Apr 2020
Hazard Statements: None.

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

coronene (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source:
http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2 H371

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

polychlorobiphenyls; PCB (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

arsenic {arsenic trioxide}

Worst case species based on Hazard Statement.

barium {barium sulfate}

conservative

cadmium {cadmium sulfide}

Worst case species based on Hazard Statements.

copper {copper(II) oxide}

Reasonable

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

oxide conversion factor included

chromium in chromium(VI) compounds {chromium(VI) oxide}

most conservative

lead {lead chromate}

Worst case species based on Hazard Statements.

mercury {mercury dichloride}

Worst case species based on Hazard Statements.

molybdenum {molybdenum(VI) oxide}

Worst case species based on Hazard Statements.

nickel {nickel dihydroxide}

Worst case species based on Hazard Statements.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on Hazard Statements.

zinc {zinc oxide}

Concentrations of chromium VI insufficient for zinc chormate to be present.

boron {diboron trioxide; boric oxide}

Reasonable

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.289.4500.8764 (15 Oct 2020)
HazWasteOnline Database: 2020.290.4501.8765 (16 Oct 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

Waste Classification Report

MLDYB-B3C49-88GLD

Job name

EMT-20-13079-Batch-1-File-2

Description/Comments

Window Samples soil

Project

B967/1

Site

Emmet Road

Related Documents

#	Name	Description
1	EMT-20-13079-Batch-1-File-2.hwol	.hwol file used to create the Job

Waste Stream Template

EJEL Rilta

Classified by

Name:
Kate Moraes dos Santos
Date:
08 Oct 2020 10:29 GMT
Telephone:

Company:
O'Connor Sutton Cronin & Assoc. Ltd.
OCSC

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	08 Apr 2020
Advanced Hazardous Waste Classification	09 Apr 2020

Report

Created by: Kate Moraes dos Santos
Created date: 08 Oct 2020 10:29 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS23-22/09/2020-0.00-1.00m		Non Hazardous		3
2	WS23-22/09/2020-1.00-2.00m		Hazardous	HP 7, HP 11	6
3	WS23-22/09/2020-2.00-3.00m		Hazardous	HP 7, HP 11	9
4	WS23-22/09/2020-3.00-3.40m		Non Hazardous		12
5	WS08-22/09/2020-0.15-1.00m		Hazardous	HP 7, HP 11	15
6	WS08-22/09/2020-1.00-2.00m		Non Hazardous		18
7	WS08-22/09/2020-2.00-3.00m		Non Hazardous		21
8	WS08-22/09/2020-3.00-3.40m		Non Hazardous		24
9	WS06-22/09/2020-0.00-1.00m		Non Hazardous		27
10	WS06-22/09/2020-1.00-2.00m		Non Hazardous		30
11	WS06-22/09/2020-2.00-3.00m		Non Hazardous		33
12	WS06-22/09/2020-2.70-3.00m		Non Hazardous		36
13	WS07-22/09/2020-0.00-1.00m		Non Hazardous		39

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
14	WS07-22/09/2020-1.00-2.00m		Non Hazardous		42
15	WS07-22/09/2020-2.00-3.00m		Non Hazardous		45
16	WS07-22/09/2020-3.00-3.40m		Non Hazardous		48

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	51
Appendix B: Rationale for selection of metal species	52
Appendix C: Version	53

Classification of sample: WS23-22/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS23-22/09/2020-0.00-1.00m
Moisture content:
14.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	1	2 mg/kg		1.712 mg/kg	0.000171 %	✓	
	051-003-00-9							
2	arsenic { arsenic trioxide }		20.3 mg/kg	1.32	22.943 mg/kg	0.00229 %	✓	
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	barium { barium sulfate }		106 mg/kg	1.7	154.207 mg/kg	0.0154 %	✓	
	231-784-4 / 7727-43-7							
4	cadmium { cadmium sulfide }	1	1.6 mg/kg	1.285	1.76 mg/kg	0.000137 %	✓	
	048-010-00-4 / 215-147-8 / 1306-23-6							
5	copper { copper(II) oxide }		46 mg/kg	1.252	49.29 mg/kg	0.00493 %	✓	
	029-016-00-6 / 215-269-1 / 1317-38-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		18.7 mg/kg	1.462	23.395 mg/kg	0.00234 %	✓	
	215-160-9 / 1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
	024-001-00-0 / 215-607-8 / 1333-82-0							
8	lead { lead chromate }	1	129 mg/kg	1.56	172.241 mg/kg	0.011 %	✓	
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		3 mg/kg	1.5	3.852 mg/kg	0.000385 %	✓	
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel dihydroxide }		42.8 mg/kg	1.579	57.868 mg/kg	0.00579 %	✓	
	028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<**LOD**
	034-002-00-8							
13	zinc { zinc oxide }		164 mg/kg	1.245	174.738 mg/kg	0.0175 %	✓	
	030-013-00-7 / 215-222-5 / 1314-13-2							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.9	mg/kg	3.22	2.481	mg/kg	0.000248 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.11	mg/kg		0.0942	mg/kg	0.00000942 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.18	mg/kg		0.154	mg/kg	0.0000154 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.16	mg/kg		0.137	mg/kg	0.0000137 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.11	mg/kg		0.0942	mg/kg	0.00000942 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.12	mg/kg		0.103	mg/kg	0.0000103 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.09	mg/kg		0.077	mg/kg	0.0000077 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.05	mg/kg		0.0428	mg/kg	0.00000428 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.06	mg/kg		0.0514	mg/kg	0.00000514 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.14	mg/kg		0.12	mg/kg	0.000012 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.05	mg/kg		0.0428	mg/kg	0.00000428 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.33	pH		8.33	pH	8.33 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				343	mg/kg		293.608	mg/kg	0.0294 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0902 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations are too low to be considered flammable. There is no evidence of free draining.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0294%)

Classification of sample: WS23-22/09/2020-1.00-2.00m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS23-22/09/2020-1.00-2.00m
Moisture content:
12.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.106%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.106%)

Determinands

Moisture content: 12.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.613 mg/kg	0.000261 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14.4 mg/kg	1.32	16.56 mg/kg	0.00166 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		125 mg/kg	1.7	185.035 mg/kg	0.0185 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.799 mg/kg	0.000218 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		43 mg/kg	1.252	46.883 mg/kg	0.00469 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		67 mg/kg	1.462	85.292 mg/kg	0.00853 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
7		chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<**LOD**
		024-001-00-0	215-607-8	1333-82-0									
8		lead { lead chromate }			1	85	mg/kg	1.56	115.481	mg/kg	0.0074 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
9		mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<**LOD**
		080-010-00-X	231-299-8	7487-94-7									
10		molybdenum { molybdenum(VI) oxide }				6.5	mg/kg	1.5	8.493	mg/kg	0.000849 %	✓	
		042-001-00-9	215-204-7	1313-27-5									
11		nickel { nickel dihydroxide }				46.4	mg/kg	1.579	63.835	mg/kg	0.00638 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1	mg/kg	2.554	2.224	mg/kg	0.000222 %	✓	
		034-002-00-8											
13		zinc { zinc oxide }				124	mg/kg	1.245	134.434	mg/kg	0.0134 %	✓	
		030-013-00-7	215-222-5	1314-13-2									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.963	mg/kg	0.000196 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.07	mg/kg		0.061	mg/kg	0.0000061 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				0.18	mg/kg		0.157	mg/kg	0.0000157 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.32	mg/kg		0.279	mg/kg	0.0000279 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				0.11	mg/kg		0.0958	mg/kg	0.00000958 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.11	mg/kg		0.0958	mg/kg	0.00000958 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.07	mg/kg		0.061	mg/kg	0.0000061 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.08	mg/kg		0.0697	mg/kg	0.00000697 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.05	mg/kg		0.0435	mg/kg	0.00000435 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.08	mg/kg		0.0697	mg/kg	0.00000697 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.03	mg/kg		0.0261	mg/kg	0.00000261 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.04	mg/kg		0.0348	mg/kg	0.00000348 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36	●	ethylbenzene				0.011	mg/kg		0.0095	mg/kg	0.000000958 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37	●	polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38	●	pH				8.18	pH		8.18	pH	8.18 pH		
				PH									
39		cyanides { ● salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40	●	TPH (C6 to C40) petroleum group				1216	mg/kg		1059.136	mg/kg	0.106 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.169 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations are too low to be considered flammable. There is no evidence of free draining.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 9.58e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 3.48e-06%)
TPH (C6 to C40) petroleum group: (conc.: 0.106%)

Classification of sample: WS23-22/09/2020-2.00-3.00m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS23-22/09/2020-2.00-3.00m
Moisture content:
10.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.199%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.199%)

Determinands

Moisture content: 10.2% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
1		antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }			1	2	mg/kg		1.796	mg/kg	0.00018 %	✓	
		051-003-00-9											
2		arsenic { arsenic trioxide }				8.1	mg/kg	1.32	9.604	mg/kg	0.00096 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
3		barium { barium sulfate }				35	mg/kg	1.7	53.416	mg/kg	0.00534 %	✓	
			231-784-4	7727-43-7									
4		cadmium { cadmium sulfide }			1	1.9	mg/kg	1.285	2.193	mg/kg	0.000171 %	✓	
		048-010-00-4	215-147-8	1306-23-6									
5		copper { copper(II) oxide }				31	mg/kg	1.252	34.847	mg/kg	0.00348 %	✓	
		029-016-00-6	215-269-1	1317-38-0									
6		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				46.8	mg/kg	1.462	61.424	mg/kg	0.00614 %	✓	
			215-160-9	1308-38-9									

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
7		chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
		024-001-00-0 / 215-607-8 / 1333-82-0							
8		lead { lead chromate }	1	14 mg/kg	1.56	19.61 mg/kg	0.00126 %	✓	
		082-004-00-2 / 231-846-0 / 7758-97-6							
9		mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
		080-010-00-X / 231-299-8 / 7487-94-7							
10		molybdenum { molybdenum(VI) oxide }		5.4 mg/kg	1.5	7.275 mg/kg	0.000727 %	✓	
		042-001-00-9 / 215-204-7 / 1313-27-5							
11		nickel { nickel dihydroxide }		30.2 mg/kg	1.579	42.835 mg/kg	0.00428 %	✓	
		028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		24 mg/kg	2.554	55.035 mg/kg	0.0055 %	✓	
		034-002-00-8							
13		zinc { zinc oxide }		74 mg/kg	1.245	82.714 mg/kg	0.00827 %	✓	
		030-013-00-7 / 215-222-5 / 1314-13-2							
14		boron { diboron trioxide; boric oxide }		0.6 mg/kg	3.22	1.735 mg/kg	0.000173 %	✓	
		005-008-00-8 / 215-125-8 / 1303-86-2							
15		naphthalene		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		601-052-00-2 / 202-049-5 / 91-20-3							
16		acenaphthylene		0.35 mg/kg		0.314 mg/kg	0.0000314 %	✓	
		205-917-1 / 208-96-8							
17		acenaphthene		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		201-469-6 / 83-32-9							
18		fluorene		0.73 mg/kg		0.656 mg/kg	0.0000656 %	✓	
		201-695-5 / 86-73-7							
19		phenanthrene		1.46 mg/kg		1.311 mg/kg	0.000131 %	✓	
		201-581-5 / 85-01-8							
20		anthracene		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		204-371-1 / 120-12-7							
21		fluoranthene		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		205-912-4 / 206-44-0							
22		pyrene		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		204-927-3 / 129-00-0							
23		benzo[a]anthracene		<0.6 mg/kg		<0.6 mg/kg	<0.00006 %		<LOD
		601-033-00-9 / 200-280-6 / 56-55-3							
24		chrysene		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		601-048-00-0 / 205-923-4 / 218-01-9							
25		benzo[a]pyrene; benzo[def]chrysene		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		601-032-00-3 / 200-028-5 / 50-32-8							
26		indeno[123-cd]pyrene		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		205-893-2 / 193-39-5							
27		dibenz[a,h]anthracene		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		601-041-00-2 / 200-181-8 / 53-70-3							
28		benzo[ghi]perylene		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		205-883-8 / 191-24-2							
29		coronene		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		205-881-7 / 191-07-1							
30		benzo[b]fluoranthene		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		601-034-00-4 / 205-911-9 / 205-99-2							
31		benzo[k]fluoranthene		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		601-036-00-5 / 205-916-6 / 207-08-9							
32		benzo[j]fluoranthene		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
		601-035-00-X / 205-910-3 / 205-82-3							
33		benzene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-020-00-8 / 200-753-7 / 71-43-2							
34		toluene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-021-00-3 / 203-625-9 / 108-88-3							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.138	mg/kg		0.124	mg/kg	0.0000124 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.037	mg/kg		0.0332	mg/kg	0.00000332 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.27	pH		8.27	pH	8.27 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				2217	mg/kg		1990.866	mg/kg	0.199 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.238 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations are too low to be considered flammable. There is no evidence of free draining.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 3.32e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 0.00001%)
TPH (C6 to C40) petroleum group: (conc.: 0.199%)

Classification of sample: WS23-22/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS23-22/09/2020-3.00-3.40m
Moisture content:
9.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.802 mg/kg	0.00018 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.6 mg/kg	1.32	7.851 mg/kg	0.000785 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		27 mg/kg	1.7	41.344 mg/kg	0.00413 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.9 mg/kg	1.285	2.2 mg/kg	0.000171 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		23 mg/kg	1.252	25.941 mg/kg	0.00259 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		49.1 mg/kg	1.462	64.658 mg/kg	0.00647 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14 mg/kg	1.56	19.676 mg/kg	0.00126 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.8 mg/kg	1.5	6.488 mg/kg	0.000649 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		31.4 mg/kg	1.579	44.686 mg/kg	0.00447 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	2.554	9.203 mg/kg	0.00092 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		66 mg/kg	1.245	74.018 mg/kg	0.0074 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.741	mg/kg	0.000174 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.04	mg/kg		0.036	mg/kg	0.0000036 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.33	pH		8.33	pH	8.33 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				57	mg/kg		51.357	mg/kg	0.00514 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0347 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations are too low to be considered flammable. There is no evidence of free draining.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00514%)

Classification of sample: WS08-22/09/2020-0.15-1.00m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS08-22/09/2020-0.15-1.00m
Moisture content:
14.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.133%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.133%)

Determinands

Moisture content: 14.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.852 mg/kg	0.0000852 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.7 mg/kg	1.32	7.537 mg/kg	0.000754 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		72 mg/kg	1.7	104.255 mg/kg	0.0104 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.2 mg/kg	1.285	1.314 mg/kg	0.000102 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		24 mg/kg	1.252	25.596 mg/kg	0.00256 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		62.7 mg/kg	1.462	78.077 mg/kg	0.00781 %	✓	

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
7		chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
		024-001-00-0 / 215-607-8 / 1333-82-0							
8		lead { lead chromate }	1	33 mg/kg	1.56	43.856 mg/kg	0.00281 %	✓	
		082-004-00-2 / 231-846-0 / 7758-97-6							
9		mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
		080-010-00-X / 231-299-8 / 7487-94-7							
10		molybdenum { molybdenum(VI) oxide }		4.6 mg/kg	1.5	5.88 mg/kg	0.000588 %	✓	
		042-001-00-9 / 215-204-7 / 1313-27-5							
11		nickel { nickel dihydroxide }		26.9 mg/kg	1.579	36.2 mg/kg	0.00362 %	✓	
		028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
		034-002-00-8							
13		zinc { zinc oxide }		74 mg/kg	1.245	78.477 mg/kg	0.00785 %	✓	
		030-013-00-7 / 215-222-5 / 1314-13-2							
14		boron { diboron trioxide; boric oxide }		1 mg/kg	3.22	2.743 mg/kg	0.000274 %	✓	
		005-008-00-8 / 215-125-8 / 1303-86-2							
15		naphthalene		0.35 mg/kg		0.298 mg/kg	0.0000298 %	✓	
		601-052-00-2 / 202-049-5 / 91-20-3							
16		acenaphthylene		0.11 mg/kg		0.0937 mg/kg	0.00000937 %	✓	
		205-917-1 / 208-96-8							
17		acenaphthene		0.22 mg/kg		0.187 mg/kg	0.0000187 %	✓	
		201-469-6 / 83-32-9							
18		fluorene		0.27 mg/kg		0.23 mg/kg	0.000023 %	✓	
		201-695-5 / 86-73-7							
19		phenanthrene		1.49 mg/kg		1.269 mg/kg	0.000127 %	✓	
		201-581-5 / 85-01-8							
20		anthracene		0.34 mg/kg		0.29 mg/kg	0.000029 %	✓	
		204-371-1 / 120-12-7							
21		fluoranthene		1.66 mg/kg		1.414 mg/kg	0.000141 %	✓	
		205-912-4 / 206-44-0							
22		pyrene		1.61 mg/kg		1.372 mg/kg	0.000137 %	✓	
		204-927-3 / 129-00-0							
23		benzo[a]anthracene		0.66 mg/kg		0.562 mg/kg	0.0000562 %	✓	
		601-033-00-9 / 200-280-6 / 56-55-3							
24		chrysene		0.86 mg/kg		0.733 mg/kg	0.0000733 %	✓	
		601-048-00-0 / 205-923-4 / 218-01-9							
25		benzo[a]pyrene; benzo[def]chrysene		0.53 mg/kg		0.452 mg/kg	0.0000452 %	✓	
		601-032-00-3 / 200-028-5 / 50-32-8							
26		indeno[123-cd]pyrene		0.27 mg/kg		0.23 mg/kg	0.000023 %	✓	
		205-893-2 / 193-39-5							
27		dibenz[a,h]anthracene		0.05 mg/kg		0.0426 mg/kg	0.00000426 %	✓	
		601-041-00-2 / 200-181-8 / 53-70-3							
28		benzo[ghi]perylene		0.31 mg/kg		0.264 mg/kg	0.0000264 %	✓	
		205-883-8 / 191-24-2							
29		coronene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-881-7 / 191-07-1							
30		benzo[b]fluoranthene		0.86 mg/kg		0.733 mg/kg	0.0000733 %	✓	
		601-034-00-4 / 205-911-9 / 205-99-2							
31		benzo[k]fluoranthene		0.33 mg/kg		0.281 mg/kg	0.0000281 %	✓	
		601-036-00-5 / 205-916-6 / 207-08-9							
32		benzo[j]fluoranthene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
		601-035-00-X / 205-910-3 / 205-82-3							
33		benzene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-020-00-8 / 200-753-7 / 71-43-2							
34		toluene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-021-00-3 / 203-625-9 / 108-88-3							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.031	mg/kg		0.0264	mg/kg	0.00000264 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.32	pH		8.32	pH	8.32 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				1562	mg/kg		1330.824	mg/kg	0.133 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.171 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations are too low to be considered flammable. There is no evidence of free draining.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 2.64e-06%)
TPH (C6 to C40) petroleum group: (conc.: 0.133%)

Classification of sample: WS08-22/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS08-22/09/2020-1.00-2.00m
Moisture content:
12.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.758 mg/kg	0.000176 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.9 mg/kg	1.32	11.49 mg/kg	0.00115 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		54 mg/kg	1.7	80.669 mg/kg	0.00807 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.9 mg/kg	1.285	2.146 mg/kg	0.000167 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		31 mg/kg	1.252	34.11 mg/kg	0.00341 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		44.1 mg/kg	1.462	56.656 mg/kg	0.00567 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	20.566 mg/kg	0.00132 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.5 mg/kg	1.5	5.934 mg/kg	0.000593 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		33.4 mg/kg	1.579	46.372 mg/kg	0.00464 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		75 mg/kg	1.245	82.058 mg/kg	0.00821 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.698	mg/kg	0.00017 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.55	pH		8.55	pH	8.55 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0394 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS08-22/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS08-22/09/2020-2.00-3.00m
Moisture content:
12.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	1	2 mg/kg		1.742 mg/kg	0.000174 %	✓	
	051-003-00-9							
2	arsenic { arsenic trioxide }		9.6 mg/kg	1.32	11.04 mg/kg	0.0011 %	✓	
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	barium { barium sulfate }		87 mg/kg	1.7	128.784 mg/kg	0.0129 %	✓	
	231-784-4 / 7727-43-7							
4	cadmium { cadmium sulfide }	1	2.3 mg/kg	1.285	2.575 mg/kg	0.0002 %	✓	
	048-010-00-4 / 215-147-8 / 1306-23-6							
5	copper { copper(II) oxide }		29 mg/kg	1.252	31.619 mg/kg	0.00316 %	✓	
	029-016-00-6 / 215-269-1 / 1317-38-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		50.6 mg/kg	1.462	64.415 mg/kg	0.00644 %	✓	
	215-160-9 / 1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
	024-001-00-0 / 215-607-8 / 1333-82-0							
8	lead { lead chromate }	1	16 mg/kg	1.56	21.738 mg/kg	0.00139 %	✓	
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		5.6 mg/kg	1.5	7.317 mg/kg	0.000732 %	✓	
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel dihydroxide }		37.9 mg/kg	1.579	52.141 mg/kg	0.00521 %	✓	
	028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		2 mg/kg	2.554	4.448 mg/kg	0.000445 %	✓	
	034-002-00-8							
13	zinc { zinc oxide }		91 mg/kg	1.245	98.657 mg/kg	0.00987 %	✓	
	030-013-00-7 / 215-222-5 / 1314-13-2							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.402	mg/kg	0.00014 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.77	pH		8.77	pH	8.77 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0473 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS08-22/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS08-22/09/2020-3.00-3.40m
Moisture content:
9.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.804 mg/kg	0.00018 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17.9 mg/kg	1.32	21.318 mg/kg	0.00213 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		72 mg/kg	1.7	110.373 mg/kg	0.011 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.3 mg/kg	1.285	1.507 mg/kg	0.000117 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		20 mg/kg	1.252	22.582 mg/kg	0.00226 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		45.1 mg/kg	1.462	59.456 mg/kg	0.00595 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	12 mg/kg	1.56	16.883 mg/kg	0.00108 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.8 mg/kg	1.5	6.495 mg/kg	0.00065 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		24.7 mg/kg	1.579	35.19 mg/kg	0.00352 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	2.554	9.213 mg/kg	0.000921 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		66 mg/kg	1.245	74.1 mg/kg	0.00741 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.162	mg/kg	0.000116 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.82	pH		8.82	pH	8.82 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0409 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS06-22/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS06-22/09/2020-0.00-1.00m
Moisture content:
7.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.858 mg/kg	0.000186 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.7 mg/kg	1.32	8.218 mg/kg	0.000822 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		68 mg/kg	1.7	107.362 mg/kg	0.0107 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.4 mg/kg	1.285	1.672 mg/kg	0.00013 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		27 mg/kg	1.252	31.398 mg/kg	0.00314 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		80.3 mg/kg	1.462	109.03 mg/kg	0.0109 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	37 mg/kg	1.56	53.616 mg/kg	0.00344 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6 mg/kg	1.5	8.362 mg/kg	0.000836 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		27.5 mg/kg	1.579	40.352 mg/kg	0.00404 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	2.554	2.372 mg/kg	0.000237 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		82 mg/kg	1.245	94.82 mg/kg	0.00948 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.496	mg/kg	0.00015 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.05	mg/kg		0.0465	mg/kg	0.00000465 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.05	mg/kg		0.0465	mg/kg	0.00000465 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.04	mg/kg		0.0372	mg/kg	0.00000372 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.06	mg/kg		0.0557	mg/kg	0.00000557 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.03	mg/kg		0.0279	mg/kg	0.00000279 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.75	pH		8.75	pH	8.75 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				154	mg/kg		143.066	mg/kg	0.0143 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0587 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations are too low to be considered flammable. There is no evidence of free draining.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0143%)

Classification of sample: WS06-22/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS06-22/09/2020-1.00-2.00m
Moisture content:
10.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.897 mg/kg	0.0000897 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17.4 mg/kg	1.32	20.607 mg/kg	0.00206 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		38 mg/kg	1.7	57.93 mg/kg	0.00579 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.4 mg/kg	1.285	1.614 mg/kg	0.000126 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		15 mg/kg	1.252	16.843 mg/kg	0.00168 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		33.1 mg/kg	1.462	43.395 mg/kg	0.00434 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11 mg/kg	1.56	15.391 mg/kg	0.000987 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.4 mg/kg	1.5	4.575 mg/kg	0.000458 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		20.9 mg/kg	1.579	29.611 mg/kg	0.00296 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	2.554	2.291 mg/kg	0.000229 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		48 mg/kg	1.245	53.592 mg/kg	0.00536 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.444	mg/kg	0.000144 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0628	mg/kg	0.00000628 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.0269	mg/kg	0.00000269 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.55	pH		8.55	pH	8.55 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0298 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS06-22/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS06-22/09/2020-2.00-3.00m
Moisture content:
10.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.792 mg/kg	0.000179 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.8 mg/kg	1.32	10.411 mg/kg	0.00104 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		58 mg/kg	1.7	88.321 mg/kg	0.00883 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2 mg/kg	1.285	2.303 mg/kg	0.000179 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		27 mg/kg	1.252	30.283 mg/kg	0.00303 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		46.3 mg/kg	1.462	60.632 mg/kg	0.00606 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14 mg/kg	1.56	19.566 mg/kg	0.00125 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.8 mg/kg	1.5	7.796 mg/kg	0.00078 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		34 mg/kg	1.579	48.118 mg/kg	0.00481 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	2.554	6.864 mg/kg	0.000686 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		69 mg/kg	1.245	76.953 mg/kg	0.0077 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.443	mg/kg	0.000144 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.04	mg/kg		0.0358	mg/kg	0.00000358 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.0269	mg/kg	0.00000269 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.47	pH		8.47	pH	8.47 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0402 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS06-22/09/2020-2.70-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS06-22/09/2020-2.70-3.00m
Moisture content:
10.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.796 mg/kg	0.00018 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.9 mg/kg	1.32	14.109 mg/kg	0.00141 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		85 mg/kg	1.7	129.724 mg/kg	0.013 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.6 mg/kg	1.285	3.001 mg/kg	0.000233 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		43 mg/kg	1.252	48.336 mg/kg	0.00483 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		42.8 mg/kg	1.462	56.174 mg/kg	0.00562 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	28.014 mg/kg	0.0018 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.2 mg/kg	1.5	8.352 mg/kg	0.000835 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		49.9 mg/kg	1.579	70.778 mg/kg	0.00708 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	2.554	9.173 mg/kg	0.000917 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		97 mg/kg	1.245	108.422 mg/kg	0.0108 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.157	mg/kg	0.000116 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0629	mg/kg	0.00000629 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.4	pH		8.4	pH	8.4 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0524 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS07-22/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS07-22/09/2020-0.00-1.00m
Moisture content:
11.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.2 mg/kg	1.32	8.451 mg/kg	0.000845 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		43 mg/kg	1.7	64.967 mg/kg	0.0065 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.8 mg/kg	1.285	2.057 mg/kg	0.00016 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		20 mg/kg	1.252	22.257 mg/kg	0.00223 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		9 mg/kg	1.462	11.694 mg/kg	0.00117 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	25 mg/kg	1.56	34.667 mg/kg	0.00222 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		1.8 mg/kg	1.5	2.401 mg/kg	0.00024 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		24.1 mg/kg	1.579	33.841 mg/kg	0.00338 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		75 mg/kg	1.245	82.991 mg/kg	0.0083 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.3	mg/kg	3.22	0.859	mg/kg	0.0000859 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.05	mg/kg		0.0445	mg/kg	0.00000445 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.25	mg/kg		0.222	mg/kg	0.0000222 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.06	mg/kg		0.0533	mg/kg	0.00000533 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.35	mg/kg		0.311	mg/kg	0.0000311 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.3	mg/kg		0.267	mg/kg	0.0000267 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.19	mg/kg		0.169	mg/kg	0.0000169 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.21	mg/kg		0.187	mg/kg	0.0000187 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.19	mg/kg		0.169	mg/kg	0.0000169 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.11	mg/kg		0.0978	mg/kg	0.00000978 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.12	mg/kg		0.107	mg/kg	0.0000107 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.26	mg/kg		0.231	mg/kg	0.0000231 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.1	mg/kg		0.0889	mg/kg	0.00000889 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				9.7	pH		9.7	pH	9.7 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0312 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS07-22/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS07-22/09/2020-1.00-2.00m
Moisture content:
12%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.64 mg/kg	0.000264 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14.7 mg/kg	1.32	17.08 mg/kg	0.00171 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		86 mg/kg	1.7	128.619 mg/kg	0.0129 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	3 mg/kg	1.285	3.393 mg/kg	0.000264 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		46 mg/kg	1.252	50.672 mg/kg	0.00507 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		54.6 mg/kg	1.462	70.225 mg/kg	0.00702 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	21 mg/kg	1.56	28.825 mg/kg	0.00185 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.4 mg/kg	1.5	8.449 mg/kg	0.000845 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		53.7 mg/kg	1.579	74.641 mg/kg	0.00746 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	2.554	2.247 mg/kg	0.000225 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		111 mg/kg	1.245	121.584 mg/kg	0.0122 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.417	mg/kg	0.000142 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.66	pH		8.66	pH	8.66 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0554 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS07-22/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS07-22/09/2020-2.00-3.00m
Moisture content:
9.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.808 mg/kg	0.000181 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.3 mg/kg	1.32	13.487 mg/kg	0.00135 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		90 mg/kg	1.7	138.273 mg/kg	0.0138 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	3.1 mg/kg	1.285	3.602 mg/kg	0.00028 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		36 mg/kg	1.252	40.738 mg/kg	0.00407 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		44.1 mg/kg	1.462	58.267 mg/kg	0.00583 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	25.381 mg/kg	0.00163 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.2 mg/kg	1.5	8.408 mg/kg	0.000841 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		46.8 mg/kg	1.579	66.824 mg/kg	0.00668 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	2.554	6.925 mg/kg	0.000693 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		87 mg/kg	1.245	97.894 mg/kg	0.00979 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.455	mg/kg	0.000146 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.08	mg/kg		0.0723	mg/kg	0.00000723 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.04	mg/kg		0.0362	mg/kg	0.00000362 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.35	pH		8.35	pH	8.35 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0509 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS07-22/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS07-22/09/2020-3.00-3.40m
Moisture content:
8.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.834 mg/kg	0.000183 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.9 mg/kg	1.32	13.197 mg/kg	0.00132 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		97 mg/kg	1.7	151.17 mg/kg	0.0151 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.4 mg/kg	1.285	2.829 mg/kg	0.00022 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		37 mg/kg	1.252	42.472 mg/kg	0.00425 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		45.4 mg/kg	1.462	60.847 mg/kg	0.00608 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	24.316 mg/kg	0.00156 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.1 mg/kg	1.5	8.392 mg/kg	0.000839 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		45.8 mg/kg	1.579	66.337 mg/kg	0.00663 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	2.554	9.367 mg/kg	0.000937 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		92 mg/kg	1.245	105.009 mg/kg	0.0105 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.181	mg/kg	0.000118 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0642	mg/kg	0.00000642 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.0275	mg/kg	0.00000275 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.28	pH		8.28	pH	8.28 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0533 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

barium sulfate (EC Number: 231-784-4, CAS Number: 7727-43-7)

Conversion factor: 1.7
Description/Comments: No hazard statements
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/89983 Sigma Aldrich SDS dated 15/4/19
Data source date: 02 Apr 2020
Hazard Statements: None.

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **coronene** (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source:
http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2 H371

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

- **polychlorobiphenyls; PCB** (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

- **pH** (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

arsenic {arsenic trioxide}

Worst case species based on Hazard Statement.

barium {barium sulfate}

conservative

cadmium {cadmium sulfide}

Worst case species based on Hazard Statements.

copper {copper(II) oxide}

Reasonable

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

oxide conversion factor included

chromium in chromium(VI) compounds {chromium(VI) oxide}

most conservative

lead {lead chromate}

Worst case species based on Hazard Statements.

mercury {mercury dichloride}

Worst case species based on Hazard Statements.

molybdenum {molybdenum(VI) oxide}

Worst case species based on Hazard Statements.

nickel {nickel dihydroxide}

Worst case species based on Hazard Statements.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on Hazard Statements.

zinc {zinc oxide}

Concentrations of chromium VI insufficient for zinc chormate to be present.

boron {diboron trioxide; boric oxide}

Reasonable

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.276.4488.8743 (02 Oct 2020)
HazWasteOnline Database: 2020.276.4488.8743 (02 Oct 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

Waste Classification Report

BZSWP-PRVRS-4H2SG

Job name

EMT-20-13184-Batch-1-File-2

Description/Comments

Window Samples

Project

B967/1

Site

Emmet Road

Related Documents

#	Name	Description
1	EMT-20-13184-Batch-1-File-2.hwol	.hwol file used to create the Job

Waste Stream Template

EJEL Rilta

Classified by

Name:
Kate Moraes dos Santos
Date:
08 Oct 2020 13:20 GMT
Telephone:

Company:
O'Connor Sutton Cronin & Assoc. Ltd.
OCSC

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	08 Apr 2020
Advanced Hazardous Waste Classification	09 Apr 2020

Report

Created by: Kate Moraes dos Santos
Created date: 08 Oct 2020 13:20 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS11-23/09/2020-0.12-1.00m		Non Hazardous		3
2	WS11-23/09/2020-1.00-2.00m		Non Hazardous		6
3	WS11-23/09/2020-2.00-3.00m		Non Hazardous		9
4	WS11-23/09/2020-3.00-3.40m		Non Hazardous		12
5	WS27-23/09/2020-0.00-1.00m		Non Hazardous		15
6	WS27-23/09/2020-1.00-1.50m		Non Hazardous		18
7	WS26-23/09/2020-0.00-1.00m		Non Hazardous		21
8	WS26-23/09/2020-1.00-2.00m		Non Hazardous		24
9	WS26-23/09/2020-2.00-2.80m		Non Hazardous		27
10	WS25-23/09/2020-0.00-1.00m		Non Hazardous		30
11	WS25-23/09/2020-1.00-2.00m		Non Hazardous		33
12	WS25-23/09/2020-2.00-3.00m		Non Hazardous		36
13	WS25-23/09/2020-3.00-3.20m		Non Hazardous		39

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	42
Appendix B: Rationale for selection of metal species	43
Appendix C: Version	44

Classification of sample: WS11-23/09/2020-0.12-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS11-23/09/2020-0.12-1.00m
Moisture content:
8.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.912 mg/kg	0.0000912 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.7 mg/kg	1.32	12.884 mg/kg	0.00129 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		283 mg/kg	1.7	438.639 mg/kg	0.0439 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.9 mg/kg	1.285	1.055 mg/kg	0.0000821 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		18 mg/kg	1.252	20.549 mg/kg	0.00205 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		66.1 mg/kg	1.462	88.107 mg/kg	0.00881 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11 mg/kg	1.56	15.648 mg/kg	0.001 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.1 mg/kg	1.5	6.978 mg/kg	0.000698 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		22.3 mg/kg	1.579	32.123 mg/kg	0.00321 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		50 mg/kg	1.245	56.759 mg/kg	0.00568 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.056	mg/kg	0.000206 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				10.7	pH		10.7	pH	10.7 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0728 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS11-23/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS11-23/09/2020-1.00-2.00m
Moisture content:
6.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 6.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.932 mg/kg	0.0000932 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		3.5 mg/kg	1.32	4.307 mg/kg	0.000431 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		35 mg/kg	1.7	55.438 mg/kg	0.00554 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.3 mg/kg	1.285	1.557 mg/kg	0.000121 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		11 mg/kg	1.252	12.833 mg/kg	0.00128 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		58.5 mg/kg	1.462	79.687 mg/kg	0.00797 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	9 mg/kg	1.56	13.084 mg/kg	0.000839 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.4 mg/kg	1.5	6.152 mg/kg	0.000615 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		14.8 mg/kg	1.579	21.787 mg/kg	0.00218 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		41 mg/kg	1.245	47.563 mg/kg	0.00476 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.2	mg/kg	0.00012 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				9.04	pH		9.04	pH	9.04 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0297 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS11-23/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS11-23/09/2020-2.00-3.00m
Moisture content:
8.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.824 mg/kg	0.000182 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.7 mg/kg	1.32	12.884 mg/kg	0.00129 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		59 mg/kg	1.7	91.448 mg/kg	0.00914 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.9 mg/kg	1.285	3.399 mg/kg	0.000264 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		34 mg/kg	1.252	38.815 mg/kg	0.00388 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		47.1 mg/kg	1.462	62.781 mg/kg	0.00628 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	22.761 mg/kg	0.00146 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.3 mg/kg	1.5	8.619 mg/kg	0.000862 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		41.8 mg/kg	1.579	60.213 mg/kg	0.00602 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	2.554	6.987 mg/kg	0.000699 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		95 mg/kg	1.245	107.842 mg/kg	0.0108 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.175	mg/kg	0.000117 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.04	mg/kg		0.0365	mg/kg	0.00000365 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.43	pH		8.43	pH	8.43 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0465 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS11-23/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS11-23/09/2020-3.00-3.40m
Moisture content:
8.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.828 mg/kg	0.000183 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.5 mg/kg	1.32	12.671 mg/kg	0.00127 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		77 mg/kg	1.7	119.609 mg/kg	0.012 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.3 mg/kg	1.285	2.702 mg/kg	0.00021 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		34 mg/kg	1.252	38.9 mg/kg	0.00389 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		37 mg/kg	1.462	49.427 mg/kg	0.00494 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	24.236 mg/kg	0.00155 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.7 mg/kg	1.5	7.816 mg/kg	0.000782 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		43.2 mg/kg	1.579	62.366 mg/kg	0.00624 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	2.554	7.002 mg/kg	0.0007 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		84 mg/kg	1.245	95.564 mg/kg	0.00956 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.766	mg/kg	0.000177 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.08	mg/kg		0.0731	mg/kg	0.00000731 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.04	mg/kg		0.0366	mg/kg	0.00000366 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.32	pH		8.32	pH	8.32 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.047 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS27-23/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS27-23/09/2020-0.00-1.00m
Moisture content:
13.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.73 mg/kg	0.000173 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.7 mg/kg	1.32	17.931 mg/kg	0.00179 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		149 mg/kg	1.7	219.042 mg/kg	0.0219 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.8 mg/kg	1.285	2.001 mg/kg	0.000156 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		52 mg/kg	1.252	56.305 mg/kg	0.00563 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		19.5 mg/kg	1.462	24.653 mg/kg	0.00247 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	171 mg/kg	1.56	230.72 mg/kg	0.0148 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.2 mg/kg	1.5	2.855 mg/kg	0.000285 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		42.2 mg/kg	1.579	57.656 mg/kg	0.00577 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	2.554	2.209 mg/kg	0.000221 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		205 mg/kg	1.245	220.719 mg/kg	0.0221 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.3	mg/kg	3.22	3.621	mg/kg	0.000362 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.09	mg/kg		0.0779	mg/kg	0.00000779 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.13	mg/kg		0.112	mg/kg	0.0000112 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				0.09	mg/kg		0.0779	mg/kg	0.00000779 %	✓	
			201-469-6	83-32-9									
18		fluorene				0.08	mg/kg		0.0692	mg/kg	0.00000692 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.92	mg/kg		0.796	mg/kg	0.0000796 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.35	mg/kg		0.303	mg/kg	0.0000303 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				1.75	mg/kg		1.514	mg/kg	0.000151 %	✓	
			205-912-4	206-44-0									
22		pyrene				1.57	mg/kg		1.358	mg/kg	0.000136 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				1.05	mg/kg		0.908	mg/kg	0.0000908 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				1.01	mg/kg		0.874	mg/kg	0.0000874 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.9	mg/kg		0.779	mg/kg	0.0000779 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.58	mg/kg		0.502	mg/kg	0.0000502 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.14	mg/kg		0.121	mg/kg	0.0000121 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.59	mg/kg		0.51	mg/kg	0.000051 %	✓	
			205-883-8	191-24-2									
29		coronene				0.12	mg/kg		0.104	mg/kg	0.0000104 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				1.22	mg/kg		1.055	mg/kg	0.000106 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.48	mg/kg		0.415	mg/kg	0.0000415 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.03	pH		8.03	pH	8.03 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				197	mg/kg		170.405	mg/kg	0.017 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0939 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations are too low to be considerate Flammable. There is no evidence of free draining.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.017%)

Classification of sample: WS27-23/09/2020-1.00-1.50m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS27-23/09/2020-1.00-1.50m
Moisture content:
12%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.76 mg/kg	0.000176 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8 mg/kg	1.32	9.295 mg/kg	0.00093 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		114 mg/kg	1.7	170.496 mg/kg	0.017 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.3 mg/kg	1.285	2.601 mg/kg	0.000202 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		28 mg/kg	1.252	30.844 mg/kg	0.00308 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		39.2 mg/kg	1.462	50.418 mg/kg	0.00504 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	21.962 mg/kg	0.00141 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.5 mg/kg	1.5	5.941 mg/kg	0.000594 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		38.8 mg/kg	1.579	53.93 mg/kg	0.00539 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	2.554	4.494 mg/kg	0.000449 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		82 mg/kg	1.245	89.819 mg/kg	0.00898 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.983	mg/kg	0.000198 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				0.09	mg/kg		0.0792	mg/kg	0.00000792 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0616	mg/kg	0.00000616 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				0.06	mg/kg		0.0528	mg/kg	0.00000528 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				0.038	mg/kg		0.0334	mg/kg	0.00000334 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.011	mg/kg		0.0096	mg/kg	0.000000968 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.14	pH		8.14	pH	8.14 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				822	mg/kg		723.36	mg/kg	0.0723 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.116 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations are too low to be considerate Flammable. There is no evidence of free draining.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 9.68e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 3.34e-06%)
TPH (C6 to C40) petroleum group: (conc.: 0.0723%)

Classification of sample: WS26-23/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS26-23/09/2020-0.00-1.00m
Moisture content:
10.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.782 mg/kg	0.000178 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		33.6 mg/kg	1.32	39.527 mg/kg	0.00395 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		130 mg/kg	1.7	196.855 mg/kg	0.0197 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.7 mg/kg	1.285	0.802 mg/kg	0.0000624 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		39 mg/kg	1.252	43.498 mg/kg	0.00435 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		64 mg/kg	1.462	83.344 mg/kg	0.00833 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	52 mg/kg	1.56	72.269 mg/kg	0.00463 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.8 mg/kg	1.5	3.743 mg/kg	0.000374 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		44.1 mg/kg	1.579	62.063 mg/kg	0.00621 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	2.554	2.275 mg/kg	0.000228 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		158 mg/kg	1.245	175.228 mg/kg	0.0175 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.008	mg/kg	0.000201 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.04	mg/kg		0.0356	mg/kg	0.00000356 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.07	mg/kg		0.0624	mg/kg	0.00000624 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				0.09	mg/kg		0.0802	mg/kg	0.00000802 %	✓	
			201-469-6	83-32-9									
18		fluorene				0.08	mg/kg		0.0713	mg/kg	0.00000713 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.81	mg/kg		0.722	mg/kg	0.0000722 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.27	mg/kg		0.241	mg/kg	0.0000241 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				1.53	mg/kg		1.363	mg/kg	0.000136 %	✓	
			205-912-4	206-44-0									
22		pyrene				1.31	mg/kg		1.167	mg/kg	0.000117 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.84	mg/kg		0.748	mg/kg	0.0000748 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.86	mg/kg		0.766	mg/kg	0.0000766 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.89	mg/kg		0.793	mg/kg	0.0000793 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.65	mg/kg		0.579	mg/kg	0.0000579 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.11	mg/kg		0.098	mg/kg	0.0000098 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.7	mg/kg		0.624	mg/kg	0.0000624 %	✓	
			205-883-8	191-24-2									
29		coronene				0.1	mg/kg		0.0891	mg/kg	0.00000891 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				1.17	mg/kg		1.042	mg/kg	0.000104 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.46	mg/kg		0.41	mg/kg	0.000041 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.55	pH		8.55	pH	8.55 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				292	mg/kg		260.172	mg/kg	0.026 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0929 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations are too low to be considerate Flammable. There is no evidence of free draining.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.026%)

Classification of sample: WS26-23/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS26-23/09/2020-1.00-2.00m
Moisture content:
12.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.754 mg/kg	0.000175 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14 mg/kg	1.32	16.211 mg/kg	0.00162 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		110 mg/kg	1.7	163.952 mg/kg	0.0164 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.8 mg/kg	1.285	2.029 mg/kg	0.000158 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		30 mg/kg	1.252	32.934 mg/kg	0.00329 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		37.9 mg/kg	1.462	48.58 mg/kg	0.00486 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	28 mg/kg	1.56	38.303 mg/kg	0.00246 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.7 mg/kg	1.5	6.184 mg/kg	0.000618 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		31.7 mg/kg	1.579	43.912 mg/kg	0.00439 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	2.554	4.479 mg/kg	0.000448 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		81 mg/kg	1.245	88.421 mg/kg	0.00884 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.694	mg/kg	0.000169 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.1	mg/kg		0.0877	mg/kg	0.00000877 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.16	mg/kg		0.14	mg/kg	0.000014 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.15	mg/kg		0.132	mg/kg	0.0000132 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.13	mg/kg		0.114	mg/kg	0.0000114 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.11	mg/kg		0.0965	mg/kg	0.00000965 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.1	mg/kg		0.0877	mg/kg	0.00000877 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.08	mg/kg		0.0702	mg/kg	0.00000702 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.08	mg/kg		0.0702	mg/kg	0.00000702 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.14	mg/kg		0.123	mg/kg	0.0000123 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.05	mg/kg		0.0439	mg/kg	0.00000439 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.39	pH		8.39	pH	8.39 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				54	mg/kg		47.358	mg/kg	0.00474 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0486 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations are too low to be considerate Flammable. There is no evidence of free draining.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00474%)

Classification of sample: WS26-23/09/2020-2.00-2.80m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS26-23/09/2020-2.00-2.80m
Moisture content:
8.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.826 mg/kg	0.000183 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.2 mg/kg	1.32	11.09 mg/kg	0.00111 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		70 mg/kg	1.7	108.616 mg/kg	0.0109 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2 mg/kg	1.285	2.347 mg/kg	0.000183 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		31 mg/kg	1.252	35.429 mg/kg	0.00354 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		49.8 mg/kg	1.462	66.453 mg/kg	0.00665 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	22.786 mg/kg	0.00146 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6 mg/kg	1.5	8.218 mg/kg	0.000822 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		40.9 mg/kg	1.579	58.981 mg/kg	0.0059 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	2.554	6.994 mg/kg	0.000699 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		97 mg/kg	1.245	110.233 mg/kg	0.011 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.176	mg/kg	0.000118 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0639	mg/kg	0.00000639 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.04	mg/kg		0.0365	mg/kg	0.00000365 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.31	pH		8.31	pH	8.31 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0481 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS25-23/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS25-23/09/2020-0.00-1.00m
Moisture content:
11.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.772 mg/kg	0.000177 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.4 mg/kg	1.32	13.336 mg/kg	0.00133 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		100 mg/kg	1.7	150.577 mg/kg	0.0151 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.6 mg/kg	1.285	1.822 mg/kg	0.000142 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		28 mg/kg	1.252	31.054 mg/kg	0.00311 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		69.4 mg/kg	1.462	89.869 mg/kg	0.00899 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	23 mg/kg	1.56	31.786 mg/kg	0.00204 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.8 mg/kg	1.5	7.709 mg/kg	0.000771 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		35.2 mg/kg	1.579	49.26 mg/kg	0.00493 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	2.554	2.262 mg/kg	0.000226 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		80 mg/kg	1.245	88.225 mg/kg	0.00882 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.2	mg/kg	3.22	3.423	mg/kg	0.000342 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.062	mg/kg	0.0000062 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.12	mg/kg		0.106	mg/kg	0.0000106 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.11	mg/kg		0.0975	mg/kg	0.00000975 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.1	mg/kg		0.0886	mg/kg	0.00000886 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.07	mg/kg		0.062	mg/kg	0.0000062 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.06	mg/kg		0.0532	mg/kg	0.00000532 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.08	mg/kg		0.0709	mg/kg	0.00000709 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.03	mg/kg		0.0266	mg/kg	0.00000266 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.47	pH		8.47	pH	8.47 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0515 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS25-23/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS25-23/09/2020-1.00-2.00m
Moisture content:
10%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.8 mg/kg	0.00018 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.5 mg/kg	1.32	13.665 mg/kg	0.00137 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		74 mg/kg	1.7	113.188 mg/kg	0.0113 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.3 mg/kg	1.285	2.66 mg/kg	0.000207 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		35 mg/kg	1.252	39.431 mg/kg	0.00394 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		43 mg/kg	1.462	56.562 mg/kg	0.00566 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	22.461 mg/kg	0.00144 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.2 mg/kg	1.5	8.371 mg/kg	0.000837 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		42.6 mg/kg	1.579	60.558 mg/kg	0.00606 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	2.554	2.298 mg/kg	0.00023 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		102 mg/kg	1.245	114.265 mg/kg	0.0114 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.739	mg/kg	0.000174 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.52	pH		8.52	pH	8.52 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0484 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS25-23/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS25-23/09/2020-2.00-3.00m
Moisture content:
8.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.828 mg/kg	0.000183 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.9 mg/kg	1.32	11.947 mg/kg	0.00119 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		80 mg/kg	1.7	124.269 mg/kg	0.0124 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.937 mg/kg	0.000229 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		38 mg/kg	1.252	43.477 mg/kg	0.00435 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		40.6 mg/kg	1.462	54.236 mg/kg	0.00542 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	27.088 mg/kg	0.00174 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.4 mg/kg	1.5	7.404 mg/kg	0.00074 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		43.7 mg/kg	1.579	63.088 mg/kg	0.00631 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	2.554	9.336 mg/kg	0.000934 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		95 mg/kg	1.245	108.079 mg/kg	0.0108 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.471	mg/kg	0.000147 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.04	mg/kg		0.0366	mg/kg	0.00000366 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.0274	mg/kg	0.00000274 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.45	pH		8.45	pH	8.45 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.05 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS25-23/09/2020-3.00-3.20m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS25-23/09/2020-3.00-3.20m
Moisture content:
10.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.792 mg/kg	0.000179 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10 mg/kg	1.32	11.83 mg/kg	0.00118 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		66 mg/kg	1.7	100.503 mg/kg	0.0101 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.533 mg/kg	0.000197 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		33 mg/kg	1.252	37.013 mg/kg	0.0037 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		41.1 mg/kg	1.462	53.823 mg/kg	0.00538 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	23.759 mg/kg	0.00152 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6 mg/kg	1.5	8.065 mg/kg	0.000807 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		42.3 mg/kg	1.579	59.864 mg/kg	0.00599 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	2.554	6.864 mg/kg	0.000686 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		85 mg/kg	1.245	94.797 mg/kg	0.00948 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.443	mg/kg	0.000144 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.06	mg/kg		0.0538	mg/kg	0.00000538 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.0269	mg/kg	0.00000269 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.43	pH		8.43	pH	8.43 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0449 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

barium sulfate (EC Number: 231-784-4, CAS Number: 7727-43-7)

Conversion factor: 1.7
Description/Comments: No hazard statements
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/89983 Sigma Aldrich SDS dated 15/4/19
Data source date: 02 Apr 2020
Hazard Statements: None.

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

coronene (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source:
http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2 H371

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

polychlorobiphenyls; PCB (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

arsenic {arsenic trioxide}

Worst case species based on Hazard Statement.

barium {barium sulfate}

conservative

cadmium {cadmium sulfide}

Worst case species based on Hazard Statements.

copper {copper(II) oxide}

Reasonable

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

oxide conversion factor included

chromium in chromium(VI) compounds {chromium(VI) oxide}

most conservative

lead {lead chromate}

Worst case species based on Hazard Statements.

mercury {mercury dichloride}

Worst case species based on Hazard Statements.

molybdenum {molybdenum(VI) oxide}

Worst case species based on Hazard Statements.

nickel {nickel dihydroxide}

Worst case species based on Hazard Statements.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on Hazard Statements.

zinc {zinc oxide}

Concentrations of chromium VI insufficient for zinc chormate to be present.

boron {diboron trioxide; boric oxide}

Reasonable

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.276.4488.8743 (02 Oct 2020)
HazWasteOnline Database: 2020.276.4488.8743 (02 Oct 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

Waste Classification Report

V86ZZ-HX22B-SKSZ9

Job name

EMT-20-13299-Batch-1-File-1

Description/Comments

Soil Samples

Project

B967/1

Site

Emmet Road

Related Documents

#	Name	Description
1	EMT-20-13299-Batch-1-File-1.hwol	.hwol file used to create the Job

Waste Stream Template

EJEL Rilta

Classified by

Name:
Kate Moraes dos Santos
Date:
19 Oct 2020 16:33 GMT
Telephone:

Company:
O'Connor Sutton Cronin & Assoc. Ltd.
OCSC

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	08 Apr 2020
Advanced Hazardous Waste Classification	09 Apr 2020

Report

Created by: Kate Moraes dos Santos
Created date: 19 Oct 2020 16:33 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS24-24/09/2020-0.00-1.00m		Non Hazardous		3
2	WS24-24/09/2020-0.80-1.00m		Non Hazardous		6
3	WS24-24/09/2020-1.00-2.00m		Non Hazardous		9
4	WS24-24/09/2020-2.00-3.00m		Non Hazardous		12
5	WS24-24/09/2020-3.00-3.40m		Non Hazardous		15
6	WS28-24/09/2020-0.00-1.00m		Non Hazardous		18
7	WS28-24/09/2020-0.80-1.00m		Non Hazardous		21
8	WS29-24/09/2020-0.00-1.00m		Non Hazardous		24
9	WS29-24/09/2020-1.00-2.00m		Non Hazardous		27
10	WS29-24/09/2020-3.00-3.40m		Non Hazardous		30
11	WS30-24/09/2020-0.00-1.00m		Non Hazardous		33
12	WS30-24/09/2020-0.80-1.00m		Non Hazardous		36
13	WS30-24/09/2020-1.00-2.00m		Hazardous	HP 7, HP 11	39

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
14	WS30-24/09/2020-3.00-3.40m		Non Hazardous		42
15	WS03-24/09/2020-0.00-1.00m		Non Hazardous		45
16	WS03-24/09/2020-0.80-1.00m		Non Hazardous		48
17	WS03-24/09/2020-1.00-2.00m		Non Hazardous		51
18	WS03-24/09/2020-2.00-3.00m		Non Hazardous		54
19	WS03-24/09/2020-3.00-3.40m		Non Hazardous		57
20	WS31-25/09/2020-0.00-1.00m		Non Hazardous		60
21	WS31-25/09/2020-1.00-1.60m		Hazardous	HP 7, HP 11	63
22	WS34-25/09/2020-0.00-1.00m		Hazardous	HP 7, HP 11	66
23	WS34-25/09/2020-0.80-1.00m		Hazardous	HP 7, HP 11	69
24	WS34-25/09/2020-1.30-1.50m		Hazardous	HP 7, HP 11	72
25	WS34-25/09/2020-1.00-2.00m		Hazardous	HP 7, HP 11	75
26	WS34-25/09/2020-2.00-3.00m		Non Hazardous		78
27	WS34-25/09/2020-3.00-3.40m		Non Hazardous		81
28	WS32-25/09/2020-0.00-1.00m		Non Hazardous		84
29	WS32-25/09/2020-0.80-1.00m		Non Hazardous		87
30	WS32-25/09/2020-1.00-2.00m		Non Hazardous		90
31	WS32-25/09/2020-2.00-3.00m		Non Hazardous		93
32	WS30-25/09/2020-2.00-3.00m		Non Hazardous		96

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	99
Appendix B: Rationale for selection of metal species	100
Appendix C: Version	101

Classification of sample: WS24-24/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS24-24/09/2020-0.00-1.00m
Moisture content:
10.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.896 mg/kg	0.0000896 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.1 mg/kg	1.32	11.948 mg/kg	0.00119 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		68 mg/kg	1.7	103.548 mg/kg	0.0104 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.3 mg/kg	1.285	1.497 mg/kg	0.000116 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		28 mg/kg	1.252	31.405 mg/kg	0.00314 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		55.5 mg/kg	1.462	72.68 mg/kg	0.00727 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	32 mg/kg	1.56	44.723 mg/kg	0.00287 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.7 mg/kg	1.5	4.973 mg/kg	0.000497 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		27.1 mg/kg	1.579	38.353 mg/kg	0.00384 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.259 mg/kg	0.000126 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		78 mg/kg	1.245	86.991 mg/kg	0.0087 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.9	mg/kg	3.22	2.597	mg/kg	0.00026 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.13	mg/kg		0.116	mg/kg	0.0000116 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.2	mg/kg		0.179	mg/kg	0.0000179 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.18	mg/kg		0.161	mg/kg	0.0000161 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.15	mg/kg		0.134	mg/kg	0.0000134 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.12	mg/kg		0.108	mg/kg	0.0000108 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.12	mg/kg		0.108	mg/kg	0.0000108 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.08	mg/kg		0.0717	mg/kg	0.00000717 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.09	mg/kg		0.0806	mg/kg	0.00000806 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.16	mg/kg		0.143	mg/kg	0.0000143 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.06	mg/kg		0.0538	mg/kg	0.00000538 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.44	pH		8.44	pH	8.44 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				116	mg/kg		103.936	mg/kg	0.0104 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0493 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0104%)

Classification of sample: WS24-24/09/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS24-24/09/2020-0.80-1.00m
Moisture content:
8.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.1 mg/kg	1.32	10.97 mg/kg	0.0011 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		102 mg/kg	1.7	158.269 mg/kg	0.0158 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.934 mg/kg	0.000228 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		18 mg/kg	1.252	20.572 mg/kg	0.00206 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		49.3 mg/kg	1.462	65.786 mg/kg	0.00658 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	13 mg/kg	1.56	18.513 mg/kg	0.00119 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.6 mg/kg	1.5	6.3 mg/kg	0.00063 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		35.2 mg/kg	1.579	50.761 mg/kg	0.00508 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		53 mg/kg	1.245	60.23 mg/kg	0.00602 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.9	mg/kg	3.22	2.646	mg/kg	0.000265 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.63	pH		8.63	pH	8.63 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0447 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS24-24/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS24-24/09/2020-1.00-2.00m
Moisture content:
12%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.76 mg/kg	0.000176 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.2 mg/kg	1.32	11.851 mg/kg	0.00119 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		91 mg/kg	1.7	136.097 mg/kg	0.0136 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.4 mg/kg	1.285	2.714 mg/kg	0.000211 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		32 mg/kg	1.252	35.25 mg/kg	0.00353 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		44.4 mg/kg	1.462	57.106 mg/kg	0.00571 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	20.59 mg/kg	0.00132 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.1 mg/kg	1.5	6.733 mg/kg	0.000673 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		38.3 mg/kg	1.579	53.235 mg/kg	0.00532 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.236 mg/kg	0.000124 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		82 mg/kg	1.245	89.819 mg/kg	0.00898 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.7	mg/kg	0.00017 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.49	pH		8.49	pH	8.49 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0465 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS24-24/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS24-24/09/2020-2.00-3.00m
Moisture content:
10.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.898 mg/kg	0.0000898 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7 mg/kg	1.32	8.3 mg/kg	0.00083 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		47 mg/kg	1.7	71.73 mg/kg	0.00717 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.5 mg/kg	1.285	1.731 mg/kg	0.000135 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		23 mg/kg	1.252	25.854 mg/kg	0.00259 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		72.8 mg/kg	1.462	95.548 mg/kg	0.00955 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	10 mg/kg	1.56	14.007 mg/kg	0.000898 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.7 mg/kg	1.5	9.026 mg/kg	0.000903 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		27.2 mg/kg	1.579	38.58 mg/kg	0.00386 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.523 mg/kg	0.000252 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		51 mg/kg	1.245	57.005 mg/kg	0.0057 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.446	mg/kg	0.000145 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.31	pH		8.31	pH	8.31 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0377 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS24-24/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS24-24/09/2020-3.00-3.40m
Moisture content:
7.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.844 mg/kg	0.000184 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.8 mg/kg	1.32	14.365 mg/kg	0.00144 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		63 mg/kg	1.7	98.718 mg/kg	0.00987 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.6 mg/kg	1.285	3.081 mg/kg	0.00024 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		35 mg/kg	1.252	40.395 mg/kg	0.00404 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		41.7 mg/kg	1.462	56.193 mg/kg	0.00562 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	25.887 mg/kg	0.00166 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6 mg/kg	1.5	8.299 mg/kg	0.00083 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		48 mg/kg	1.579	69.902 mg/kg	0.00699 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	5.182 mg/kg	0.000518 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		89 mg/kg	1.245	102.139 mg/kg	0.0102 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.484	mg/kg	0.000148 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.08	mg/kg		0.0738	mg/kg	0.00000738 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.05	mg/kg		0.0461	mg/kg	0.00000461 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.29	pH		8.29	pH	8.29 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0473 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS28-24/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS28-24/09/2020-0.00-1.00m
Moisture content:
12.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.634 mg/kg	0.000263 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14 mg/kg	1.32	16.229 mg/kg	0.00162 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		138 mg/kg	1.7	205.92 mg/kg	0.0206 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.483 mg/kg	0.000193 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		51 mg/kg	1.252	56.052 mg/kg	0.00561 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		56.1 mg/kg	1.462	71.99 mg/kg	0.0072 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	82 mg/kg	1.56	112.3 mg/kg	0.0072 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.2 mg/kg	1.353	0.238 mg/kg	0.0000238 %	✓	
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.4 mg/kg	1.5	7.113 mg/kg	0.000711 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		41.4 mg/kg	1.579	57.414 mg/kg	0.00574 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.467 mg/kg	0.000247 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		118 mg/kg	1.245	128.957 mg/kg	0.0129 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.5	mg/kg	3.22	4.241	mg/kg	0.000424 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.06	mg/kg		0.0527	mg/kg	0.00000527 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.05	mg/kg		0.0439	mg/kg	0.00000439 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				0.23	mg/kg		0.202	mg/kg	0.0000202 %	✓	
			201-469-6	83-32-9									
18		fluorene				0.18	mg/kg		0.158	mg/kg	0.0000158 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				1.81	mg/kg		1.589	mg/kg	0.000159 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.34	mg/kg		0.299	mg/kg	0.0000299 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				2.14	mg/kg		1.879	mg/kg	0.000188 %	✓	
			205-912-4	206-44-0									
22		pyrene				1.86	mg/kg		1.633	mg/kg	0.000163 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				1.06	mg/kg		0.931	mg/kg	0.0000931 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.93	mg/kg		0.817	mg/kg	0.0000817 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.88	mg/kg		0.773	mg/kg	0.0000773 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.51	mg/kg		0.448	mg/kg	0.0000448 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.13	mg/kg		0.114	mg/kg	0.0000114 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.51	mg/kg		0.448	mg/kg	0.0000448 %	✓	
			205-883-8	191-24-2									
29		coronene				0.08	mg/kg		0.0702	mg/kg	0.00000702 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				1.2	mg/kg		1.054	mg/kg	0.000105 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.47	mg/kg		0.413	mg/kg	0.0000413 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.09	pH		8.09	pH	8.09 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				161	mg/kg		141.358	mg/kg	0.0141 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0782 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0141%)

Classification of sample: WS28-24/09/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS28-24/09/2020-0.80-1.00m
Moisture content:
12.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	1	2 mg/kg		1.742 mg/kg	0.000174 %	✓	
	051-003-00-9							
2	arsenic { arsenic trioxide }		11.6 mg/kg	1.32	13.34 mg/kg	0.00133 %	✓	
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	barium { barium sulfate }		114 mg/kg	1.7	168.752 mg/kg	0.0169 %	✓	
	231-784-4 / 7727-43-7							
4	cadmium { cadmium sulfide }	1	1.5 mg/kg	1.285	1.679 mg/kg	0.000131 %	✓	
	048-010-00-4 / 215-147-8 / 1306-23-6							
5	copper { copper(II) oxide }		33 mg/kg	1.252	35.98 mg/kg	0.0036 %	✓	
	029-016-00-6 / 215-269-1 / 1317-38-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		51.3 mg/kg	1.462	65.306 mg/kg	0.00653 %	✓	
	215-160-9 / 1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
	024-001-00-0 / 215-607-8 / 1333-82-0							
8	lead { lead chromate }	1	110 mg/kg	1.56	149.446 mg/kg	0.00958 %	✓	
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		0.9 mg/kg	1.353	1.061 mg/kg	0.000106 %	✓	
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		5 mg/kg	1.5	6.533 mg/kg	0.000653 %	✓	
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel dihydroxide }		30.1 mg/kg	1.579	41.41 mg/kg	0.00414 %	✓	
	028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		1 mg/kg	1.405	1.224 mg/kg	0.000122 %	✓	
	034-002-00-8							
13	zinc { zinc oxide }		110 mg/kg	1.245	119.256 mg/kg	0.0119 %	✓	
	030-013-00-7 / 215-222-5 / 1314-13-2							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				2.1	mg/kg	3.22	5.889	mg/kg	0.000589 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.08	mg/kg		0.0697	mg/kg	0.00000697 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.06	mg/kg		0.0523	mg/kg	0.00000523 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				0.05	mg/kg		0.0435	mg/kg	0.00000435 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.6	mg/kg		0.523	mg/kg	0.0000523 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.16	mg/kg		0.139	mg/kg	0.0000139 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				1.1	mg/kg		0.958	mg/kg	0.0000958 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.98	mg/kg		0.854	mg/kg	0.0000854 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.64	mg/kg		0.557	mg/kg	0.0000557 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.57	mg/kg		0.496	mg/kg	0.0000496 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.55	mg/kg		0.479	mg/kg	0.0000479 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.31	mg/kg		0.27	mg/kg	0.000027 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.07	mg/kg		0.061	mg/kg	0.0000061 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.3	mg/kg		0.261	mg/kg	0.0000261 %	✓	
			205-883-8	191-24-2									
29		coronene				0.05	mg/kg		0.0435	mg/kg	0.00000435 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.76	mg/kg		0.662	mg/kg	0.0000662 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.3	mg/kg		0.261	mg/kg	0.0000261 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				0.048	mg/kg		0.0418	mg/kg	0.00000418 %	✓	
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.27	pH		8.27	pH	8.27 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				54	mg/kg		47.034	mg/kg	0.0047 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0613 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0047%)

Classification of sample: WS29-24/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS29-24/09/2020-0.00-1.00m
Moisture content:
12.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.742 mg/kg	0.000174 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.2 mg/kg	1.32	17.48 mg/kg	0.00175 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		116 mg/kg	1.7	171.712 mg/kg	0.0172 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.7 mg/kg	1.285	1.903 mg/kg	0.000148 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		34 mg/kg	1.252	37.07 mg/kg	0.00371 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		66.7 mg/kg	1.462	84.91 mg/kg	0.00849 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	54 mg/kg	1.56	73.364 mg/kg	0.0047 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.1 mg/kg	1.5	6.664 mg/kg	0.000666 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		36.1 mg/kg	1.579	49.664 mg/kg	0.00497 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.448 mg/kg	0.000245 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		108 mg/kg	1.245	117.088 mg/kg	0.0117 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.8	mg/kg	3.22	5.048	mg/kg	0.000505 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.08	mg/kg		0.0697	mg/kg	0.00000697 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.14	mg/kg		0.122	mg/kg	0.0000122 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.11	mg/kg		0.0958	mg/kg	0.00000958 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.11	mg/kg		0.0958	mg/kg	0.00000958 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.09	mg/kg		0.0784	mg/kg	0.00000784 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.07	mg/kg		0.061	mg/kg	0.0000061 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.1	mg/kg		0.0871	mg/kg	0.00000871 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.04	mg/kg		0.0348	mg/kg	0.00000348 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				9.2	pH		9.2	pH	9.2 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				273	mg/kg		237.783	mg/kg	0.0238 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0784 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0238%)

Classification of sample: WS29-24/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS29-24/09/2020-1.00-2.00m
Moisture content:
10.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.896 mg/kg	0.0000896 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6 mg/kg	1.32	7.098 mg/kg	0.00071 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		93 mg/kg	1.7	141.617 mg/kg	0.0142 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.8 mg/kg	1.285	2.073 mg/kg	0.000161 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		21 mg/kg	1.252	23.553 mg/kg	0.00236 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		42.1 mg/kg	1.462	55.132 mg/kg	0.00551 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11 mg/kg	1.56	15.374 mg/kg	0.000986 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.1 mg/kg	1.5	5.511 mg/kg	0.000551 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		29 mg/kg	1.579	41.042 mg/kg	0.0041 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		58 mg/kg	1.245	64.685 mg/kg	0.00647 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.443	mg/kg	0.000144 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				9.45	pH		9.45	pH	9.45 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0409 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS29-24/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS29-24/09/2020-3.00-3.40m
Moisture content:
9.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.808 mg/kg	0.000181 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.9 mg/kg	1.32	10.623 mg/kg	0.00106 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		259 mg/kg	1.7	397.918 mg/kg	0.0398 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.8 mg/kg	1.285	2.091 mg/kg	0.000163 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		27 mg/kg	1.252	30.553 mg/kg	0.00306 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		49.9 mg/kg	1.462	65.93 mg/kg	0.00659 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14 mg/kg	1.56	19.741 mg/kg	0.00127 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.5 mg/kg	1.5	7.459 mg/kg	0.000746 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		31.7 mg/kg	1.579	45.263 mg/kg	0.00453 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.54 mg/kg	0.000254 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		68 mg/kg	1.245	76.515 mg/kg	0.00765 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.038	mg/kg	0.000204 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				9.5	pH		9.5	pH	9.5 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.071 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS30-24/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS30-24/09/2020-0.00-1.00m
Moisture content:
14.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	1	2 mg/kg		1.716 mg/kg	0.000172 %	✓	
	051-003-00-9							
2	arsenic { arsenic trioxide }		12.1 mg/kg	1.32	13.707 mg/kg	0.00137 %	✓	
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	barium { barium sulfate }		122 mg/kg	1.7	177.899 mg/kg	0.0178 %	✓	
	231-784-4 / 7727-43-7							
4	cadmium { cadmium sulfide }	1	1.7 mg/kg	1.285	1.875 mg/kg	0.000146 %	✓	
	048-010-00-4 / 215-147-8 / 1306-23-6							
5	copper { copper(II) oxide }		31 mg/kg	1.252	33.295 mg/kg	0.00333 %	✓	
	029-016-00-6 / 215-269-1 / 1317-38-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		56.6 mg/kg	1.462	70.977 mg/kg	0.0071 %	✓	
	215-160-9 / 1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
	024-001-00-0 / 215-607-8 / 1333-82-0							
8	lead { lead chromate }	1	51 mg/kg	1.56	68.254 mg/kg	0.00438 %	✓	
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		4.4 mg/kg	1.5	5.664 mg/kg	0.000566 %	✓	
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel dihydroxide }		32.5 mg/kg	1.579	44.044 mg/kg	0.0044 %	✓	
	028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		1 mg/kg	1.405	1.205 mg/kg	0.000121 %	✓	
	034-002-00-8							
13	zinc { zinc oxide }		94 mg/kg	1.245	100.389 mg/kg	0.01 %	✓	
	030-013-00-7 / 215-222-5 / 1314-13-2							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.5	mg/kg	3.22	4.144	mg/kg	0.000414 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.14	mg/kg		0.12	mg/kg	0.000012 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.21	mg/kg		0.18	mg/kg	0.000018 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.19	mg/kg		0.163	mg/kg	0.0000163 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.16	mg/kg		0.137	mg/kg	0.0000137 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.13	mg/kg		0.112	mg/kg	0.0000112 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.1	mg/kg		0.0858	mg/kg	0.00000858 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.06	mg/kg		0.0515	mg/kg	0.00000515 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.07	mg/kg		0.0601	mg/kg	0.00000601 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.15	mg/kg		0.129	mg/kg	0.0000129 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.06	mg/kg		0.0515	mg/kg	0.00000515 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0554 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS30-24/09/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS30-24/09/2020-0.80-1.00m
Moisture content:
10.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.891 mg/kg	0.0000891 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.7 mg/kg	1.32	9.058 mg/kg	0.000906 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		102 mg/kg	1.7	154.456 mg/kg	0.0154 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.5 mg/kg	1.285	1.718 mg/kg	0.000134 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		16 mg/kg	1.252	17.845 mg/kg	0.00178 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		44.6 mg/kg	1.462	58.08 mg/kg	0.00581 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11 mg/kg	1.56	15.288 mg/kg	0.00098 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.5 mg/kg	1.5	6.015 mg/kg	0.000602 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		23.4 mg/kg	1.579	32.932 mg/kg	0.00329 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.252 mg/kg	0.000125 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		53 mg/kg	1.245	58.779 mg/kg	0.00588 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.721	mg/kg	0.000172 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.39	pH		8.39	pH	8.39 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0408 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS30-24/09/2020-1.00-2.00m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS30-24/09/2020-1.00-2.00m
Moisture content:
9.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.203%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.203%)

Determinands

Moisture content: 9.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.905 mg/kg	0.0000905 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5.5 mg/kg	1.32	6.572 mg/kg	0.000657 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		69 mg/kg	1.7	106.126 mg/kg	0.0106 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.6 mg/kg	1.285	1.861 mg/kg	0.000145 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		17 mg/kg	1.252	19.259 mg/kg	0.00193 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		45.9 mg/kg	1.462	60.712 mg/kg	0.00607 %	✓	

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
7		chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
		024-001-00-0 / 215-607-8 / 1333-82-0							
8		lead { lead chromate }	1	7 mg/kg	1.56	9.881 mg/kg	0.000634 %	✓	
		082-004-00-2 / 231-846-0 / 7758-97-6							
9		mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
		080-010-00-X / 231-299-8 / 7487-94-7							
10		molybdenum { molybdenum(VI) oxide }		4.2 mg/kg	1.5	5.702 mg/kg	0.00057 %	✓	
		042-001-00-9 / 215-204-7 / 1313-27-5							
11		nickel { nickel dihydroxide }		21.5 mg/kg	1.579	30.733 mg/kg	0.00307 %	✓	
		028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
		034-002-00-8							
13		zinc { zinc oxide }		50 mg/kg	1.245	56.323 mg/kg	0.00563 %	✓	
		030-013-00-7 / 215-222-5 / 1314-13-2							
14		boron { diboron trioxide; boric oxide }		0.4 mg/kg	3.22	1.166 mg/kg	0.000117 %	✓	
		005-008-00-8 / 215-125-8 / 1303-86-2							
15		naphthalene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		601-052-00-2 / 202-049-5 / 91-20-3							
16		acenaphthylene		0.2 mg/kg		0.181 mg/kg	0.0000181 %	✓	
		205-917-1 / 208-96-8							
17		acenaphthene		0.06 mg/kg		0.0543 mg/kg	0.00000543 %	✓	
		201-469-6 / 83-32-9							
18		fluorene		0.31 mg/kg		0.281 mg/kg	0.0000281 %	✓	
		201-695-5 / 86-73-7							
19		phenanthrene		0.45 mg/kg		0.407 mg/kg	0.0000407 %	✓	
		201-581-5 / 85-01-8							
20		anthracene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1 / 120-12-7							
21		fluoranthene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-912-4 / 206-44-0							
22		pyrene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		204-927-3 / 129-00-0							
23		benzo[a]anthracene		<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
		601-033-00-9 / 200-280-6 / 56-55-3							
24		chrysene		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
		601-048-00-0 / 205-923-4 / 218-01-9							
25		benzo[a]pyrene; benzo[def]chrysene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		601-032-00-3 / 200-028-5 / 50-32-8							
26		indeno[123-cd]pyrene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-893-2 / 193-39-5							
27		dibenz[a,h]anthracene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		601-041-00-2 / 200-181-8 / 53-70-3							
28		benzo[ghi]perylene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-883-8 / 191-24-2							
29		coronene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-881-7 / 191-07-1							
30		benzo[b]fluoranthene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		601-034-00-4 / 205-911-9 / 205-99-2							
31		benzo[k]fluoranthene		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
		601-036-00-5 / 205-916-6 / 207-08-9							
32		benzo[j]fluoranthene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
		601-035-00-X / 205-910-3 / 205-82-3							
33		benzene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-020-00-8 / 200-753-7 / 71-43-2							
34		toluene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-021-00-3 / 203-625-9 / 108-88-3							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.21	mg/kg		0.19	mg/kg	0.000019 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.025	mg/kg		0.0226	mg/kg	0.00000226 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38		pH				7.94	pH		7.94	pH	7.94 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				2245	mg/kg		2031.725	mg/kg	0.203 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.233 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 2.26e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 0.00001%)
TPH (C6 to C40) petroleum group: (conc.: 0.203%)

Classification of sample: WS30-24/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS30-24/09/2020-3.00-3.40m
Moisture content:
8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.92 mg/kg	0.000092 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.5 mg/kg	1.32	7.896 mg/kg	0.00079 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		29 mg/kg	1.7	45.343 mg/kg	0.00453 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.9 mg/kg	1.285	2.247 mg/kg	0.000175 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		25 mg/kg	1.252	28.791 mg/kg	0.00288 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		46.9 mg/kg	1.462	63.063 mg/kg	0.00631 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	12 mg/kg	1.56	17.22 mg/kg	0.0011 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.4 mg/kg	1.5	7.453 mg/kg	0.000745 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		29.7 mg/kg	1.579	43.158 mg/kg	0.00432 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.878 mg/kg	0.000388 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		59 mg/kg	1.245	67.563 mg/kg	0.00676 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.481	mg/kg	0.000148 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.42	pH		8.42	pH	8.42 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0338 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS03-24/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS03-24/09/2020-0.00-1.00m
Moisture content:
17.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.646 mg/kg	0.000165 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.9 mg/kg	1.32	11.844 mg/kg	0.00118 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		166 mg/kg	1.7	232.185 mg/kg	0.0232 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.644 mg/kg	0.000206 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		31 mg/kg	1.252	31.937 mg/kg	0.00319 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		65.8 mg/kg	1.462	79.148 mg/kg	0.00791 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	193 mg/kg	1.56	247.759 mg/kg	0.0159 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.5 mg/kg	1.5	6.791 mg/kg	0.000679 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		37.5 mg/kg	1.579	48.747 mg/kg	0.00487 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.313 mg/kg	0.000231 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		118 mg/kg	1.245	120.879 mg/kg	0.0121 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.5	mg/kg	3.22	3.975	mg/kg	0.000397 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.07	mg/kg		0.0576	mg/kg	0.00000576 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.1	mg/kg		0.0823	mg/kg	0.00000823 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				0.13	mg/kg		0.107	mg/kg	0.0000107 %	✓	
			201-469-6	83-32-9									
18		fluorene				0.13	mg/kg		0.107	mg/kg	0.0000107 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				1.9	mg/kg		1.564	mg/kg	0.000156 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.49	mg/kg		0.403	mg/kg	0.0000403 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				3.22	mg/kg		2.65	mg/kg	0.000265 %	✓	
			205-912-4	206-44-0									
22		pyrene				2.63	mg/kg		2.164	mg/kg	0.000216 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				1.65	mg/kg		1.358	mg/kg	0.000136 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				1.54	mg/kg		1.267	mg/kg	0.000127 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				1.48	mg/kg		1.218	mg/kg	0.000122 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.91	mg/kg		0.749	mg/kg	0.0000749 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.17	mg/kg		0.14	mg/kg	0.000014 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.83	mg/kg		0.683	mg/kg	0.0000683 %	✓	
			205-883-8	191-24-2									
29		coronene				0.1	mg/kg		0.0823	mg/kg	0.00000823 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				2.07	mg/kg		1.704	mg/kg	0.00017 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.8	mg/kg		0.658	mg/kg	0.0000658 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				9	pH		9	pH	9pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				128	mg/kg		105.344	mg/kg	0.0105 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0823 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0105%)

Classification of sample: WS03-24/09/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS03-24/09/2020-0.80-1.00m
Moisture content:
15.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		3.4 mg/kg	1.32	3.789 mg/kg	0.000379 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		23 mg/kg	1.7	32.991 mg/kg	0.0033 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.9 mg/kg	1.285	0.976 mg/kg	0.000076 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		11 mg/kg	1.252	11.621 mg/kg	0.00116 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		21.1 mg/kg	1.462	26.028 mg/kg	0.0026 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	6 mg/kg	1.56	7.899 mg/kg	0.000506 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		1.9 mg/kg	1.5	2.406 mg/kg	0.000241 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		17.6 mg/kg	1.579	23.463 mg/kg	0.00235 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		29 mg/kg	1.245	30.466 mg/kg	0.00305 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.631	mg/kg	0.000163 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.59	pH		8.59	pH	8.59 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0196 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS03-24/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS03-24/09/2020-1.00-2.00m
Moisture content:
12.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.742 mg/kg	0.000174 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13.1 mg/kg	1.32	15.065 mg/kg	0.00151 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		68 mg/kg	1.7	100.659 mg/kg	0.0101 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.799 mg/kg	0.000218 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		45 mg/kg	1.252	49.063 mg/kg	0.00491 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		45.8 mg/kg	1.462	58.304 mg/kg	0.00583 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	24.455 mg/kg	0.00157 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.6 mg/kg	1.5	7.317 mg/kg	0.000732 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		52.3 mg/kg	1.579	71.951 mg/kg	0.0072 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.224 mg/kg	0.000122 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		95 mg/kg	1.245	102.994 mg/kg	0.0103 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.122	mg/kg	0.000112 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0483 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS03-24/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS03-24/09/2020-2.00-3.00m
Moisture content:
11.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.762 mg/kg	0.000176 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.5 mg/kg	1.32	12.214 mg/kg	0.00122 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		68 mg/kg	1.7	101.815 mg/kg	0.0102 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.491 mg/kg	0.000194 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		34 mg/kg	1.252	37.496 mg/kg	0.00375 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		35 mg/kg	1.462	45.067 mg/kg	0.00451 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	21.987 mg/kg	0.00141 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.1 mg/kg	1.5	6.741 mg/kg	0.000674 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		39.7 mg/kg	1.579	55.244 mg/kg	0.00552 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.713 mg/kg	0.000371 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		75 mg/kg	1.245	82.244 mg/kg	0.00822 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.418	mg/kg	0.000142 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.54	pH		8.54	pH	8.54 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0419 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS03-24/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS03-24/09/2020-3.00-3.40m
Moisture content:
8.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.822 mg/kg	0.000182 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.6 mg/kg	1.32	12.75 mg/kg	0.00127 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		52 mg/kg	1.7	80.51 mg/kg	0.00805 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.4 mg/kg	1.285	2.81 mg/kg	0.000219 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		41 mg/kg	1.252	46.755 mg/kg	0.00468 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		35.2 mg/kg	1.462	46.868 mg/kg	0.00469 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	25.578 mg/kg	0.00164 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.2 mg/kg	1.5	7.107 mg/kg	0.000711 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		44 mg/kg	1.579	63.313 mg/kg	0.00633 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	5.12 mg/kg	0.000512 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		80 mg/kg	1.245	90.715 mg/kg	0.00907 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.3	mg/kg	3.22	0.88	mg/kg	0.000088 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.09	mg/kg		0.082	mg/kg	0.0000082 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.07	mg/kg		0.0638	mg/kg	0.00000638 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.043 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS31-25/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS31-25/09/2020-0.00-1.00m
Moisture content:
10.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	7 mg/kg		6.237 mg/kg	0.000624 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.5 mg/kg	1.32	8.823 mg/kg	0.000882 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		62 mg/kg	1.7	93.885 mg/kg	0.00939 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.1 mg/kg	1.285	1.26 mg/kg	0.000098 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		35 mg/kg	1.252	39.037 mg/kg	0.0039 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		65.2 mg/kg	1.462	84.906 mg/kg	0.00849 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	39 mg/kg	1.56	54.202 mg/kg	0.00347 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.3 mg/kg	1.5	7.084 mg/kg	0.000708 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		27.9 mg/kg	1.579	39.265 mg/kg	0.00393 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		74 mg/kg	1.245	82.069 mg/kg	0.00821 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.721	mg/kg	0.000172 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.15	mg/kg		0.134	mg/kg	0.0000134 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.19	mg/kg		0.169	mg/kg	0.0000169 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.21	mg/kg		0.187	mg/kg	0.0000187 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.13	mg/kg		0.116	mg/kg	0.0000116 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.11	mg/kg		0.098	mg/kg	0.0000098 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.08	mg/kg		0.0713	mg/kg	0.00000713 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.06	mg/kg		0.0535	mg/kg	0.00000535 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.11	mg/kg		0.098	mg/kg	0.0000098 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.04	mg/kg		0.0356	mg/kg	0.00000356 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.33	pH		8.33	pH	8.33 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0456 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS31-25/09/2020-1.00-1.60m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS31-25/09/2020-1.00-1.60m
Moisture content:
13.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.118%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.118%)

Determinands

Moisture content: 13.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.867 mg/kg	0.0000867 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		4.5 mg/kg	1.32	5.151 mg/kg	0.000515 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		31 mg/kg	1.7	45.678 mg/kg	0.00457 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.5 mg/kg	1.285	1.671 mg/kg	0.00013 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		20 mg/kg	1.252	21.706 mg/kg	0.00217 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		56 mg/kg	1.462	70.961 mg/kg	0.0071 %	✓	

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
7		chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
		024-001-00-0 / 215-607-8 / 1333-82-0							
8		lead { lead chromate }	1	13 mg/kg	1.56	17.581 mg/kg	0.00113 %	✓	
		082-004-00-2 / 231-846-0 / 7758-97-6							
9		mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
		080-010-00-X / 231-299-8 / 7487-94-7							
10		molybdenum { molybdenum(VI) oxide }		3.8 mg/kg	1.5	4.943 mg/kg	0.000494 %	✓	
		042-001-00-9 / 215-204-7 / 1313-27-5							
11		nickel { nickel dihydroxide }		20.7 mg/kg	1.579	28.347 mg/kg	0.00283 %	✓	
		028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		1 mg/kg	1.405	1.218 mg/kg	0.000122 %	✓	
		034-002-00-8							
13		zinc { zinc oxide }		57 mg/kg	1.245	61.513 mg/kg	0.00615 %	✓	
		030-013-00-7 / 215-222-5 / 1314-13-2							
14		boron { diboron trioxide; boric oxide }		0.6 mg/kg	3.22	1.675 mg/kg	0.000167 %	✓	
		005-008-00-8 / 215-125-8 / 1303-86-2							
15		naphthalene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		601-052-00-2 / 202-049-5 / 91-20-3							
16		acenaphthylene		0.13 mg/kg		0.113 mg/kg	0.0000113 %	✓	
		205-917-1 / 208-96-8							
17		acenaphthene		0.1 mg/kg		0.0867 mg/kg	0.00000867 %	✓	
		201-469-6 / 83-32-9							
18		fluorene		0.45 mg/kg		0.39 mg/kg	0.000039 %	✓	
		201-695-5 / 86-73-7							
19		phenanthrene		0.84 mg/kg		0.728 mg/kg	0.0000728 %	✓	
		201-581-5 / 85-01-8							
20		anthracene		0.07 mg/kg		0.0607 mg/kg	0.00000607 %	✓	
		204-371-1 / 120-12-7							
21		fluoranthene		0.06 mg/kg		0.052 mg/kg	0.0000052 %	✓	
		205-912-4 / 206-44-0							
22		pyrene		0.08 mg/kg		0.0694 mg/kg	0.00000694 %	✓	
		204-927-3 / 129-00-0							
23		benzo[a]anthracene		<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
		601-033-00-9 / 200-280-6 / 56-55-3							
24		chrysene		0.03 mg/kg		0.026 mg/kg	0.0000026 %	✓	
		601-048-00-0 / 205-923-4 / 218-01-9							
25		benzo[a]pyrene; benzo[def]chrysene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		601-032-00-3 / 200-028-5 / 50-32-8							
26		indeno[123-cd]pyrene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-893-2 / 193-39-5							
27		dibenz[a,h]anthracene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		601-041-00-2 / 200-181-8 / 53-70-3							
28		benzo[ghi]perylene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-883-8 / 191-24-2							
29		coronene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-881-7 / 191-07-1							
30		benzo[b]fluoranthene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		601-034-00-4 / 205-911-9 / 205-99-2							
31		benzo[k]fluoranthene		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
		601-036-00-5 / 205-916-6 / 207-08-9							
32		benzo[j]fluoranthene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
		601-035-00-X / 205-910-3 / 205-82-3							
33		benzene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-020-00-8 / 200-753-7 / 71-43-2							
34		toluene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-021-00-3 / 203-625-9 / 108-88-3							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.045	mg/kg		0.039	mg/kg	0.0000039 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.009	mg/kg		0.0078	mg/kg	0.00000078 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38		pH				7.98	pH		7.98	pH	7.98 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				1364	mg/kg		1182.588	mg/kg	0.118 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.144 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 7.8e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 3.9e-06%)
TPH (C6 to C40) petroleum group: (conc.: 0.118%)

Classification of sample: WS34-25/09/2020-0.00-1.00m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS34-25/09/2020-0.00-1.00m
Moisture content:
13.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.264%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.264%)

Determinands

Moisture content: 13.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.722 mg/kg	0.000172 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13 mg/kg	1.32	14.778 mg/kg	0.00148 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		86 mg/kg	1.7	125.842 mg/kg	0.0126 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.6 mg/kg	1.285	1.771 mg/kg	0.000138 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		43 mg/kg	1.252	46.345 mg/kg	0.00463 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		59.9 mg/kg	1.462	75.378 mg/kg	0.00754 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
7		chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
8		lead { lead chromate }			1	73	mg/kg	1.56	98.039	mg/kg	0.00629 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
9		mercury { mercury dichloride }				0.2	mg/kg	1.353	0.233	mg/kg	0.0000233 %	✓	
		080-010-00-X	231-299-8	7487-94-7									
10		molybdenum { molybdenum(VI) oxide }				4.6	mg/kg	1.5	5.942	mg/kg	0.000594 %	✓	
		042-001-00-9	215-204-7	1313-27-5									
11		nickel { nickel dihydroxide }				30.1	mg/kg	1.579	40.934	mg/kg	0.00409 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1	mg/kg	1.405	1.21	mg/kg	0.000121 %	✓	
		034-002-00-8											
13		zinc { zinc oxide }				99	mg/kg	1.245	106.098	mg/kg	0.0106 %	✓	
		030-013-00-7	215-222-5	1314-13-2									
14		boron { diboron trioxide; boric oxide }				1.5	mg/kg	3.22	4.158	mg/kg	0.000416 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.49	mg/kg		0.422	mg/kg	0.0000422 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.5	mg/kg		0.431	mg/kg	0.000043 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				1.57	mg/kg		1.352	mg/kg	0.000135 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				3.09	mg/kg		2.66	mg/kg	0.000266 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				0.36	mg/kg		0.31	mg/kg	0.000031 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.6	mg/kg		<0.6	mg/kg	<0.00006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.158	mg/kg		0.136	mg/kg	0.0000136 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.026	mg/kg		0.0224	mg/kg	0.00000224 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.05	pH		8.05	pH	8.05 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				3066	mg/kg		2639.826	mg/kg	0.264 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.315 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 2.24e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 0.00001%)
TPH (C6 to C40) petroleum group: (conc.: 0.264%)

Classification of sample: WS34-25/09/2020-0.80-1.00m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS34-25/09/2020-0.80-1.00m
Moisture content:
22.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.62%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.62%)

Determinands

Moisture content: 22.6% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
1		antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }			1	2	mg/kg		1.548	mg/kg	0.000155 %	✓	
		051-003-00-9											
2		arsenic { arsenic trioxide }				10.5	mg/kg	1.32	10.73	mg/kg	0.00107 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
3		barium { barium sulfate }				103	mg/kg	1.7	135.489	mg/kg	0.0135 %	✓	
			231-784-4	7727-43-7									
4		cadmium { cadmium sulfide }			1	1.9	mg/kg	1.285	1.89	mg/kg	0.000147 %	✓	
		048-010-00-4	215-147-8	1306-23-6									
5		copper { copper(II) oxide }				33	mg/kg	1.252	31.973	mg/kg	0.0032 %	✓	
		029-016-00-6	215-269-1	1317-38-0									
6		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				57.6	mg/kg	1.462	65.16	mg/kg	0.00652 %	✓	
			215-160-9	1308-38-9									

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	35 mg/kg	1.56	42.255 mg/kg	0.00271 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5 mg/kg	1.5	5.806 mg/kg	0.000581 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		35.5 mg/kg	1.579	43.4 mg/kg	0.00434 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.175 mg/kg	0.000217 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		99 mg/kg	1.245	95.377 mg/kg	0.00954 %	✓	
14	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.3 mg/kg	3.22	5.732 mg/kg	0.000573 %	✓	
15	naphthalene	601-052-00-2	202-049-5	91-20-3		1.67 mg/kg		1.293 mg/kg	0.000129 %	✓	
16	acenaphthylene		205-917-1	208-96-8		1.45 mg/kg		1.122 mg/kg	0.000112 %	✓	
17	acenaphthene		201-469-6	83-32-9		0.94 mg/kg		0.728 mg/kg	0.0000728 %	✓	
18	fluorene		201-695-5	86-73-7		3.73 mg/kg		2.887 mg/kg	0.000289 %	✓	
19	phenanthrene		201-581-5	85-01-8		7.62 mg/kg		5.898 mg/kg	0.00059 %	✓	
20	anthracene		204-371-1	120-12-7		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
21	fluoranthene		205-912-4	206-44-0		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
22	pyrene		204-927-3	129-00-0		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.6 mg/kg		<0.6 mg/kg	<0.00006 %		<LOD
24	chrysene	601-048-00-0	205-923-4	218-01-9		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
25	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
26	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
27	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
28	benzo[ghi]perylene		205-883-8	191-24-2		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
29	coronene		205-881-7	191-07-1		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
30	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
31	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
32	benzo[j]fluoranthene	601-035-00-X	205-910-3	205-82-3		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
33	benzene	601-020-00-8	200-753-7	71-43-2		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
34	toluene	601-021-00-3	203-625-9	108-88-3		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.895	mg/kg		0.693	mg/kg	0.0000693 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.161	mg/kg		0.125	mg/kg	0.0000125 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38		pH				7.65	pH		7.65	pH	7.65 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				8012	mg/kg		6201.288	mg/kg	0.62 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.025	mg/kg		0.0194	mg/kg	0.00000194 %	✓	
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.666 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

ethylbenzene: (conc.: 0.00001%)
tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.94e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 0.00006%)
TPH (C6 to C40) petroleum group: (conc.: 0.62%)

Classification of sample: WS34-25/09/2020-1.30-1.50m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS34-25/09/2020-1.30-1.50m
Moisture content:
18.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.456%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.456%)

Determinands

Moisture content: 18.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.622 mg/kg	0.000162 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.6 mg/kg	1.32	9.209 mg/kg	0.000921 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		121 mg/kg	1.7	166.775 mg/kg	0.0167 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.5 mg/kg	1.285	0.521 mg/kg	0.0000405 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		24 mg/kg	1.252	24.365 mg/kg	0.00244 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		74.3 mg/kg	1.462	88.069 mg/kg	0.00881 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
7		chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
8		lead { lead chromate }			1	16	mg/kg	1.56	20.24	mg/kg	0.0013 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
9		mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
10		molybdenum { molybdenum(VI) oxide }				6.4	mg/kg	1.5	7.787	mg/kg	0.000779 %	✓	
		042-001-00-9	215-204-7	1313-27-5									
11		nickel { nickel dihydroxide }				39.2	mg/kg	1.579	50.214	mg/kg	0.00502 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1	mg/kg	1.405	1.139	mg/kg	0.000114 %	✓	
		034-002-00-8											
13		zinc { zinc oxide }				49	mg/kg	1.245	49.464	mg/kg	0.00495 %	✓	
		030-013-00-7	215-222-5	1314-13-2									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.089	mg/kg	0.000209 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.51	mg/kg		0.414	mg/kg	0.0000414 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				1.66	mg/kg		1.346	mg/kg	0.000135 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				3.28	mg/kg		2.66	mg/kg	0.000266 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.6	mg/kg		<0.6	mg/kg	<0.00006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				1.017	mg/kg		0.825	mg/kg	0.0000825 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36	●	ethylbenzene				0.149	mg/kg		0.121	mg/kg	0.0000121 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37	●	polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38	●	pH				7.72	pH		7.72	pH	7.72 pH		
				PH									
39		cyanides { ● salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40	●	TPH (C6 to C40) petroleum group				5617	mg/kg		4555.387	mg/kg	0.456 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.101	mg/kg		0.0819	mg/kg	0.00000819 %	✓	
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.499 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

ethylbenzene: (conc.: 0.00001%)
tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 8.19e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 0.00008%)
TPH (C6 to C40) petroleum group: (conc.: 0.456%)

Classification of sample: WS34-25/09/2020-1.00-2.00m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS34-25/09/2020-1.00-2.00m
Moisture content:
17%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.455%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.455%)

Determinands

Moisture content: 17% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.83 mg/kg	0.000083 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.9 mg/kg	1.32	9.753 mg/kg	0.000975 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		121 mg/kg	1.7	170.683 mg/kg	0.0171 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.3 mg/kg	1.285	1.387 mg/kg	0.000108 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		19 mg/kg	1.252	19.741 mg/kg	0.00197 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		46.9 mg/kg	1.462	56.894 mg/kg	0.00569 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
7		chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
8		lead { lead chromate }			1	17	mg/kg	1.56	22.009	mg/kg	0.00141 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
9		mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
10		molybdenum { molybdenum(VI) oxide }				3.7	mg/kg	1.5	4.607	mg/kg	0.000461 %	✓	
		042-001-00-9	215-204-7	1313-27-5									
11		nickel { nickel dihydroxide }				29.9	mg/kg	1.579	39.198	mg/kg	0.00392 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1	mg/kg	1.405	1.166	mg/kg	0.000117 %	✓	
		034-002-00-8											
13		zinc { zinc oxide }				65	mg/kg	1.245	67.152	mg/kg	0.00672 %	✓	
		030-013-00-7	215-222-5	1314-13-2									
14		boron { diboron trioxide; boric oxide }				0.9	mg/kg	3.22	2.405	mg/kg	0.000241 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.52	mg/kg		0.432	mg/kg	0.0000432 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				1.24	mg/kg		1.029	mg/kg	0.000103 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				2.46	mg/kg		2.042	mg/kg	0.000204 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.6	mg/kg		<0.6	mg/kg	<0.00006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.278	mg/kg		0.231	mg/kg	0.0000231 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.041	mg/kg		0.034	mg/kg	0.0000034 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38		pH				7.86	pH		7.86	pH	7.86 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				5482	mg/kg		4550.06	mg/kg	0.455 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.018	mg/kg		0.0149	mg/kg	0.00000149 %	✓	
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.496 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

ethylbenzene: (conc.: 3.4e-06%)
tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.49e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 0.00002%)
TPH (C6 to C40) petroleum group: (conc.: 0.455%)

Classification of sample: WS34-25/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS34-25/09/2020-2.00-3.00m
Moisture content:
13.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.734 mg/kg	0.000173 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.9 mg/kg	1.32	14.767 mg/kg	0.00148 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		68 mg/kg	1.7	100.197 mg/kg	0.01 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2 mg/kg	1.285	2.229 mg/kg	0.000173 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		30 mg/kg	1.252	32.559 mg/kg	0.00326 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		40.8 mg/kg	1.462	51.7 mg/kg	0.00517 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14 mg/kg	1.56	18.933 mg/kg	0.00121 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.5 mg/kg	1.5	7.154 mg/kg	0.000715 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		39.3 mg/kg	1.579	53.818 mg/kg	0.00538 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	4.873 mg/kg	0.000487 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		82 mg/kg	1.245	88.492 mg/kg	0.00885 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.675	mg/kg	0.000167 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.14	mg/kg		0.121	mg/kg	0.0000121 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.07	mg/kg		0.0607	mg/kg	0.00000607 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				0.21	mg/kg		0.182	mg/kg	0.0000182 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.39	mg/kg		0.338	mg/kg	0.0000338 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				0.031	mg/kg		0.0269	mg/kg	0.00000269 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8	pH		8	pH	8pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				1021	mg/kg		885.207	mg/kg	0.0885 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.008 mg/kg		0.0069 mg/kg	0.000000694 %	✓	
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.126 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 6.94e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 2.69e-06%)
TPH (C6 to C40) petroleum group: (conc.: 0.0885%)

Classification of sample: WS34-25/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS34-25/09/2020-3.00-3.40m
Moisture content:
13.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.726 mg/kg	0.000173 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.6 mg/kg	1.32	8.66 mg/kg	0.000866 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		49 mg/kg	1.7	71.867 mg/kg	0.00719 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.7 mg/kg	1.285	2.995 mg/kg	0.000233 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		33 mg/kg	1.252	35.649 mg/kg	0.00356 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		36 mg/kg	1.462	45.408 mg/kg	0.00454 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	24.23 mg/kg	0.00155 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.2 mg/kg	1.5	2.848 mg/kg	0.000285 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		39.6 mg/kg	1.579	53.979 mg/kg	0.0054 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				5 mg/kg	1.405	6.063 mg/kg	0.000606 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		112 mg/kg	1.245	120.309 mg/kg	0.012 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.389	mg/kg	0.000139 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.09	pH		8.09	pH	8.09 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0421 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS32-25/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS32-25/09/2020-0.00-1.00m
Moisture content:
12.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.748 mg/kg	0.000175 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13.6 mg/kg	1.32	15.694 mg/kg	0.00157 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		178 mg/kg	1.7	264.397 mg/kg	0.0264 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	3.1 mg/kg	1.285	3.482 mg/kg	0.000271 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		34 mg/kg	1.252	37.198 mg/kg	0.00372 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		48.8 mg/kg	1.462	62.337 mg/kg	0.00623 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	34 mg/kg	1.56	46.351 mg/kg	0.00297 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.8 mg/kg	1.5	7.605 mg/kg	0.00076 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		47.6 mg/kg	1.579	65.711 mg/kg	0.00657 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.456 mg/kg	0.000246 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		87 mg/kg	1.245	94.646 mg/kg	0.00946 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.2	mg/kg	3.22	3.377	mg/kg	0.000338 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0612	mg/kg	0.00000612 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.09	mg/kg		0.0787	mg/kg	0.00000787 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.08	mg/kg		0.0699	mg/kg	0.00000699 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.08	mg/kg		0.0699	mg/kg	0.00000699 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.06	mg/kg		0.0524	mg/kg	0.00000524 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.05	mg/kg		0.0437	mg/kg	0.00000437 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.06	mg/kg		0.0524	mg/kg	0.00000524 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.02	mg/kg		0.0175	mg/kg	0.00000175 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0643 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS32-25/09/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS32-25/09/2020-0.80-1.00m
Moisture content:
10.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	1	2 mg/kg		1.796 mg/kg	0.00018 %	✓	
	051-003-00-9							
2	arsenic { arsenic trioxide }		12.5 mg/kg	1.32	14.821 mg/kg	0.00148 %	✓	
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	barium { barium sulfate }		75 mg/kg	1.7	114.462 mg/kg	0.0114 %	✓	
	231-784-4 / 7727-43-7							
4	cadmium { cadmium sulfide }	1	2.6 mg/kg	1.285	3.001 mg/kg	0.000233 %	✓	
	048-010-00-4 / 215-147-8 / 1306-23-6							
5	copper { copper(II) oxide }		37 mg/kg	1.252	41.592 mg/kg	0.00416 %	✓	
	029-016-00-6 / 215-269-1 / 1317-38-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		43.4 mg/kg	1.462	56.962 mg/kg	0.0057 %	✓	
	215-160-9 / 1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
	024-001-00-0 / 215-607-8 / 1333-82-0							
8	lead { lead chromate }	1	15 mg/kg	1.56	21.011 mg/kg	0.00135 %	✓	
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		6.1 mg/kg	1.5	8.218 mg/kg	0.000822 %	✓	
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel dihydroxide }		40.3 mg/kg	1.579	57.161 mg/kg	0.00572 %	✓	
	028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		2 mg/kg	1.405	2.523 mg/kg	0.000252 %	✓	
	034-002-00-8							
13	zinc { zinc oxide }		86 mg/kg	1.245	96.127 mg/kg	0.00961 %	✓	
	030-013-00-7 / 215-222-5 / 1314-13-2							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.313	mg/kg	0.000231 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.51	pH		8.51	pH	8.51 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0467 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS32-25/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS32-25/09/2020-1.00-2.00m
Moisture content:
10.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.782 mg/kg	0.000178 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.6 mg/kg	1.32	12.47 mg/kg	0.00125 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		78 mg/kg	1.7	118.113 mg/kg	0.0118 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.863 mg/kg	0.000223 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		36 mg/kg	1.252	40.152 mg/kg	0.00402 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		42.5 mg/kg	1.462	55.345 mg/kg	0.00553 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	22.237 mg/kg	0.00143 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.1 mg/kg	1.5	6.817 mg/kg	0.000682 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		40.5 mg/kg	1.579	56.997 mg/kg	0.0057 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		81 mg/kg	1.245	89.832 mg/kg	0.00898 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.721	mg/kg	0.000172 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.44	pH		8.44	pH	8.44 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0456 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS32-25/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS32-25/09/2020-2.00-3.00m
Moisture content:
10.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.899 mg/kg	0.0000899 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5.6 mg/kg	1.32	6.647 mg/kg	0.000665 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		26 mg/kg	1.7	39.725 mg/kg	0.00397 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.4 mg/kg	1.285	1.618 mg/kg	0.000126 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		17 mg/kg	1.252	19.131 mg/kg	0.00191 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		52.9 mg/kg	1.462	69.507 mg/kg	0.00695 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	10 mg/kg	1.56	14.023 mg/kg	0.000899 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.3 mg/kg	1.5	5.799 mg/kg	0.00058 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		21.4 mg/kg	1.579	30.387 mg/kg	0.00304 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.526 mg/kg	0.000253 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		47 mg/kg	1.245	52.593 mg/kg	0.00526 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.158	mg/kg	0.000116 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.39	pH		8.39	pH	8.39 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0294 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS30-25/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS30-25/09/2020-2.00-3.00m
Moisture content:
12.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.752 mg/kg	0.000175 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.8 mg/kg	1.32	9.022 mg/kg	0.000902 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		34 mg/kg	1.7	50.618 mg/kg	0.00506 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.1 mg/kg	1.285	2.364 mg/kg	0.000184 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		25 mg/kg	1.252	27.414 mg/kg	0.00274 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		45.2 mg/kg	1.462	57.871 mg/kg	0.00579 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11 mg/kg	1.56	15.03 mg/kg	0.000964 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.4 mg/kg	1.5	5.782 mg/kg	0.000578 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		29.2 mg/kg	1.579	40.402 mg/kg	0.00404 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				8 mg/kg	1.405	9.846 mg/kg	0.000985 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		75 mg/kg	1.245	81.778 mg/kg	0.00818 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.974	mg/kg	0.000197 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0613	mg/kg	0.00000613 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				0.051	mg/kg		0.0447	mg/kg	0.00000447 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.008	mg/kg		0.007	mg/kg	0.000000701 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.29	pH		8.29	pH	8.29 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				210	mg/kg		183.96	mg/kg	0.0184 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0485 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 7.01e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 4.47e-06%)
TPH (C6 to C40) petroleum group: (conc.: 0.0184%)

Appendix A: Classifier defined and non CLP determinands

barium sulfate (EC Number: 231-784-4, CAS Number: 7727-43-7)

Conversion factor: 1.7
Description/Comments: No hazard statements
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/89983 Sigma Aldrich SDS dated 15/4/19
Data source date: 02 Apr 2020
Hazard Statements: None.

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **coronene** (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source:
http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2 H371

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

- **polychlorobiphenyls; PCB** (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

- **pH** (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

arsenic {arsenic trioxide}

Worst case species based on Hazard Statement.

barium {barium sulfate}

conservative

cadmium {cadmium sulfide}

Worst case species based on Hazard Statements.

copper {copper(II) oxide}

Reasonable

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

oxide conversion factor included

chromium in chromium(VI) compounds {chromium(VI) oxide}

most conservative

lead {lead chromate}

Worst case species based on Hazard Statements.

mercury {mercury dichloride}

Worst case species based on Hazard Statements.

molybdenum {molybdenum(VI) oxide}

Worst case species based on Hazard Statements.

nickel {nickel dihydroxide}

Worst case species based on Hazard Statements.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on Hazard Statements.

zinc {zinc oxide}

Concentrations of chromium VI insufficient for zinc chormate to be present.

boron {diboron trioxide; boric oxide}

Reasonable

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.289.4500.8764 (15 Oct 2020)
HazWasteOnline Database: 2020.290.4501.8765 (16 Oct 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

Waste Classification Report

898Y6-H85LT-SKTSF

Job name

EMT-20-13350-Batch-1-File-1

Description/Comments

Soil Samples

Project

B967/1

Site

Emmet Road

Related Documents

#	Name	Description
1	EMT-20-13350-Batch-1-File-1.hwol	.hwol file used to create the Job

Waste Stream Template

EJEL Rilta

Classified by

Name:
Kate Moraes dos Santos
Date:
19 Oct 2020 16:30 GMT
Telephone:

Company:
O'Connor Sutton Cronin & Assoc. Ltd.
OCSC

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	08 Apr 2020
Advanced Hazardous Waste Classification	09 Apr 2020

Report

Created by: Kate Moraes dos Santos
Created date: 19 Oct 2020 16:30 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS 36-28/09/2020-0.08-1.0m		Non Hazardous		3
2	WS 36-28/09/2020-0.0-1.0m		Non Hazardous		6
3	WS 36-28/09/2020-1.0-2.0m		Non Hazardous		9
4	WS 36-28/09/2020-2.0-2.5m		Non Hazardous		12
5	WS 37-28/09/2020-0.08-1.0m		Non Hazardous		15
6	WS 37-28/09/2020-0-0-1.0m		Non Hazardous		18
7	WS 38-28/09/2020-0-0-1.0m		Non Hazardous		21
8	WS 38-28/09/2020-2.0-3.0m		Non Hazardous		24
9	WS 38-28/09/2020-0.8-1.0m		Non Hazardous		27
10	WS 39-28/09/2020-0.08-1.0m		Non Hazardous		30
11	WS 39-28/09/2020-1.0-2.0m		Hazardous	HP 7, HP 11	33
12	WS 39-28/09/2020-2.0-3.0m		Hazardous	HP 7, HP 11	36
13	WS 39-28/09/2020-3.0-3.2m		Hazardous	HP 7, HP 11	39

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
14	WS 39-28/09/2020-1.20-1.45m		Hazardous	HP 7, HP 11	42
15	WS 39-28/09/2020-0.0-1.0m		Non Hazardous		45

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Appendix A: Classifier defined and non CLP determinands	48
Appendix B: Rationale for selection of metal species	49
Appendix C: Version	50

Classification of sample: WS 36-28/09/2020-0.08-1.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 36-28/09/2020-0.08-1.0m
Moisture content:
10.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.782 mg/kg	0.000178 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.8 mg/kg	1.32	11.529 mg/kg	0.00115 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		48 mg/kg	1.7	72.685 mg/kg	0.00727 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.9 mg/kg	1.285	2.176 mg/kg	0.000169 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		25 mg/kg	1.252	27.883 mg/kg	0.00279 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		34.3 mg/kg	1.462	44.667 mg/kg	0.00447 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14 mg/kg	1.56	19.457 mg/kg	0.00125 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.6 mg/kg	1.5	7.485 mg/kg	0.000749 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		28.9 mg/kg	1.579	40.672 mg/kg	0.00407 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.252 mg/kg	0.000125 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		73 mg/kg	1.245	80.96 mg/kg	0.0081 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.295	mg/kg	0.00023 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				0.008	mg/kg		0.0071	mg/kg	0.000000713 %	✓	
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				10.77	pH		10.77	pH	10.77 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0361 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

benzene: (conc.: 7.13e-07%)

Classification of sample: WS 36-28/09/2020-0.0-1.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 36-28/09/2020-0.0-1.0m
Moisture content:
13.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.728 mg/kg	0.000173 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		20.3 mg/kg	1.32	23.157 mg/kg	0.00232 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		184 mg/kg	1.7	270.182 mg/kg	0.027 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.6 mg/kg	1.285	1.777 mg/kg	0.000138 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		30 mg/kg	1.252	32.446 mg/kg	0.00324 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		45.4 mg/kg	1.462	57.33 mg/kg	0.00573 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	58 mg/kg	1.56	78.165 mg/kg	0.00501 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.5 mg/kg	1.5	4.537 mg/kg	0.000454 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		32.3 mg/kg	1.579	44.079 mg/kg	0.00441 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.428 mg/kg	0.000243 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		103 mg/kg	1.245	110.77 mg/kg	0.0111 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.226	mg/kg	0.000223 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.14	mg/kg		0.121	mg/kg	0.0000121 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.24	mg/kg		0.207	mg/kg	0.0000207 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.23	mg/kg		0.199	mg/kg	0.0000199 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.14	mg/kg		0.121	mg/kg	0.0000121 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.17	mg/kg		0.147	mg/kg	0.0000147 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.14	mg/kg		0.121	mg/kg	0.0000121 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.06	mg/kg		0.0518	mg/kg	0.00000518 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.07	mg/kg		0.0605	mg/kg	0.00000605 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.19	mg/kg		0.164	mg/kg	0.0000164 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.08	mg/kg		0.0691	mg/kg	0.00000691 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				9.79	pH		9.79	pH	9.79 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0657 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 36-28/09/2020-1.0-2.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 36-28/09/2020-1.0-2.0m
Moisture content:
8.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.826 mg/kg	0.000183 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.5 mg/kg	1.32	10.246 mg/kg	0.00102 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		50 mg/kg	1.7	77.583 mg/kg	0.00776 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.582 mg/kg	0.000201 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		29 mg/kg	1.252	33.143 mg/kg	0.00331 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		36.7 mg/kg	1.462	48.972 mg/kg	0.0049 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11 mg/kg	1.56	15.665 mg/kg	0.001 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.1 mg/kg	1.5	6.985 mg/kg	0.000699 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		32.7 mg/kg	1.579	47.156 mg/kg	0.00472 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.566 mg/kg	0.000257 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		83 mg/kg	1.245	94.323 mg/kg	0.00943 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.764	mg/kg	0.000176 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.79	pH		8.79	pH	8.79 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0392 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 36-28/09/2020-2.0-2.5m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 36-28/09/2020-2.0-2.5m
Moisture content:
13%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5.9 mg/kg	1.32	6.777 mg/kg	0.000678 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		33 mg/kg	1.7	48.793 mg/kg	0.00488 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.7 mg/kg	1.285	0.783 mg/kg	0.0000609 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		19 mg/kg	1.252	20.692 mg/kg	0.00207 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		24.4 mg/kg	1.462	31.026 mg/kg	0.0031 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	8 mg/kg	1.56	10.856 mg/kg	0.000696 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.6 mg/kg	1.5	3.393 mg/kg	0.000339 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		33 mg/kg	1.579	45.347 mg/kg	0.00453 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.222 mg/kg	0.000122 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		35 mg/kg	1.245	37.902 mg/kg	0.00379 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1	mg/kg	3.22	2.801	mg/kg	0.00028 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				0.06	mg/kg		0.0522	mg/kg	0.00000522 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.15	mg/kg		0.13	mg/kg	0.000013 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.13	mg/kg		0.113	mg/kg	0.0000113 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.05	mg/kg		0.0435	mg/kg	0.00000435 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.45	pH		8.45	pH	8.45 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				503	mg/kg		437.61	mg/kg	0.0438 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0648 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0438%)

Classification of sample: WS 37-28/09/2020-0.08-1.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 37-28/09/2020-0.08-1.0m
Moisture content:
11.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.772 mg/kg	0.000177 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		46.5 mg/kg	1.32	54.396 mg/kg	0.00544 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		104 mg/kg	1.7	156.6 mg/kg	0.0157 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.6 mg/kg	1.285	1.822 mg/kg	0.000142 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		30 mg/kg	1.252	33.272 mg/kg	0.00333 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		18.1 mg/kg	1.462	23.438 mg/kg	0.00234 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	73 mg/kg	1.56	100.886 mg/kg	0.00647 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		1.6 mg/kg	1.5	2.127 mg/kg	0.000213 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		28.9 mg/kg	1.579	40.444 mg/kg	0.00404 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		166 mg/kg	1.245	183.068 mg/kg	0.0183 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.997	mg/kg	0.0002 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.28	mg/kg		0.248	mg/kg	0.0000248 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.07	mg/kg		0.062	mg/kg	0.0000062 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.52	mg/kg		0.461	mg/kg	0.0000461 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.42	mg/kg		0.372	mg/kg	0.0000372 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.21	mg/kg		0.186	mg/kg	0.0000186 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.28	mg/kg		0.248	mg/kg	0.0000248 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.17	mg/kg		0.151	mg/kg	0.0000151 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.08	mg/kg		0.0709	mg/kg	0.00000709 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.08	mg/kg		0.0709	mg/kg	0.00000709 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.26	mg/kg		0.23	mg/kg	0.000023 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.1	mg/kg		0.0886	mg/kg	0.00000886 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				9.16	pH		9.16	pH	9.16 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				238	mg/kg		210.868	mg/kg	0.0211 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0781 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0211%)

Classification of sample: WS 37-28/09/2020-0-0-1.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 37-28/09/2020-0-0-1.0m
Moisture content:
11.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.772 mg/kg	0.000177 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		133.9 mg/kg	1.32	156.637 mg/kg	0.0157 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		114 mg/kg	1.7	171.658 mg/kg	0.0172 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1 mg/kg	1.285	1.139 mg/kg	0.0000886 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		36 mg/kg	1.252	39.927 mg/kg	0.00399 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		56.7 mg/kg	1.462	73.423 mg/kg	0.00734 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	41 mg/kg	1.56	56.662 mg/kg	0.00363 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.1 mg/kg	1.5	5.45 mg/kg	0.000545 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		40.5 mg/kg	1.579	56.677 mg/kg	0.00567 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.49 mg/kg	0.000249 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		107 mg/kg	1.245	118.001 mg/kg	0.0118 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.1	mg/kg	3.22	3.138	mg/kg	0.000314 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.1	mg/kg		0.0886	mg/kg	0.00000886 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.17	mg/kg		0.151	mg/kg	0.0000151 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.14	mg/kg		0.124	mg/kg	0.0000124 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.09	mg/kg		0.0797	mg/kg	0.00000797 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.1	mg/kg		0.0886	mg/kg	0.00000886 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.07	mg/kg		0.062	mg/kg	0.0000062 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.1	mg/kg		0.0886	mg/kg	0.00000886 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.04	mg/kg		0.0354	mg/kg	0.00000354 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.51	pH		8.51	pH	8.51 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0722 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 38-28/09/2020-0-0-1.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 38-28/09/2020-0-0-1.0m
Moisture content:
15.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	4 mg/kg		3.364 mg/kg	0.000336 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17 mg/kg	1.32	18.877 mg/kg	0.00189 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		122 mg/kg	1.7	174.374 mg/kg	0.0174 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.2 mg/kg	1.285	1.297 mg/kg	0.000101 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		37 mg/kg	1.252	38.952 mg/kg	0.0039 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		56.9 mg/kg	1.462	69.94 mg/kg	0.00699 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	100 mg/kg	1.56	131.18 mg/kg	0.00841 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.4 mg/kg	1.5	4.29 mg/kg	0.000429 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		36.3 mg/kg	1.579	48.219 mg/kg	0.00482 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.363 mg/kg	0.000236 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		156 mg/kg	1.245	163.301 mg/kg	0.0163 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1	mg/kg	3.22	2.708	mg/kg	0.000271 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.39	mg/kg		0.328	mg/kg	0.0000328 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.11	mg/kg		0.0925	mg/kg	0.00000925 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.74	mg/kg		0.622	mg/kg	0.0000622 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.61	mg/kg		0.513	mg/kg	0.0000513 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.45	mg/kg		0.378	mg/kg	0.0000378 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.45	mg/kg		0.378	mg/kg	0.0000378 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.36	mg/kg		0.303	mg/kg	0.0000303 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.2	mg/kg		0.168	mg/kg	0.0000168 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.2	mg/kg		0.168	mg/kg	0.0000168 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.49	mg/kg		0.412	mg/kg	0.0000412 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.19	mg/kg		0.16	mg/kg	0.000016 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.08	pH		8.08	pH	8.08 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				233	mg/kg		195.953	mg/kg	0.0196 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0814 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0196%)

Classification of sample: WS 38-28/09/2020-2.0-3.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 38-28/09/2020-2.0-3.0m
Moisture content:
8.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.913 mg/kg	0.0000913 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.3 mg/kg	1.32	10.005 mg/kg	0.001 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		28 mg/kg	1.7	43.446 mg/kg	0.00434 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.5 mg/kg	1.285	1.76 mg/kg	0.000137 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		22 mg/kg	1.252	25.143 mg/kg	0.00251 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		41.1 mg/kg	1.462	54.844 mg/kg	0.00548 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	13 mg/kg	1.56	18.513 mg/kg	0.00119 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.8 mg/kg	1.5	5.205 mg/kg	0.00052 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		23.6 mg/kg	1.579	34.033 mg/kg	0.0034 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		75 mg/kg	1.245	85.232 mg/kg	0.00852 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.47	mg/kg	0.000147 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.51	pH		8.51	pH	8.51 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.033 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 38-28/09/2020-0.8-1.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 38-28/09/2020-0.8-1.0m
Moisture content:
17.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	14 mg/kg		11.578 mg/kg	0.00116 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		31.2 mg/kg	1.32	34.068 mg/kg	0.00341 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		562 mg/kg	1.7	789.891 mg/kg	0.079 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.338 mg/kg	0.000182 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		119 mg/kg	1.252	123.191 mg/kg	0.0123 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		78.7 mg/kg	1.462	95.125 mg/kg	0.00951 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	402 mg/kg	1.56	518.567 mg/kg	0.0332 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.4 mg/kg	1.353	0.448 mg/kg	0.0000448 %	✓	
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.6 mg/kg	1.5	8.188 mg/kg	0.000819 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		59.6 mg/kg	1.579	77.852 mg/kg	0.00779 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.486 mg/kg	0.000349 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		660 mg/kg	1.245	679.39 mg/kg	0.0679 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.8	mg/kg	3.22	4.793	mg/kg	0.000479 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.12	mg/kg		0.0992	mg/kg	0.00000992 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.17	mg/kg		0.141	mg/kg	0.0000141 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				0.1	mg/kg		0.0827	mg/kg	0.00000827 %	✓	
			201-469-6	83-32-9									
18		fluorene				0.11	mg/kg		0.091	mg/kg	0.0000091 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				2.14	mg/kg		1.77	mg/kg	0.000177 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.52	mg/kg		0.43	mg/kg	0.000043 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				4.12	mg/kg		3.407	mg/kg	0.000341 %	✓	
			205-912-4	206-44-0									
22		pyrene				3.31	mg/kg		2.737	mg/kg	0.000274 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				2.24	mg/kg		1.852	mg/kg	0.000185 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				2.37	mg/kg		1.96	mg/kg	0.000196 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				1.99	mg/kg		1.646	mg/kg	0.000165 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				1.18	mg/kg		0.976	mg/kg	0.0000976 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.25	mg/kg		0.207	mg/kg	0.0000207 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				1.11	mg/kg		0.918	mg/kg	0.0000918 %	✓	
			205-883-8	191-24-2									
29		coronene				0.15	mg/kg		0.124	mg/kg	0.0000124 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				2.71	mg/kg		2.241	mg/kg	0.000224 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				1.05	mg/kg		0.868	mg/kg	0.0000868 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				7.82	pH		7.82	pH	7.82 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				264	mg/kg		218.328	mg/kg	0.0218 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.24 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0218%)

Classification of sample: WS 39-28/09/2020-0.08-1.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 39-28/09/2020-0.08-1.0m
Moisture content:
8.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.914 mg/kg	0.0000914 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.4 mg/kg	1.32	8.93 mg/kg	0.000893 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		56 mg/kg	1.7	86.988 mg/kg	0.0087 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.3 mg/kg	1.285	1.527 mg/kg	0.000119 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		20 mg/kg	1.252	22.882 mg/kg	0.00229 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		63.3 mg/kg	1.462	84.56 mg/kg	0.00846 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	25.662 mg/kg	0.00165 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.8 mg/kg	1.5	6.582 mg/kg	0.000658 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		36.4 mg/kg	1.579	52.549 mg/kg	0.00525 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		65 mg/kg	1.245	73.948 mg/kg	0.00739 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.766	mg/kg	0.000177 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.05	mg/kg		0.0457	mg/kg	0.00000457 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				0.007	mg/kg		0.0064	mg/kg	0.00000064 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.14	pH		8.14	pH	8.14 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				1054	mg/kg		963.356	mg/kg	0.0963 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.132 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 6.4e-07%)
TPH (C6 to C40) petroleum group: (conc.: 0.0963%)

Classification of sample: WS 39-28/09/2020-1.0-2.0m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS 39-28/09/2020-1.0-2.0m
Moisture content:
8.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.409%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.409%)

Determinands

Moisture content: 8.2% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
1		antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }			1	2	mg/kg		1.836	mg/kg	0.000184 %	✓	
		051-003-00-9											
2		arsenic { arsenic trioxide }				8.5	mg/kg	1.32	10.302	mg/kg	0.00103 %	✓	
		033-003-00-0	215-481-4	1327-53-3									
3		barium { barium sulfate }				53	mg/kg	1.7	82.688	mg/kg	0.00827 %	✓	
			231-784-4	7727-43-7									
4		cadmium { cadmium sulfide }			1	2.2	mg/kg	1.285	2.596	mg/kg	0.000202 %	✓	
		048-010-00-4	215-147-8	1306-23-6									
5		copper { copper(II) oxide }				24	mg/kg	1.252	27.579	mg/kg	0.00276 %	✓	
		029-016-00-6	215-269-1	1317-38-0									
6		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				41.1	mg/kg	1.462	55.144	mg/kg	0.00551 %	✓	
			215-160-9	1308-38-9									

#		Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
7		chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<LOD
8		lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	12	mg/kg	1.56	17.183	mg/kg	0.0011 %	✓	
9		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
10		molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.3	mg/kg	1.5	7.299	mg/kg	0.00073 %	✓	
11		nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		31.1	mg/kg	1.579	45.094	mg/kg	0.00451 %	✓	
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2	mg/kg	1.405	2.58	mg/kg	0.000258 %	✓	
13		zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		77	mg/kg	1.245	87.984	mg/kg	0.0088 %	✓	
14		boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.5	mg/kg	3.22	1.478	mg/kg	0.000148 %	✓	
15		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
16		acenaphthylene		205-917-1	208-96-8		0.85	mg/kg		0.78	mg/kg	0.000078 %	✓	
17		acenaphthene		201-469-6	83-32-9		<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<LOD
18		fluorene		201-695-5	86-73-7		2.4	mg/kg		2.203	mg/kg	0.00022 %	✓	
19		phenanthrene		201-581-5	85-01-8		4.53	mg/kg		4.159	mg/kg	0.000416 %	✓	
20		anthracene		204-371-1	120-12-7		<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
21		fluoranthene		205-912-4	206-44-0		<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
22		pyrene		204-927-3	129-00-0		<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
23		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.6	mg/kg		<0.6	mg/kg	<0.00006 %		<LOD
24		chrysene	601-048-00-0	205-923-4	218-01-9		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
25		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
26		indeno[123-cd]pyrene		205-893-2	193-39-5		<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
27		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
28		benzo[ghi]perylene		205-883-8	191-24-2		<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
29		coronene		205-881-7	191-07-1		<0.4	mg/kg		<0.4	mg/kg	<0.00004 %		<LOD
30		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.5	mg/kg		<0.5	mg/kg	<0.00005 %		<LOD
31		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
32		benzo[j]fluoranthene	601-035-00-X	205-910-3	205-82-3		<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
33		benzene	601-020-00-8	200-753-7	71-43-2		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
34		toluene	601-021-00-3	203-625-9	108-88-3		<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.182	mg/kg		0.167	mg/kg	0.0000167 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.037	mg/kg		0.034	mg/kg	0.0000034 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.09	pH		8.09	pH	8.09 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				4452	mg/kg		4086.936	mg/kg	0.409 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.445 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 3.4e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 0.00001%)
TPH (C6 to C40) petroleum group: (conc.: 0.409%)

Classification of sample: WS 39-28/09/2020-2.0-3.0m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS 39-28/09/2020-2.0-3.0m
Moisture content:
11.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.154%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.154%)

Determinands

Moisture content: 11.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.766 mg/kg	0.000177 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.6 mg/kg	1.32	12.358 mg/kg	0.00124 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		107 mg/kg	1.7	160.572 mg/kg	0.0161 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.9 mg/kg	1.285	2.156 mg/kg	0.000168 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		33 mg/kg	1.252	36.476 mg/kg	0.00365 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		59.9 mg/kg	1.462	77.304 mg/kg	0.00773 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
7		chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
8		lead { lead chromate }			1	16	mg/kg	1.56	22.037	mg/kg	0.00141 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
9		mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
10		molybdenum { molybdenum(VI) oxide }				5.9	mg/kg	1.5	7.816	mg/kg	0.000782 %	✓	
		042-001-00-9	215-204-7	1313-27-5									
11		nickel { nickel dihydroxide }				45.7	mg/kg	1.579	63.738	mg/kg	0.00637 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				3	mg/kg	1.405	3.722	mg/kg	0.000372 %	✓	
		034-002-00-8											
13		zinc { zinc oxide }				97	mg/kg	1.245	106.611	mg/kg	0.0107 %	✓	
		030-013-00-7	215-222-5	1314-13-2									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.275	mg/kg	0.000227 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.18	mg/kg		0.159	mg/kg	0.0000159 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.11	mg/kg		0.0971	mg/kg	0.00000971 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				0.06	mg/kg		0.053	mg/kg	0.0000053 %	✓	
			201-469-6	83-32-9									
18		fluorene				0.29	mg/kg		0.256	mg/kg	0.0000256 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.53	mg/kg		0.468	mg/kg	0.0000468 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.065	mg/kg		0.0574	mg/kg	0.00000574 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36	•	ethylbenzene				0.019	mg/kg		0.0168	mg/kg	0.00000168 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37	•	polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38	•	pH				8.11	pH		8.11	pH	8.11 pH		
				PH									
39		cyanides { • salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40	•	TPH (C6 to C40) petroleum group				1742	mg/kg		1538.186	mg/kg	0.154 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.014	mg/kg		0.0124	mg/kg	0.00000124 %	✓	
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.203 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

ethylbenzene: (conc.: 1.68e-06%)
tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.24e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 5.74e-06%)
TPH (C6 to C40) petroleum group: (conc.: 0.154%)

Classification of sample: WS 39-28/09/2020-3.0-3.2m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS 39-28/09/2020-3.0-3.2m
Moisture content:
14.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.103%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.103%)

Determinands

Moisture content: 14.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.851 mg/kg	0.0000851 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.8 mg/kg	1.32	7.64 mg/kg	0.000764 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		66 mg/kg	1.7	95.455 mg/kg	0.00955 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.5 mg/kg	1.285	1.641 mg/kg	0.000128 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		16 mg/kg	1.252	17.044 mg/kg	0.0017 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		51 mg/kg	1.462	63.433 mg/kg	0.00634 %	✓	

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
7	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 / 215-607-8 / 1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	9 mg/kg	1.56	11.947 mg/kg	0.000766 %	✓	
9	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide } 042-001-00-9 / 215-204-7 / 1313-27-5		4.8 mg/kg	1.5	6.128 mg/kg	0.000613 %	✓	
11	nickel { nickel dihydroxide } 028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]		21.9 mg/kg	1.579	29.437 mg/kg	0.00294 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8		2 mg/kg	1.405	2.391 mg/kg	0.000239 %	✓	
13	zinc { zinc oxide } 030-013-00-7 / 215-222-5 / 1314-13-2		53 mg/kg	1.245	56.14 mg/kg	0.00561 %	✓	
14	boron { diboron trioxide; boric oxide } 005-008-00-8 / 215-125-8 / 1303-86-2		0.5 mg/kg	3.22	1.37 mg/kg	0.000137 %	✓	
15	naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		0.24 mg/kg		0.204 mg/kg	0.0000204 %	✓	
16	acenaphthylene 205-917-1 / 208-96-8		0.07 mg/kg		0.0596 mg/kg	0.00000596 %	✓	
17	acenaphthene 201-469-6 / 83-32-9		0.06 mg/kg		0.0511 mg/kg	0.00000511 %	✓	
18	fluorene 201-695-5 / 86-73-7		0.25 mg/kg		0.213 mg/kg	0.0000213 %	✓	
19	phenanthrene 201-581-5 / 85-01-8		0.45 mg/kg		0.383 mg/kg	0.0000383 %	✓	
20	anthracene 204-371-1 / 120-12-7		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
21	fluoranthene 205-912-4 / 206-44-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
22	pyrene 204-927-3 / 129-00-0		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
23	benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
24	chrysene 601-048-00-0 / 205-923-4 / 218-01-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
25	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
26	indeno[123-cd]pyrene 205-893-2 / 193-39-5		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
27	dibenz[a,h]anthracene 601-041-00-2 / 200-181-8 / 53-70-3		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
28	benzo[ghi]perylene 205-883-8 / 191-24-2		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
29	coronene 205-881-7 / 191-07-1		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
30	benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
32	benzo[j]fluoranthene 601-035-00-X / 205-910-3 / 205-82-3		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
33	benzene 601-020-00-8 / 200-753-7 / 71-43-2		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
34	toluene 601-021-00-3 / 203-625-9 / 108-88-3		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.041	mg/kg		0.0349	mg/kg	0.00000349 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.021	mg/kg		0.0179	mg/kg	0.00000179 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.28	pH		8.28	pH	8.28 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				1205	mg/kg		1025.455	mg/kg	0.103 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.027	mg/kg		0.023	mg/kg	0.0000023 %	✓	
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.132 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

ethylbenzene: (conc.: 1.79e-06%)
tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 2.3e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 3.49e-06%)
TPH (C6 to C40) petroleum group: (conc.: 0.103%)

Classification of sample: WS 39-28/09/2020-1.20-1.45m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS 39-28/09/2020-1.20-1.45m
Moisture content:
7.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.632%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.632%)

Determinands

Moisture content: 7.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.856 mg/kg	0.000186 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.2 mg/kg	1.32	11.272 mg/kg	0.00113 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		49 mg/kg	1.7	77.28 mg/kg	0.00773 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.7 mg/kg	1.285	2.028 mg/kg	0.000158 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		26 mg/kg	1.252	30.203 mg/kg	0.00302 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		59.1 mg/kg	1.462	80.159 mg/kg	0.00802 %	✓	

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
7		chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
		024-001-00-0 / 215-607-8 / 1333-82-0							
8		lead { lead chromate }	1	14 mg/kg	1.56	20.265 mg/kg	0.0013 %	✓	
		082-004-00-2 / 231-846-0 / 7758-97-6							
9		mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
		080-010-00-X / 231-299-8 / 7487-94-7							
10		molybdenum { molybdenum(VI) oxide }		6.3 mg/kg	1.5	8.771 mg/kg	0.000877 %	✓	
		042-001-00-9 / 215-204-7 / 1313-27-5							
11		nickel { nickel dihydroxide }		28 mg/kg	1.579	41.042 mg/kg	0.0041 %	✓	
		028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
		034-002-00-8							
13		zinc { zinc oxide }		67 mg/kg	1.245	77.391 mg/kg	0.00774 %	✓	
		030-013-00-7 / 215-222-5 / 1314-13-2							
14		boron { diboron trioxide; boric oxide }		0.6 mg/kg	3.22	1.793 mg/kg	0.000179 %	✓	
		005-008-00-8 / 215-125-8 / 1303-86-2							
15		naphthalene		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		601-052-00-2 / 202-049-5 / 91-20-3							
16		acenaphthylene		0.65 mg/kg		0.603 mg/kg	0.0000603 %	✓	
		/ 205-917-1 / 208-96-8							
17		acenaphthene		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		/ 201-469-6 / 83-32-9							
18		fluorene		2.35 mg/kg		2.181 mg/kg	0.000218 %	✓	
		/ 201-695-5 / 86-73-7							
19		phenanthrene		4.48 mg/kg		4.157 mg/kg	0.000416 %	✓	
		/ 201-581-5 / 85-01-8							
20		anthracene		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		/ 204-371-1 / 120-12-7							
21		fluoranthene		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		/ 205-912-4 / 206-44-0							
22		pyrene		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		/ 204-927-3 / 129-00-0							
23		benzo[a]anthracene		<0.6 mg/kg		<0.6 mg/kg	<0.00006 %		<LOD
		601-033-00-9 / 200-280-6 / 56-55-3							
24		chrysene		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		601-048-00-0 / 205-923-4 / 218-01-9							
25		benzo[a]pyrene; benzo[def]chrysene		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		601-032-00-3 / 200-028-5 / 50-32-8							
26		indeno[123-cd]pyrene		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		/ 205-893-2 / 193-39-5							
27		dibenz[a,h]anthracene		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		601-041-00-2 / 200-181-8 / 53-70-3							
28		benzo[ghi]perylene		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		/ 205-883-8 / 191-24-2							
29		coronene		<0.4 mg/kg		<0.4 mg/kg	<0.00004 %		<LOD
		/ 205-881-7 / 191-07-1							
30		benzo[b]fluoranthene		<0.5 mg/kg		<0.5 mg/kg	<0.00005 %		<LOD
		601-034-00-4 / 205-911-9 / 205-99-2							
31		benzo[k]fluoranthene		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
		601-036-00-5 / 205-916-6 / 207-08-9							
32		benzo[j]fluoranthene		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
		601-035-00-X / 205-910-3 / 205-82-3							
33		benzene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-020-00-8 / 200-753-7 / 71-43-2							
34		toluene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-021-00-3 / 203-625-9 / 108-88-3							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.198	mg/kg		0.184	mg/kg	0.0000184 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36	●	ethylbenzene				0.034	mg/kg		0.0316	mg/kg	0.00000316 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37	●	polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38	●	pH				8.18	pH		8.18	pH	8.18 pH		
				PH									
39		cyanides { ● salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40	●	TPH (C6 to C40) petroleum group				6808	mg/kg		6317.824	mg/kg	0.632 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				0.011	mg/kg		0.0102	mg/kg	0.00000102 %	✓	
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.669 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

ethylbenzene: (conc.: 3.16e-06%)
tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane: (conc.: 1.02e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 0.00001%)
TPH (C6 to C40) petroleum group: (conc.: 0.632%)

Classification of sample: WS 39-28/09/2020-0.0-1.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 39-28/09/2020-0.0-1.0m
Moisture content:
12.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.744 mg/kg	0.000174 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8 mg/kg	1.32	9.211 mg/kg	0.000921 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		303 mg/kg	1.7	449.04 mg/kg	0.0449 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.9 mg/kg	1.285	1.009 mg/kg	0.0000785 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		17 mg/kg	1.252	18.556 mg/kg	0.00186 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		40.5 mg/kg	1.462	51.616 mg/kg	0.00516 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	40 mg/kg	1.56	54.406 mg/kg	0.00349 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.8 mg/kg	1.5	4.971 mg/kg	0.000497 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		18.9 mg/kg	1.579	26.031 mg/kg	0.0026 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.225 mg/kg	0.000123 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		57 mg/kg	1.245	61.867 mg/kg	0.00619 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.965	mg/kg	0.000197 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.07	mg/kg		0.061	mg/kg	0.0000061 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.28	mg/kg		0.244	mg/kg	0.0000244 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.08	mg/kg		0.0698	mg/kg	0.00000698 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.46	mg/kg		0.401	mg/kg	0.0000401 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.42	mg/kg		0.366	mg/kg	0.0000366 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.22	mg/kg		0.192	mg/kg	0.0000192 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.24	mg/kg		0.209	mg/kg	0.0000209 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.21	mg/kg		0.183	mg/kg	0.0000183 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.11	mg/kg		0.0959	mg/kg	0.00000959 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.13	mg/kg		0.113	mg/kg	0.0000113 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.28	mg/kg		0.244	mg/kg	0.0000244 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.11	mg/kg		0.0959	mg/kg	0.00000959 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.66	pH		8.66	pH	8.66 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0719 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

- **barium sulfate** (EC Number: 231-784-4, CAS Number: 7727-43-7)

Conversion factor: 1.7
Description/Comments: No hazard statements
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/89983 Sigma Aldrich SDS dated 15/4/19
Data source date: 02 Apr 2020
Hazard Statements: None.

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

coronene (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source:
http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2 H371

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

polychlorobiphenyls; PCB (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

arsenic {arsenic trioxide}

Worst case species based on Hazard Statement.

barium {barium sulfate}

conservative

cadmium {cadmium sulfide}

Worst case species based on Hazard Statements.

copper {copper(II) oxide}

Reasonable

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

oxide conversion factor included

chromium in chromium(VI) compounds {chromium(VI) oxide}

most conservative

lead {lead chromate}

Worst case species based on Hazard Statements.

mercury {mercury dichloride}

Worst case species based on Hazard Statements.

molybdenum {molybdenum(VI) oxide}

Worst case species based on Hazard Statements.

nickel {nickel dihydroxide}

Worst case species based on Hazard Statements.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on Hazard Statements.

zinc {zinc oxide}

Concentrations of chromium VI insufficient for zinc chormate to be present.

boron {diboron trioxide; boric oxide}

Reasonable

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.289.4500.8764 (15 Oct 2020)
HazWasteOnline Database: 2020.290.4501.8765 (16 Oct 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

Waste Classification Report

CMKDT-4HGVZ-YCG3Y

Job name

EMT-20-13444-Batch-1-File-1

Description/Comments

Soil Samples

Project

B967/1

Site

Emmet Road

Related Documents

#	Name	Description
1	EMT-20-13444-Batch-1-File-1.HWOL	.hwol file used to create the Job

Waste Stream Template

EJEL Rilta

Classified by

Name:
Kate Moraes dos Santos
Date:
19 Oct 2020 16:27 GMT
Telephone:

Company:
O'Connor Sutton Cronin & Assoc. Ltd.
OCSC

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	08 Apr 2020
Advanced Hazardous Waste Classification	09 Apr 2020

Report

Created by: Kate Moraes dos Santos
Created date: 19 Oct 2020 16:27 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS43-29/09/2020-0.00-1.00m		Non Hazardous		3
2	WS43-29/09/2020-0.80-1.00m		Non Hazardous		6
3	WS43-29/09/2020-1.00-2.00m		Non Hazardous		9
4	WS43-29/09/2020-2.00-2.50m		Non Hazardous		12
5	WS42-29/09/2020-0.00-1.00m		Non Hazardous		15
6	WS42-29/09/2020-0.80-1.00m		Non Hazardous		18
7	WS42-29/09/2020-1.00-2.00m		Non Hazardous		21
8	WS42-29/09/2020-2.00-2.50m		Non Hazardous		24
9	WS41-29/09/2020-0.00-1.00m		Non Hazardous		27
10	WS41-29/09/2020-0.80-1.00m		Non Hazardous		30
11	WS41-29/09/2020-1.00-1.50m		Non Hazardous		33
12	WS41-29/09/2020-2.00-2.50m		Non Hazardous		36
13	WS40-29/09/2020-0.00-1.00m		Non Hazardous		39

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
14	WS40-29/09/2020-0.80-1.00m		Non Hazardous		42
15	WS40-29/09/2020-1.00-2.00m		Non Hazardous		45
16	WS40-29/09/2020-2.00-2.40m		Non Hazardous		48
17	WS44-29/09/2020-0.00-1.00m		Non Hazardous		51
18	WS44-29/09/2020-0.80-1.00m		Non Hazardous		54
19	WS44-29/09/2020-1.00-2.00m		Non Hazardous		57
20	WS44-29/09/2020-2.00-3.00m		Non Hazardous		60
21	WS44-29/09/2020-3.00-3.40m		Non Hazardous		63

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Classification of sample: WS43-29/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS43-29/09/2020-0.00-1.00m
Moisture content:
13.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.736 mg/kg	0.000174 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19.9 mg/kg	1.32	22.806 mg/kg	0.00228 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		108 mg/kg	1.7	159.32 mg/kg	0.0159 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.6 mg/kg	1.285	1.785 mg/kg	0.000139 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		67 mg/kg	1.252	72.798 mg/kg	0.00728 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		61.7 mg/kg	1.462	78.274 mg/kg	0.00783 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	57 mg/kg	1.56	77.173 mg/kg	0.00495 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.3 mg/kg	1.5	6.901 mg/kg	0.00069 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		39.5 mg/kg	1.579	54.155 mg/kg	0.00542 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.22 mg/kg	0.000122 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		136 mg/kg	1.245	146.936 mg/kg	0.0147 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.3	mg/kg	3.22	3.633	mg/kg	0.000363 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.23	mg/kg		0.2	mg/kg	0.00002 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.06	mg/kg		0.0521	mg/kg	0.00000521 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.32	mg/kg		0.278	mg/kg	0.0000278 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.31	mg/kg		0.269	mg/kg	0.0000269 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.23	mg/kg		0.2	mg/kg	0.00002 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.22	mg/kg		0.191	mg/kg	0.0000191 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.21	mg/kg		0.182	mg/kg	0.0000182 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.13	mg/kg		0.113	mg/kg	0.0000113 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.15	mg/kg		0.13	mg/kg	0.000013 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.27	mg/kg		0.234	mg/kg	0.0000234 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.1	mg/kg		0.0868	mg/kg	0.00000868 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.15	pH		8.15	pH	8.15 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		**<LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				0.01	mg/kg		0.0086	mg/kg	0.000000868 %	✓	
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0656 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS43-29/09/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS43-29/09/2020-0.80-1.00m
Moisture content:
8.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.824 mg/kg	0.000182 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.6 mg/kg	1.32	10.356 mg/kg	0.00104 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		68 mg/kg	1.7	105.397 mg/kg	0.0105 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.5 mg/kg	1.285	1.758 mg/kg	0.000137 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		24 mg/kg	1.252	27.399 mg/kg	0.00274 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		57.8 mg/kg	1.462	77.044 mg/kg	0.0077 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	25 mg/kg	1.56	35.564 mg/kg	0.00228 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.2 mg/kg	1.5	7.114 mg/kg	0.000711 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		27.1 mg/kg	1.579	39.038 mg/kg	0.0039 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		76 mg/kg	1.245	86.274 mg/kg	0.00863 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.762	mg/kg	0.000176 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.64	pH		8.64	pH	8.64 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0437 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS43-29/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS43-29/09/2020-1.00-2.00m
Moisture content:
12.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	1	2 mg/kg		1.746 mg/kg	0.000175 %	✓	
	051-003-00-9							
2	arsenic { arsenic trioxide }		10.1 mg/kg	1.32	11.642 mg/kg	0.00116 %	✓	
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	barium { barium sulfate }		80 mg/kg	1.7	118.694 mg/kg	0.0119 %	✓	
	231-784-4 / 7727-43-7							
4	cadmium { cadmium sulfide }	1	1.9 mg/kg	1.285	2.132 mg/kg	0.000166 %	✓	
	048-010-00-4 / 215-147-8 / 1306-23-6							
5	copper { copper(II) oxide }		34 mg/kg	1.252	37.155 mg/kg	0.00372 %	✓	
	029-016-00-6 / 215-269-1 / 1317-38-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		46.2 mg/kg	1.462	58.948 mg/kg	0.00589 %	✓	
	215-160-9 / 1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
	024-001-00-0 / 215-607-8 / 1333-82-0							
8	lead { lead chromate }	1	47 mg/kg	1.56	64.001 mg/kg	0.0041 %	✓	
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		5.1 mg/kg	1.5	6.679 mg/kg	0.000668 %	✓	
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel dihydroxide }		38.4 mg/kg	1.579	52.95 mg/kg	0.00529 %	✓	
	028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		3 mg/kg	1.405	3.68 mg/kg	0.000368 %	✓	
	034-002-00-8							
13	zinc { zinc oxide }		99 mg/kg	1.245	107.577 mg/kg	0.0108 %	✓	
	030-013-00-7 / 215-222-5 / 1314-13-2							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.249	mg/kg	0.000225 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.19	mg/kg		0.166	mg/kg	0.0000166 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.05	mg/kg		0.0437	mg/kg	0.00000436 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.35	mg/kg		0.306	mg/kg	0.0000306 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.29	mg/kg		0.253	mg/kg	0.0000253 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.21	mg/kg		0.183	mg/kg	0.0000183 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.18	mg/kg		0.157	mg/kg	0.0000157 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.14	mg/kg		0.122	mg/kg	0.0000122 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.08	mg/kg		0.0698	mg/kg	0.00000698 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.08	mg/kg		0.0698	mg/kg	0.00000698 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.19	mg/kg		0.166	mg/kg	0.0000166 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.07	mg/kg		0.0611	mg/kg	0.00000611 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.28	pH		8.28	pH	8.28 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0501 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS43-29/09/2020-2.00-2.50m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS43-29/09/2020-2.00-2.50m
Moisture content:
13%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.87 mg/kg	0.000087 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.7 mg/kg	1.32	7.696 mg/kg	0.00077 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		47 mg/kg	1.7	69.493 mg/kg	0.00695 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.3 mg/kg	1.285	1.454 mg/kg	0.000113 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		22 mg/kg	1.252	23.959 mg/kg	0.0024 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		38.4 mg/kg	1.462	48.828 mg/kg	0.00488 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	26 mg/kg	1.56	35.283 mg/kg	0.00226 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.2 mg/kg	1.5	5.482 mg/kg	0.000548 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		28.5 mg/kg	1.579	39.164 mg/kg	0.00392 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.667 mg/kg	0.000367 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		61 mg/kg	1.245	66.057 mg/kg	0.00661 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.961	mg/kg	0.000196 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.08	mg/kg		0.0696	mg/kg	0.00000696 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.17	mg/kg		0.148	mg/kg	0.0000148 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.14	mg/kg		0.122	mg/kg	0.0000122 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.13	mg/kg		0.113	mg/kg	0.0000113 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.09	mg/kg		0.0783	mg/kg	0.00000783 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.07	mg/kg		0.0609	mg/kg	0.00000609 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.05	mg/kg		0.0435	mg/kg	0.00000435 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.06	mg/kg		0.0522	mg/kg	0.00000522 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.03	mg/kg		0.0261	mg/kg	0.00000261 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.56	pH		8.56	pH	8.56 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0347 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS42-29/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS42-29/09/2020-0.00-1.00m
Moisture content:
12.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.752 mg/kg	0.000175 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.8 mg/kg	1.32	11.335 mg/kg	0.00113 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		55 mg/kg	1.7	81.883 mg/kg	0.00819 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.1 mg/kg	1.285	2.364 mg/kg	0.000184 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		27 mg/kg	1.252	29.607 mg/kg	0.00296 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		41.8 mg/kg	1.462	53.517 mg/kg	0.00535 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	20.496 mg/kg	0.00131 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.4 mg/kg	1.5	4.468 mg/kg	0.000447 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		32 mg/kg	1.579	44.277 mg/kg	0.00443 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		83 mg/kg	1.245	90.501 mg/kg	0.00905 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.41	mg/kg	0.000141 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.55	pH		8.55	pH	8.55 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0391 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS42-29/09/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS42-29/09/2020-0.80-1.00m
Moisture content:
8.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.83 mg/kg	0.000183 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.2 mg/kg	1.32	14.739 mg/kg	0.00147 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		91 mg/kg	1.7	141.51 mg/kg	0.0142 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.1 mg/kg	1.285	2.47 mg/kg	0.000192 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		31 mg/kg	1.252	35.507 mg/kg	0.00355 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		44.5 mg/kg	1.462	59.511 mg/kg	0.00595 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	13 mg/kg	1.56	18.554 mg/kg	0.00119 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.3 mg/kg	1.5	7.275 mg/kg	0.000728 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		41.3 mg/kg	1.579	59.688 mg/kg	0.00597 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.286 mg/kg	0.000129 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		88 mg/kg	1.245	100.224 mg/kg	0.01 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.473	mg/kg	0.000147 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.49	pH		8.49	pH	8.49 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0492 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS42-29/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS42-29/09/2020-1.00-2.00m
Moisture content:
12.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.752 mg/kg	0.000175 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.4 mg/kg	1.32	9.715 mg/kg	0.000972 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		99 mg/kg	1.7	147.389 mg/kg	0.0147 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.9 mg/kg	1.285	2.139 mg/kg	0.000166 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		28 mg/kg	1.252	30.704 mg/kg	0.00307 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		37 mg/kg	1.462	47.372 mg/kg	0.00474 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11 mg/kg	1.56	15.03 mg/kg	0.000964 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.7 mg/kg	1.5	6.177 mg/kg	0.000618 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		39 mg/kg	1.579	53.962 mg/kg	0.0054 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.231 mg/kg	0.000123 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		69 mg/kg	1.245	75.235 mg/kg	0.00752 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.41	mg/kg	0.000141 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.31	pH		8.31	pH	8.31 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0442 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS42-29/09/2020-2.00-2.50m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS42-29/09/2020-2.00-2.50m
Moisture content:
12.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.742 mg/kg	0.000174 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.5 mg/kg	1.32	10.925 mg/kg	0.00109 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		41 mg/kg	1.7	60.691 mg/kg	0.00607 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.4 mg/kg	1.285	1.567 mg/kg	0.000122 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		29 mg/kg	1.252	31.619 mg/kg	0.00316 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		27.3 mg/kg	1.462	34.753 mg/kg	0.00348 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14 mg/kg	1.56	19.02 mg/kg	0.00122 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.9 mg/kg	1.5	5.096 mg/kg	0.00051 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		44.1 mg/kg	1.579	60.67 mg/kg	0.00607 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.671 mg/kg	0.000367 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		64 mg/kg	1.245	69.385 mg/kg	0.00694 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.963	mg/kg	0.000196 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.42	pH		8.42	pH	8.42 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0349 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS41-29/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS41-29/09/2020-0.00-1.00m
Moisture content:
11.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.768 mg/kg	0.000177 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19.9 mg/kg	1.32	23.227 mg/kg	0.00232 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		63 mg/kg	1.7	94.65 mg/kg	0.00946 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.3 mg/kg	1.285	1.477 mg/kg	0.000115 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		26 mg/kg	1.252	28.771 mg/kg	0.00288 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		57 mg/kg	1.462	73.645 mg/kg	0.00736 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	31 mg/kg	1.56	42.745 mg/kg	0.00274 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.9 mg/kg	1.5	5.172 mg/kg	0.000517 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		28.4 mg/kg	1.579	39.654 mg/kg	0.00397 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		84 mg/kg	1.245	92.427 mg/kg	0.00924 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1	mg/kg	3.22	2.846	mg/kg	0.000285 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.14	mg/kg		0.124	mg/kg	0.0000124 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.19	mg/kg		0.168	mg/kg	0.0000168 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.18	mg/kg		0.159	mg/kg	0.0000159 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.15	mg/kg		0.133	mg/kg	0.0000133 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.12	mg/kg		0.106	mg/kg	0.0000106 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.1	mg/kg		0.0884	mg/kg	0.00000884 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.07	mg/kg		0.0619	mg/kg	0.00000619 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.08	mg/kg		0.0707	mg/kg	0.00000707 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.14	mg/kg		0.124	mg/kg	0.0000124 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.05	mg/kg		0.0442	mg/kg	0.00000442 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.28	pH		8.28	pH	8.28 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0448 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS41-29/09/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS41-29/09/2020-0.80-1.00m
Moisture content:
8.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.912 mg/kg	0.0000912 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5.7 mg/kg	1.32	6.864 mg/kg	0.000686 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		39 mg/kg	1.7	60.448 mg/kg	0.00604 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.3 mg/kg	1.285	1.524 mg/kg	0.000119 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		16 mg/kg	1.252	18.266 mg/kg	0.00183 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		53.6 mg/kg	1.462	71.446 mg/kg	0.00714 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	8 mg/kg	1.56	11.38 mg/kg	0.00073 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.3 mg/kg	1.5	5.883 mg/kg	0.000588 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		20.7 mg/kg	1.579	29.818 mg/kg	0.00298 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		52 mg/kg	1.245	59.029 mg/kg	0.0059 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.468	mg/kg	0.000147 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.52	pH		8.52	pH	8.52 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0319 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS41-29/09/2020-1.00-1.50m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS41-29/09/2020-1.00-1.50m
Moisture content:
12.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	1	2 mg/kg		1.742 mg/kg	0.000174 %	✓	
	051-003-00-9							
2	arsenic { arsenic trioxide }		7.1 mg/kg	1.32	8.165 mg/kg	0.000817 %	✓	
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	barium { barium sulfate }		102 mg/kg	1.7	150.989 mg/kg	0.0151 %	✓	
	231-784-4 / 7727-43-7							
4	cadmium { cadmium sulfide }	1	1.8 mg/kg	1.285	2.015 mg/kg	0.000157 %	✓	
	048-010-00-4 / 215-147-8 / 1306-23-6							
5	copper { copper(II) oxide }		18 mg/kg	1.252	19.625 mg/kg	0.00196 %	✓	
	029-016-00-6 / 215-269-1 / 1317-38-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		51.2 mg/kg	1.462	65.178 mg/kg	0.00652 %	✓	
	215-160-9 / 1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
	024-001-00-0 / 215-607-8 / 1333-82-0							
8	lead { lead chromate }	1	12 mg/kg	1.56	16.303 mg/kg	0.00105 %	✓	
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		5.4 mg/kg	1.5	7.056 mg/kg	0.000706 %	✓	
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel dihydroxide }		31.8 mg/kg	1.579	43.749 mg/kg	0.00437 %	✓	
	028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		1 mg/kg	1.405	1.224 mg/kg	0.000122 %	✓	
	034-002-00-8							
13	zinc { zinc oxide }		75 mg/kg	1.245	81.311 mg/kg	0.00813 %	✓	
	030-013-00-7 / 215-222-5 / 1314-13-2							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.122	mg/kg	0.000112 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.67	pH		8.67	pH	8.67 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0448 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS41-29/09/2020-2.00-2.50m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS41-29/09/2020-2.00-2.50m
Moisture content:
15.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.847 mg/kg	0.0000847 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.5 mg/kg	1.32	10.624 mg/kg	0.00106 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		30 mg/kg	1.7	43.185 mg/kg	0.00432 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.2 mg/kg	1.285	1.306 mg/kg	0.000102 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		19 mg/kg	1.252	20.145 mg/kg	0.00201 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		27.1 mg/kg	1.462	33.548 mg/kg	0.00335 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	10 mg/kg	1.56	13.212 mg/kg	0.000847 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.4 mg/kg	1.5	3.05 mg/kg	0.000305 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		25.6 mg/kg	1.579	34.249 mg/kg	0.00342 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	4.76 mg/kg	0.000476 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		52 mg/kg	1.245	54.822 mg/kg	0.00548 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.182	mg/kg	0.000218 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.01	pH		8.01	pH	8.01 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0272 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS40-29/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS40-29/09/2020-0.00-1.00m
Moisture content:
19.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 19.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.61 mg/kg	0.000161 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13.4 mg/kg	1.32	14.242 mg/kg	0.00142 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		160 mg/kg	1.7	218.898 mg/kg	0.0219 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.1 mg/kg	1.285	2.173 mg/kg	0.000169 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		38 mg/kg	1.252	38.292 mg/kg	0.00383 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		55.3 mg/kg	1.462	65.063 mg/kg	0.00651 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	204 mg/kg	1.56	256.153 mg/kg	0.0164 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.9 mg/kg	1.5	5.917 mg/kg	0.000592 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		36.8 mg/kg	1.579	46.791 mg/kg	0.00468 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.262 mg/kg	0.000226 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		112 mg/kg	1.245	112.223 mg/kg	0.0112 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.7	mg/kg	3.22	4.406	mg/kg	0.000441 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.09	mg/kg		0.0724	mg/kg	0.00000724 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.15	mg/kg		0.121	mg/kg	0.0000121 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.14	mg/kg		0.113	mg/kg	0.0000113 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.11	mg/kg		0.0886	mg/kg	0.00000886 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.11	mg/kg		0.0886	mg/kg	0.00000886 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.11	mg/kg		0.0886	mg/kg	0.00000886 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.07	mg/kg		0.0564	mg/kg	0.00000564 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.07	mg/kg		0.0564	mg/kg	0.00000564 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.14	mg/kg		0.113	mg/kg	0.0000113 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.06	mg/kg		0.0483	mg/kg	0.00000483 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.25	pH		8.25	pH	8.25 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				0.01	mg/kg		0.008	mg/kg	0.000000805 %	✓	
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0731 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS40-29/09/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS40-29/09/2020-0.80-1.00m
Moisture content:
14.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.854 mg/kg	0.0000854 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.2 mg/kg	1.32	11.501 mg/kg	0.00115 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		150 mg/kg	1.7	217.708 mg/kg	0.0218 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.3 mg/kg	1.285	2.524 mg/kg	0.000196 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		19 mg/kg	1.252	20.311 mg/kg	0.00203 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		48.2 mg/kg	1.462	60.162 mg/kg	0.00602 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	27 mg/kg	1.56	35.966 mg/kg	0.00231 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.1 mg/kg	1.5	6.534 mg/kg	0.000653 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		33.9 mg/kg	1.579	45.727 mg/kg	0.00457 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		88 mg/kg	1.245	93.543 mg/kg	0.00935 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.2	mg/kg	3.22	3.3	mg/kg	0.00033 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.06	mg/kg		0.0512	mg/kg	0.00000512 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.07	mg/kg		0.0598	mg/kg	0.00000598 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.06	mg/kg		0.0512	mg/kg	0.00000512 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.04	mg/kg		0.0342	mg/kg	0.00000342 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.6	pH		8.6	pH	8.6 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0542 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS40-29/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS40-29/09/2020-1.00-2.00m
Moisture content:
13.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.861 mg/kg	0.0000861 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.6 mg/kg	1.32	8.64 mg/kg	0.000864 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		53 mg/kg	1.7	77.554 mg/kg	0.00776 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.9 mg/kg	1.285	2.103 mg/kg	0.000164 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		23 mg/kg	1.252	24.789 mg/kg	0.00248 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		40.3 mg/kg	1.462	50.714 mg/kg	0.00507 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	20.145 mg/kg	0.00129 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.4 mg/kg	1.5	5.683 mg/kg	0.000568 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		33.5 mg/kg	1.579	45.558 mg/kg	0.00456 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		80 mg/kg	1.245	85.736 mg/kg	0.00857 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.941	mg/kg	0.000194 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.64	pH		8.64	pH	8.64 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0373 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS40-29/09/2020-2.00-2.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS40-29/09/2020-2.00-2.40m
Moisture content:
11.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.77 mg/kg	0.000177 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.9 mg/kg	1.32	10.4 mg/kg	0.00104 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		42 mg/kg	1.7	63.171 mg/kg	0.00632 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.8 mg/kg	1.285	2.047 mg/kg	0.000159 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		26 mg/kg	1.252	28.803 mg/kg	0.00288 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		43 mg/kg	1.462	55.62 mg/kg	0.00556 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	12 mg/kg	1.56	16.565 mg/kg	0.00106 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.3 mg/kg	1.5	7.037 mg/kg	0.000704 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		36.3 mg/kg	1.579	50.742 mg/kg	0.00507 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.243 mg/kg	0.000124 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		78 mg/kg	1.245	85.923 mg/kg	0.00859 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.995	mg/kg	0.000199 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0374 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS44-29/09/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS44-29/09/2020-0.00-1.00m
Moisture content:
13.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.732 mg/kg	0.000173 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.7 mg/kg	1.32	17.951 mg/kg	0.0018 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		74 mg/kg	1.7	108.912 mg/kg	0.0109 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.5 mg/kg	1.285	1.67 mg/kg	0.00013 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		34 mg/kg	1.252	36.857 mg/kg	0.00369 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		47.9 mg/kg	1.462	60.627 mg/kg	0.00606 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	63 mg/kg	1.56	85.1 mg/kg	0.00546 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.1 mg/kg	1.353	0.117 mg/kg	0.0000117 %	✓	
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.3 mg/kg	1.5	5.586 mg/kg	0.000559 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		31.8 mg/kg	1.579	43.498 mg/kg	0.00435 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		107 mg/kg	1.245	115.338 mg/kg	0.0115 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.6	mg/kg	3.22	4.461	mg/kg	0.000446 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0606	mg/kg	0.00000606 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.12	mg/kg		0.104	mg/kg	0.0000104 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.12	mg/kg		0.104	mg/kg	0.0000104 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.12	mg/kg		0.104	mg/kg	0.0000104 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.08	mg/kg		0.0693	mg/kg	0.00000693 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.08	mg/kg		0.0693	mg/kg	0.00000693 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.06	mg/kg		0.052	mg/kg	0.0000052 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.06	mg/kg		0.052	mg/kg	0.0000052 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.11	mg/kg		0.0953	mg/kg	0.00000953 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.04	mg/kg		0.0346	mg/kg	0.00000346 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.48	pH		8.48	pH	8.48 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0508 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS44-29/09/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS44-29/09/2020-0.80-1.00m
Moisture content:
14.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.714 mg/kg	0.000171 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.7 mg/kg	1.32	12.107 mg/kg	0.00121 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		84 mg/kg	1.7	122.345 mg/kg	0.0122 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.7 mg/kg	1.285	1.872 mg/kg	0.000146 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		33 mg/kg	1.252	35.401 mg/kg	0.00354 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		47.6 mg/kg	1.462	59.622 mg/kg	0.00596 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	49 mg/kg	1.56	65.501 mg/kg	0.0042 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.9 mg/kg	1.5	6.3 mg/kg	0.00063 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		32.3 mg/kg	1.579	43.722 mg/kg	0.00437 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		90 mg/kg	1.245	96.005 mg/kg	0.0096 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.8	mg/kg	3.22	4.967	mg/kg	0.000497 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0482 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS44-29/09/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS44-29/09/2020-1.00-2.00m
Moisture content:
12.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.752 mg/kg	0.000175 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.1 mg/kg	1.32	12.838 mg/kg	0.00128 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		93 mg/kg	1.7	138.456 mg/kg	0.0138 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.3 mg/kg	1.285	2.59 mg/kg	0.000201 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		29 mg/kg	1.252	31.8 mg/kg	0.00318 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		47.6 mg/kg	1.462	60.943 mg/kg	0.00609 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	25 mg/kg	1.56	34.16 mg/kg	0.00219 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.5 mg/kg	1.5	7.228 mg/kg	0.000723 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		39.1 mg/kg	1.579	54.1 mg/kg	0.00541 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.462 mg/kg	0.000246 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		94 mg/kg	1.245	102.495 mg/kg	0.0102 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.4	mg/kg	3.22	3.949	mg/kg	0.000395 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.05	mg/kg		0.0438	mg/kg	0.00000438 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.36	pH		8.36	pH	8.36 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0495 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS44-29/09/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS44-29/09/2020-2.00-3.00m
Moisture content:
11.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.772 mg/kg	0.000177 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.4 mg/kg	1.32	13.336 mg/kg	0.00133 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		83 mg/kg	1.7	124.979 mg/kg	0.0125 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.4 mg/kg	1.285	2.733 mg/kg	0.000213 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		37 mg/kg	1.252	41.036 mg/kg	0.0041 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		43.6 mg/kg	1.462	56.459 mg/kg	0.00565 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	27.64 mg/kg	0.00177 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.2 mg/kg	1.5	6.912 mg/kg	0.000691 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		42.8 mg/kg	1.579	59.896 mg/kg	0.00599 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.49 mg/kg	0.000249 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		101 mg/kg	1.245	111.384 mg/kg	0.0111 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1	mg/kg	3.22	2.853	mg/kg	0.000285 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.26	pH		8.26	pH	8.26 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0496 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS44-29/09/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS44-29/09/2020-3.00-3.40m
Moisture content:
13.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.734 mg/kg	0.000173 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.9 mg/kg	1.32	12.477 mg/kg	0.00125 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		77 mg/kg	1.7	113.458 mg/kg	0.0113 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.1 mg/kg	1.285	2.34 mg/kg	0.000182 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		32 mg/kg	1.252	34.729 mg/kg	0.00347 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		51.2 mg/kg	1.462	64.879 mg/kg	0.00649 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	22 mg/kg	1.56	29.752 mg/kg	0.00191 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.7 mg/kg	1.5	7.414 mg/kg	0.000741 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		47.7 mg/kg	1.579	65.322 mg/kg	0.00653 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.436 mg/kg	0.000244 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		96 mg/kg	1.245	103.6 mg/kg	0.0104 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.233	mg/kg	0.000223 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.33	pH		8.33	pH	8.33 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0485 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

- **barium sulfate** (EC Number: 231-784-4, CAS Number: 7727-43-7)

Conversion factor: 1.7
Description/Comments: No hazard statements
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/89983 Sigma Aldrich SDS dated 15/4/19
Data source date: 02 Apr 2020
Hazard Statements: None.

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

coronene (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source:
http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2 H371

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

polychlorobiphenyls; PCB (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

arsenic {arsenic trioxide}

Worst case species based on Hazard Statement.

barium {barium sulfate}

conservative

cadmium {cadmium sulfide}

Worst case species based on Hazard Statements.

copper {copper(II) oxide}

Reasonable

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

oxide conversion factor included

chromium in chromium(VI) compounds {chromium(VI) oxide}

most conservative

lead {lead chromate}

Worst case species based on Hazard Statements.

mercury {mercury dichloride}

Worst case species based on Hazard Statements.

molybdenum {molybdenum(VI) oxide}

Worst case species based on Hazard Statements.

nickel {nickel dihydroxide}

Worst case species based on Hazard Statements.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on Hazard Statements.

zinc {zinc oxide}

Concentrations of chromium VI insufficient for zinc chormate to be present.

boron {diboron trioxide; boric oxide}

Reasonable

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.289.4500.8764 (15 Oct 2020)
HazWasteOnline Database: 2020.290.4501.8765 (16 Oct 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

Waste Classification Report

4JQ32-32JN4-QFXU2

Job name

EMT-20-13523-Batch-1-File-1

Description/Comments

Soil Samples

Project

B967/1

Site

Emmet Road

Related Documents

#	Name	Description
1	EMT-20-13523-Batch-1-File-1.HWOL	.hwol file used to create the Job

Waste Stream Template

EJEL Rilta

Classified by

Name:
Kate Moraes dos Santos
Date:
19 Oct 2020 16:25 GMT
Telephone:

Company:
O'Connor Sutton Cronin & Assoc. Ltd.
OCSC

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	08 Apr 2020
Advanced Hazardous Waste Classification	09 Apr 2020

Report

Created by: Kate Moraes dos Santos
Created date: 19 Oct 2020 16:25 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS 45-30/09/2020-0.8-1.0m		Non Hazardous		3
2	WS 45-30/09/2020-0.0-1.0m		Non Hazardous		6
3	WS 45-30/09/2020-1.0-2.0m		Non Hazardous		9
4	WS 45-30/09/2020-2.0-3.0m		Non Hazardous		12
5	WS 45-30/09/2020-3.0-3.4m		Non Hazardous		15
6	WS 46-30/09/2020-0.8-1.0m		Non Hazardous		18
7	WS 46-30/09/2020-1.0-2.0m		Non Hazardous		21
8	WS 46-30/09/2020-2.0-2.5m		Non Hazardous		24
9	WS 46-30/09/2020-0.0-1.0m		Non Hazardous		27
10	WS 47-30/09/2020-0.8-1.0m		Hazardous	HP 7, HP 11	30
11	WS 47-30/09/2020-0.0-1.0m		Hazardous	HP 7, HP 11	33
12	WS 47-30/09/2020-1.0-1.85m		Non Hazardous		36

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	39
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Appendix C: Version	41

Classification of sample: WS 45-30/09/2020-0.8-1.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 45-30/09/2020-0.8-1.0m
Moisture content:
10.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.897 mg/kg	0.0000897 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.1 mg/kg	1.32	7.224 mg/kg	0.000722 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		67 mg/kg	1.7	102.139 mg/kg	0.0102 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.9 mg/kg	1.285	1.038 mg/kg	0.0000807 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		13 mg/kg	1.252	14.597 mg/kg	0.00146 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		52.1 mg/kg	1.462	68.304 mg/kg	0.00683 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	29 mg/kg	1.56	40.575 mg/kg	0.0026 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.7 mg/kg	1.5	4.979 mg/kg	0.000498 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		15.1 mg/kg	1.579	21.394 mg/kg	0.00214 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		62 mg/kg	1.245	69.224 mg/kg	0.00692 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.155	mg/kg	0.000116 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0628	mg/kg	0.00000628 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.16	mg/kg		0.144	mg/kg	0.0000144 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.18	mg/kg		0.161	mg/kg	0.0000161 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.09	mg/kg		0.0807	mg/kg	0.00000807 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.1	mg/kg		0.0897	mg/kg	0.00000897 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.1	mg/kg		0.0897	mg/kg	0.00000897 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.06	mg/kg		0.0538	mg/kg	0.00000538 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.1	mg/kg		0.0897	mg/kg	0.00000897 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.04	mg/kg		0.0359	mg/kg	0.00000359 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				7.81	pH		7.81	pH	7.81 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0374 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 45-30/09/2020-0.0-1.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 45-30/09/2020-0.0-1.0m
Moisture content:
11.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.764 mg/kg	0.000176 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13 mg/kg	1.32	15.139 mg/kg	0.00151 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		85 mg/kg	1.7	127.413 mg/kg	0.0127 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.2 mg/kg	1.285	1.36 mg/kg	0.000106 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		25 mg/kg	1.252	27.602 mg/kg	0.00276 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		71 mg/kg	1.462	91.526 mg/kg	0.00915 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	44 mg/kg	1.56	60.533 mg/kg	0.00388 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.4 mg/kg	1.5	5.822 mg/kg	0.000582 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		28.9 mg/kg	1.579	40.261 mg/kg	0.00403 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		97 mg/kg	1.245	106.49 mg/kg	0.0106 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.704	mg/kg	0.00017 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.06	mg/kg		0.0529	mg/kg	0.00000529 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.07	mg/kg		0.0617	mg/kg	0.00000617 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.06	mg/kg		0.0529	mg/kg	0.00000529 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.09	mg/kg		0.0794	mg/kg	0.00000794 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.08	mg/kg		0.0706	mg/kg	0.00000706 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.1	mg/kg		0.0882	mg/kg	0.00000882 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.11	mg/kg		0.097	mg/kg	0.0000097 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.04	mg/kg		0.0353	mg/kg	0.00000353 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.06	pH		8.06	pH	8.06 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				120	mg/kg		105.84	mg/kg	0.0106 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0568 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0106%)

Classification of sample: WS 45-30/09/2020-1.0-2.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 45-30/09/2020-1.0-2.0m
Moisture content:
9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	1	2 mg/kg		1.82 mg/kg	0.000182 %	✓	
	051-003-00-9							
2	arsenic { arsenic trioxide }		7 mg/kg	1.32	8.41 mg/kg	0.000841 %	✓	
	033-003-00-0 / 215-481-4 / 1327-53-3							
3	barium { barium sulfate }		64 mg/kg	1.7	98.98 mg/kg	0.0099 %	✓	
	231-784-4 / 7727-43-7							
4	cadmium { cadmium sulfide }	1	2.6 mg/kg	1.285	3.041 mg/kg	0.000237 %	✓	
	048-010-00-4 / 215-147-8 / 1306-23-6							
5	copper { copper(II) oxide }		19 mg/kg	1.252	21.643 mg/kg	0.00216 %	✓	
	029-016-00-6 / 215-269-1 / 1317-38-0							
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		52 mg/kg	1.462	69.161 mg/kg	0.00692 %	✓	
	215-160-9 / 1308-38-9							
7	chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
	024-001-00-0 / 215-607-8 / 1333-82-0							
8	lead { lead chromate }	1	14 mg/kg	1.56	19.872 mg/kg	0.00127 %	✓	
	082-004-00-2 / 231-846-0 / 7758-97-6							
9	mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
	080-010-00-X / 231-299-8 / 7487-94-7							
10	molybdenum { molybdenum(VI) oxide }		5.1 mg/kg	1.5	6.962 mg/kg	0.000696 %	✓	
	042-001-00-9 / 215-204-7 / 1313-27-5							
11	nickel { nickel dihydroxide }		31.3 mg/kg	1.579	44.989 mg/kg	0.0045 %	✓	
	028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
	034-002-00-8							
13	zinc { zinc oxide }		82 mg/kg	1.245	92.881 mg/kg	0.00929 %	✓	
	030-013-00-7 / 215-222-5 / 1314-13-2							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.172	mg/kg	0.000117 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.76	pH		8.76	pH	8.76 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0418 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 45-30/09/2020-2.0-3.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 45-30/09/2020-2.0-3.0m
Moisture content:
8.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.913 mg/kg	0.0000913 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.1 mg/kg	1.32	7.353 mg/kg	0.000735 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		39 mg/kg	1.7	60.515 mg/kg	0.00605 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.1 mg/kg	1.285	2.464 mg/kg	0.000192 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		22 mg/kg	1.252	25.143 mg/kg	0.00251 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		48.4 mg/kg	1.462	64.585 mg/kg	0.00646 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11 mg/kg	1.56	15.665 mg/kg	0.001 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.7 mg/kg	1.5	6.437 mg/kg	0.000644 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		25.5 mg/kg	1.579	36.773 mg/kg	0.00368 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	5.131 mg/kg	0.000513 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		72 mg/kg	1.245	81.823 mg/kg	0.00818 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.176	mg/kg	0.000118 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.72	pH		8.72	pH	8.72 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0357 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 45-30/09/2020-3.0-3.4m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 45-30/09/2020-3.0-3.4m
Moisture content:
7.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.921 mg/kg	0.0000921 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.2 mg/kg	1.32	7.539 mg/kg	0.000754 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		26 mg/kg	1.7	40.697 mg/kg	0.00407 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.4 mg/kg	1.285	1.657 mg/kg	0.000129 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		18 mg/kg	1.252	20.752 mg/kg	0.00208 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		46.2 mg/kg	1.462	62.189 mg/kg	0.00622 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	9 mg/kg	1.56	12.929 mg/kg	0.000829 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.1 mg/kg	1.5	5.665 mg/kg	0.000566 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		24.8 mg/kg	1.579	36.077 mg/kg	0.00361 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.588 mg/kg	0.000259 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		49 mg/kg	1.245	56.173 mg/kg	0.00562 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.186	mg/kg	0.000119 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				6.48	pH		6.48	pH	6.48 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0299 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 46-30/09/2020-0.8-1.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 46-30/09/2020-0.8-1.0m
Moisture content:
7.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.929 mg/kg	0.0000929 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.1 mg/kg	1.32	7.482 mg/kg	0.000748 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		39 mg/kg	1.7	61.575 mg/kg	0.00616 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.4 mg/kg	1.285	1.672 mg/kg	0.00013 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		20 mg/kg	1.252	23.258 mg/kg	0.00233 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		53.6 mg/kg	1.462	72.777 mg/kg	0.00728 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	23.185 mg/kg	0.00149 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.4 mg/kg	1.5	6.132 mg/kg	0.000613 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		29.5 mg/kg	1.579	43.287 mg/kg	0.00433 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		70 mg/kg	1.245	80.944 mg/kg	0.00809 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.496	mg/kg	0.00015 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.06	mg/kg		0.0557	mg/kg	0.00000557 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.1	mg/kg		0.0929	mg/kg	0.00000929 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.09	mg/kg		0.0836	mg/kg	0.00000836 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.06	mg/kg		0.0557	mg/kg	0.00000557 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.06	mg/kg		0.0557	mg/kg	0.00000557 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.05	mg/kg		0.0465	mg/kg	0.00000465 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.08	mg/kg		0.0743	mg/kg	0.00000743 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.03	mg/kg		0.0279	mg/kg	0.00000279 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.99	pH		8.99	pH	8.99 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0371 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 46-30/09/2020-1.0-2.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 46-30/09/2020-1.0-2.0m
Moisture content:
12.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.746 mg/kg	0.000175 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.9 mg/kg	1.32	9.106 mg/kg	0.000911 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		45 mg/kg	1.7	66.766 mg/kg	0.00668 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.9 mg/kg	1.285	2.132 mg/kg	0.000166 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		22 mg/kg	1.252	24.042 mg/kg	0.0024 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		43.3 mg/kg	1.462	55.248 mg/kg	0.00552 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11 mg/kg	1.56	14.979 mg/kg	0.00096 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.5 mg/kg	1.5	5.893 mg/kg	0.000589 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		30.4 mg/kg	1.579	41.919 mg/kg	0.00419 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		79 mg/kg	1.245	85.844 mg/kg	0.00858 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.687	mg/kg	0.000169 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.81	pH		8.81	pH	8.81 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.036 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 46-30/09/2020-2.0-2.5m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 46-30/09/2020-2.0-2.5m
Moisture content:
11.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.881 mg/kg	0.0000881 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7 mg/kg	1.32	8.142 mg/kg	0.000814 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		49 mg/kg	1.7	73.366 mg/kg	0.00734 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.5 mg/kg	1.285	1.698 mg/kg	0.000132 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		25 mg/kg	1.252	27.57 mg/kg	0.00276 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		34 mg/kg	1.462	43.779 mg/kg	0.00438 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11 mg/kg	1.56	15.116 mg/kg	0.000969 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.5 mg/kg	1.5	4.626 mg/kg	0.000463 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		31.1 mg/kg	1.579	43.277 mg/kg	0.00433 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				5 mg/kg	1.405	6.189 mg/kg	0.000619 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		59 mg/kg	1.245	64.699 mg/kg	0.00647 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.9	mg/kg	3.22	2.553	mg/kg	0.000255 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.75	pH		8.75	pH	8.75 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0341 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 46-30/09/2020-0.0-1.0m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 46-30/09/2020-0.0-1.0m
Moisture content:
10.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.784 mg/kg	0.000178 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		30.9 mg/kg	1.32	36.392 mg/kg	0.00364 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		77 mg/kg	1.7	116.73 mg/kg	0.0117 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.9 mg/kg	1.285	1.032 mg/kg	0.0000803 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		29 mg/kg	1.252	32.381 mg/kg	0.00324 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		83.9 mg/kg	1.462	109.381 mg/kg	0.0109 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	65 mg/kg	1.56	90.438 mg/kg	0.0058 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.2 mg/kg	1.5	8.297 mg/kg	0.00083 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		28.8 mg/kg	1.579	40.577 mg/kg	0.00406 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.253 mg/kg	0.000125 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		100 mg/kg	1.245	111.028 mg/kg	0.0111 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.1	mg/kg	3.22	3.159	mg/kg	0.000316 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.03	mg/kg		0.0268	mg/kg	0.00000268 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.3	mg/kg		0.268	mg/kg	0.0000268 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.09	mg/kg		0.0803	mg/kg	0.00000803 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.67	mg/kg		0.598	mg/kg	0.0000598 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.61	mg/kg		0.544	mg/kg	0.0000544 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.34	mg/kg		0.303	mg/kg	0.0000303 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.39	mg/kg		0.348	mg/kg	0.0000348 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.4	mg/kg		0.357	mg/kg	0.0000357 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.26	mg/kg		0.232	mg/kg	0.0000232 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.04	mg/kg		0.0357	mg/kg	0.00000357 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.28	mg/kg		0.25	mg/kg	0.000025 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.55	mg/kg		0.491	mg/kg	0.0000491 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.21	mg/kg		0.187	mg/kg	0.0000187 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.65	pH		8.65	pH	8.65 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0578 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS 47-30/09/2020-0.8-1.0m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS 47-30/09/2020-0.8-1.0m
Moisture content:
17.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.272%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.272%)

Determinands

Moisture content: 17.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	4 mg/kg		3.312 mg/kg	0.000331 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.9 mg/kg	1.32	8.637 mg/kg	0.000864 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		89 mg/kg	1.7	125.241 mg/kg	0.0125 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.341 mg/kg	0.000182 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		96 mg/kg	1.252	99.501 mg/kg	0.00995 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		97.9 mg/kg	1.462	118.475 mg/kg	0.0118 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
7		chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<**LOD**
		024-001-00-0	215-607-8	1333-82-0									
8		lead { lead chromate }			1	319	mg/kg	1.56	411.997	mg/kg	0.0264 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
9		mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<**LOD**
		080-010-00-X	231-299-8	7487-94-7									
10		molybdenum { molybdenum(VI) oxide }				5	mg/kg	1.5	6.211	mg/kg	0.000621 %	✓	
		042-001-00-9	215-204-7	1313-27-5									
11		nickel { nickel dihydroxide }				49.4	mg/kg	1.579	64.607	mg/kg	0.00646 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<**LOD**
		034-002-00-8											
13		zinc { zinc oxide }				372	mg/kg	1.245	383.392	mg/kg	0.0383 %	✓	
		030-013-00-7	215-222-5	1314-13-2									
14		boron { diboron trioxide; boric oxide }				0.9	mg/kg	3.22	2.399	mg/kg	0.00024 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.14	mg/kg		0.116	mg/kg	0.0000116 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.18	mg/kg		0.149	mg/kg	0.0000149 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				0.17	mg/kg		0.141	mg/kg	0.0000141 %	✓	
			201-469-6	83-32-9									
18		fluorene				0.22	mg/kg		0.182	mg/kg	0.0000182 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				2.5	mg/kg		2.07	mg/kg	0.000207 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.48	mg/kg		0.397	mg/kg	0.0000397 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				2.73	mg/kg		2.26	mg/kg	0.000226 %	✓	
			205-912-4	206-44-0									
22		pyrene				2.46	mg/kg		2.037	mg/kg	0.000204 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.87	mg/kg		0.72	mg/kg	0.000072 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				1.24	mg/kg		1.027	mg/kg	0.000103 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				1.01	mg/kg		0.836	mg/kg	0.0000836 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.78	mg/kg		0.646	mg/kg	0.0000646 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.17	mg/kg		0.141	mg/kg	0.0000141 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				1.19	mg/kg		0.985	mg/kg	0.0000985 %	✓	
			205-883-8	191-24-2									
29		coronene				0.39	mg/kg		0.323	mg/kg	0.0000323 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				1.5	mg/kg		1.242	mg/kg	0.000124 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.59	mg/kg		0.489	mg/kg	0.0000489 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				0.067	mg/kg		0.0555	mg/kg	0.00000555 %	✓	
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.41	pH		8.41	pH	8.41 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				3281	mg/kg		2716.668	mg/kg	0.272 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.381 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.272%)

Classification of sample: WS 47-30/09/2020-0.0-1.0m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
WS 47-30/09/2020-0.0-1.0m
Moisture content:
14.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.225%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.225%)

Determinands

Moisture content: 14.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.568 mg/kg	0.000257 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13.2 mg/kg	1.32	14.919 mg/kg	0.00149 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		81 mg/kg	1.7	117.838 mg/kg	0.0118 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.3 mg/kg	1.285	2.53 mg/kg	0.000197 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		53 mg/kg	1.252	56.791 mg/kg	0.00568 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		94.8 mg/kg	1.462	118.603 mg/kg	0.0119 %	✓	

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
7		chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
		024-001-00-0 / 215-607-8 / 1333-82-0							
8		lead { lead chromate }	1	83 mg/kg	1.56	110.822 mg/kg	0.0071 %	✓	
		082-004-00-2 / 231-846-0 / 7758-97-6							
9		mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
		080-010-00-X / 231-299-8 / 7487-94-7							
10		molybdenum { molybdenum(VI) oxide }		5.1 mg/kg	1.5	6.549 mg/kg	0.000655 %	✓	
		042-001-00-9 / 215-204-7 / 1313-27-5							
11		nickel { nickel dihydroxide }		54.1 mg/kg	1.579	73.146 mg/kg	0.00731 %	✓	
		028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		2 mg/kg	1.405	2.405 mg/kg	0.000241 %	✓	
		034-002-00-8							
13		zinc { zinc oxide }		173 mg/kg	1.245	184.327 mg/kg	0.0184 %	✓	
		030-013-00-7 / 215-222-5 / 1314-13-2							
14		boron { diboron trioxide; boric oxide }		1 mg/kg	3.22	2.756 mg/kg	0.000276 %	✓	
		005-008-00-8 / 215-125-8 / 1303-86-2							
15		naphthalene		0.05 mg/kg		0.0428 mg/kg	0.00000428 %	✓	
		601-052-00-2 / 202-049-5 / 91-20-3							
16		acenaphthylene		0.09 mg/kg		0.077 mg/kg	0.0000077 %	✓	
		205-917-1 / 208-96-8							
17		acenaphthene		0.15 mg/kg		0.128 mg/kg	0.0000128 %	✓	
		201-469-6 / 83-32-9							
18		fluorene		0.11 mg/kg		0.0942 mg/kg	0.00000942 %	✓	
		201-695-5 / 86-73-7							
19		phenanthrene		0.96 mg/kg		0.822 mg/kg	0.0000822 %	✓	
		201-581-5 / 85-01-8							
20		anthracene		0.51 mg/kg		0.437 mg/kg	0.0000437 %	✓	
		204-371-1 / 120-12-7							
21		fluoranthene		4.59 mg/kg		3.929 mg/kg	0.000393 %	✓	
		205-912-4 / 206-44-0							
22		pyrene		3.78 mg/kg		3.236 mg/kg	0.000324 %	✓	
		204-927-3 / 129-00-0							
23		benzo[a]anthracene		1.31 mg/kg		1.121 mg/kg	0.000112 %	✓	
		601-033-00-9 / 200-280-6 / 56-55-3							
24		chrysene		1.78 mg/kg		1.524 mg/kg	0.000152 %	✓	
		601-048-00-0 / 205-923-4 / 218-01-9							
25		benzo[a]pyrene; benzo[def]chrysene		1.92 mg/kg		1.644 mg/kg	0.000164 %	✓	
		601-032-00-3 / 200-028-5 / 50-32-8							
26		indeno[123-cd]pyrene		1.3 mg/kg		1.113 mg/kg	0.000111 %	✓	
		205-893-2 / 193-39-5							
27		dibenz[a,h]anthracene		0.21 mg/kg		0.18 mg/kg	0.000018 %	✓	
		601-041-00-2 / 200-181-8 / 53-70-3							
28		benzo[ghi]perylene		1.14 mg/kg		0.976 mg/kg	0.0000976 %	✓	
		205-883-8 / 191-24-2							
29		coronene		0.25 mg/kg		0.214 mg/kg	0.0000214 %	✓	
		205-881-7 / 191-07-1							
30		benzo[b]fluoranthene		2.6 mg/kg		2.226 mg/kg	0.000223 %	✓	
		601-034-00-4 / 205-911-9 / 205-99-2							
31		benzo[k]fluoranthene		1.01 mg/kg		0.865 mg/kg	0.0000865 %	✓	
		601-036-00-5 / 205-916-6 / 207-08-9							
32		benzo[j]fluoranthene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
		601-035-00-X / 205-910-3 / 205-82-3							
33		benzene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-020-00-8 / 200-753-7 / 71-43-2							
34		toluene		0.007 mg/kg		0.0059 mg/kg	0.000000599 %	✓	
		601-021-00-3 / 203-625-9 / 108-88-3							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.72	pH		8.72	pH	8.72 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				2632	mg/kg		2252.992	mg/kg	0.225 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				0.01	mg/kg		0.0085	mg/kg	0.000000856 %	✓	
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.293 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

toluene: (conc.: 5.99e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.225%)

Classification of sample: WS 47-30/09/2020-1.0-1.85m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS 47-30/09/2020-1.0-1.85m
Moisture content:
12.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.742 mg/kg	0.000174 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.2 mg/kg	1.32	14.03 mg/kg	0.0014 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		94 mg/kg	1.7	139.146 mg/kg	0.0139 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.1 mg/kg	1.285	2.351 mg/kg	0.000183 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		39 mg/kg	1.252	42.522 mg/kg	0.00425 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		50.2 mg/kg	1.462	63.905 mg/kg	0.00639 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	41 mg/kg	1.56	55.703 mg/kg	0.00357 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.3 mg/kg	1.5	6.925 mg/kg	0.000693 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		51.8 mg/kg	1.579	71.264 mg/kg	0.00713 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.671 mg/kg	0.000367 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		119 mg/kg	1.245	129.013 mg/kg	0.0129 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.683	mg/kg	0.000168 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.06	mg/kg		0.0523	mg/kg	0.00000523 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.06	mg/kg		0.0523	mg/kg	0.00000523 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				0.05	mg/kg		0.0435	mg/kg	0.00000435 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.37	mg/kg		0.322	mg/kg	0.0000322 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.2	mg/kg		0.174	mg/kg	0.0000174 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				1.16	mg/kg		1.01	mg/kg	0.000101 %	✓	
			205-912-4	206-44-0									
22		pyrene				1.09	mg/kg		0.949	mg/kg	0.0000949 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.72	mg/kg		0.627	mg/kg	0.0000627 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.77	mg/kg		0.671	mg/kg	0.0000671 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.87	mg/kg		0.758	mg/kg	0.0000758 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.62	mg/kg		0.54	mg/kg	0.000054 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.14	mg/kg		0.122	mg/kg	0.0000122 %	✓	
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.57	mg/kg		0.496	mg/kg	0.0000496 %	✓	
			205-883-8	191-24-2									
29		coronene				0.11	mg/kg		0.0958	mg/kg	0.00000958 %	✓	
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				1.09	mg/kg		0.949	mg/kg	0.0000949 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.42	mg/kg		0.366	mg/kg	0.0000366 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.49	pH		8.49	pH	8.49 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				103	mg/kg		89.713	mg/kg	0.00897 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0611 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00897%)

Appendix A: Classifier defined and non CLP determinands

barium sulfate (EC Number: 231-784-4, CAS Number: 7727-43-7)

Conversion factor: 1.7
Description/Comments: No hazard statements
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/89983 Sigma Aldrich SDS dated 15/4/19
Data source date: 02 Apr 2020
Hazard Statements: None.

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **coronene** (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source:
http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2 H371

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

- **polychlorobiphenyls; PCB** (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

- **pH** (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

arsenic {arsenic trioxide}

Worst case species based on Hazard Statement.

barium {barium sulfate}

conservative

cadmium {cadmium sulfide}

Worst case species based on Hazard Statements.

copper {copper(II) oxide}

Reasonable

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

oxide conversion factor included

chromium in chromium(VI) compounds {chromium(VI) oxide}

most conservative

lead {lead chromate}

Worst case species based on Hazard Statements.

mercury {mercury dichloride}

Worst case species based on Hazard Statements.

molybdenum {molybdenum(VI) oxide}

Worst case species based on Hazard Statements.

nickel {nickel dihydroxide}

Worst case species based on Hazard Statements.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on Hazard Statements.

zinc {zinc oxide}

Concentrations of chromium VI insufficient for zinc chormate to be present.

boron {diboron trioxide; boric oxide}

Reasonable

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.289.4500.8764 (15 Oct 2020)
HazWasteOnline Database: 2020.290.4501.8765 (16 Oct 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

Waste Classification Report

XKZXL-GAE58-DKKW8

Job name

EMT-20-13660-Batch-1-File-1

Description/Comments

Soil Samples

Project

B967/1

Site

Emmet Road

Related Documents

#	Name	Description
1	EMT-20-13660-Batch-1-File-1.hwol	.hwol file used to create the Job

Waste Stream Template

EJEL Rilta

Classified by

Name:
Kate Moraes dos Santos
Date:
09 Nov 2020 10:59 GMT
Telephone:

Company:
O'Connor Sutton Cronin & Assoc. Ltd.
OCSC

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	08 Apr 2020
Advanced Hazardous Waste Classification	09 Apr 2020

Report

Created by: Kate Moraes dos Santos
Created date: 09 Nov 2020 10:59 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS51-01/10/2020-0.80-1.00m		Non Hazardous		3
2	WS51-01/10/2020-0.00-1.00m		Non Hazardous		6
3	WS51-01/10/2020-1.00-1.70m		Non Hazardous		9
4	WS50-01/10/2020-0.80-1.00m		Non Hazardous		12
5	WS50-01/10/2020-0.00-1.00m		Non Hazardous		15
6	WS50-01/10/2020-1.00-2.00m		Non Hazardous		18
7	WS48-01/10/2020-0.80-1.00m		Non Hazardous		21
8	WS48-01/10/2020-0.00-1.00m		Non Hazardous		24
9	WS48-01/10/2020-1.30-2.00m		Non Hazardous		27
10	WS48-01/10/2020-2.40-3.00m		Non Hazardous		30
11	WS49-01/10/2020-0.70-0.90m		Non Hazardous		33
12	WS49-01/10/2020-0.00-0.90m		Non Hazardous		36

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	39
Appendix B: Rationale for selection of metal species	40
Appendix C: Version	41

Classification of sample: WS51-01/10/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS51-01/10/2020-0.80-1.00m
Moisture content:
8.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.822 mg/kg	0.000182 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.1 mg/kg	1.32	12.148 mg/kg	0.00121 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		71 mg/kg	1.7	109.926 mg/kg	0.011 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.3 mg/kg	1.285	2.693 mg/kg	0.00021 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		34 mg/kg	1.252	38.773 mg/kg	0.00388 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		43.6 mg/kg	1.462	58.052 mg/kg	0.00581 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	24.157 mg/kg	0.00155 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.5 mg/kg	1.5	7.517 mg/kg	0.000752 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		45.3 mg/kg	1.579	65.183 mg/kg	0.00652 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.56 mg/kg	0.000256 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		93 mg/kg	1.245	105.456 mg/kg	0.0105 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.053	mg/kg	0.000205 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.8	pH		8.8	pH	8.8 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0476 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS51-01/10/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS51-01/10/2020-0.00-1.00m
Moisture content:
7.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.929 mg/kg	0.0000929 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		29.4 mg/kg	1.32	36.062 mg/kg	0.00361 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		34 mg/kg	1.7	53.681 mg/kg	0.00537 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.7 mg/kg	1.285	0.836 mg/kg	0.000065 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		19 mg/kg	1.252	22.095 mg/kg	0.00221 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		35.8 mg/kg	1.462	48.609 mg/kg	0.00486 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	21.736 mg/kg	0.00139 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3 mg/kg	1.5	4.181 mg/kg	0.000418 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		18.4 mg/kg	1.579	26.999 mg/kg	0.0027 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		65 mg/kg	1.245	75.162 mg/kg	0.00752 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.795	mg/kg	0.000179 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.34	mg/kg		0.316	mg/kg	0.0000316 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.17	mg/kg		0.158	mg/kg	0.0000158 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				1.16	mg/kg		1.078	mg/kg	0.000108 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.87	mg/kg		0.808	mg/kg	0.0000808 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.39	mg/kg		0.362	mg/kg	0.0000362 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.41	mg/kg		0.381	mg/kg	0.0000381 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.18	mg/kg		0.167	mg/kg	0.0000167 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.08	mg/kg		0.0743	mg/kg	0.00000743 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.1	mg/kg		0.0929	mg/kg	0.00000929 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.3	mg/kg		0.279	mg/kg	0.0000279 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.12	mg/kg		0.111	mg/kg	0.0000111 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.49	pH		8.49	pH	8.49 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0344 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS51-01/10/2020-1.00-1.70m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS51-01/10/2020-1.00-1.70m
Moisture content:
6.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 6.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.87 mg/kg	0.000187 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.8 mg/kg	1.32	8.395 mg/kg	0.000839 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		42 mg/kg	1.7	66.74 mg/kg	0.00667 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.644 mg/kg	0.000206 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		26 mg/kg	1.252	30.431 mg/kg	0.00304 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		37.3 mg/kg	1.462	50.972 mg/kg	0.0051 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11 mg/kg	1.56	16.043 mg/kg	0.00103 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.7 mg/kg	1.5	6.593 mg/kg	0.000659 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		27.3 mg/kg	1.579	40.318 mg/kg	0.00403 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.941 mg/kg	0.000394 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		65 mg/kg	1.245	75.647 mg/kg	0.00756 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.505	mg/kg	0.000151 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.76	pH		8.76	pH	8.76 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0354 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS50-01/10/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS50-01/10/2020-0.80-1.00m
Moisture content:
11.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.762 mg/kg	0.000176 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		22.4 mg/kg	1.32	26.056 mg/kg	0.00261 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		64 mg/kg	1.7	95.826 mg/kg	0.00958 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.5 mg/kg	1.285	1.698 mg/kg	0.000132 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		30 mg/kg	1.252	33.084 mg/kg	0.00331 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		41 mg/kg	1.462	52.793 mg/kg	0.00528 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	24 mg/kg	1.56	32.981 mg/kg	0.00211 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.7 mg/kg	1.5	4.89 mg/kg	0.000489 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		33.4 mg/kg	1.579	46.477 mg/kg	0.00465 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		90 mg/kg	1.245	98.693 mg/kg	0.00987 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.269	mg/kg	0.000227 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.06	mg/kg		0.0529	mg/kg	0.00000529 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.08	mg/kg		0.0705	mg/kg	0.00000705 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.07	mg/kg		0.0617	mg/kg	0.00000617 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.05	mg/kg		0.0441	mg/kg	0.00000441 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.78	pH		8.78	pH	8.78 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				166	mg/kg		146.246	mg/kg	0.0146 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0535 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0146%)

Classification of sample: WS50-01/10/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS50-01/10/2020-0.00-1.00m
Moisture content:
13.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.722 mg/kg	0.000172 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15.8 mg/kg	1.32	17.961 mg/kg	0.0018 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		90 mg/kg	1.7	131.696 mg/kg	0.0132 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2 mg/kg	1.285	2.213 mg/kg	0.000172 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		28 mg/kg	1.252	30.178 mg/kg	0.00302 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		46.9 mg/kg	1.462	59.019 mg/kg	0.0059 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	31 mg/kg	1.56	41.633 mg/kg	0.00267 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.8 mg/kg	1.5	6.2 mg/kg	0.00062 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		39 mg/kg	1.579	53.038 mg/kg	0.0053 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.21 mg/kg	0.000121 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		95 mg/kg	1.245	101.811 mg/kg	0.0102 %	✓	

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
14		boron { diboron trioxide; boric oxide }		0.8 mg/kg	3.22	2.218 mg/kg	0.000222 %	✓	
		005-008-00-8 / 215-125-8 / 1303-86-2							
15		naphthalene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		601-052-00-2 / 202-049-5 / 91-20-3							
16		acenaphthylene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-917-1 / 208-96-8							
17		acenaphthene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6 / 83-32-9							
18		fluorene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		201-695-5 / 86-73-7							
19		phenanthrene		0.09 mg/kg		0.0775 mg/kg	0.00000775 %	✓	
		201-581-5 / 85-01-8							
20		anthracene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1 / 120-12-7							
21		fluoranthene		0.13 mg/kg		0.112 mg/kg	0.0000112 %	✓	
		205-912-4 / 206-44-0							
22		pyrene		0.12 mg/kg		0.103 mg/kg	0.0000103 %	✓	
		204-927-3 / 129-00-0							
23		benzo[a]anthracene		0.08 mg/kg		0.0689 mg/kg	0.00000689 %	✓	
		601-033-00-9 / 200-280-6 / 56-55-3							
24		chrysene		0.07 mg/kg		0.0603 mg/kg	0.00000603 %	✓	
		601-048-00-0 / 205-923-4 / 218-01-9							
25		benzo[a]pyrene; benzo[def]chrysene		0.07 mg/kg		0.0603 mg/kg	0.00000603 %	✓	
		601-032-00-3 / 200-028-5 / 50-32-8							
26		indeno[123-cd]pyrene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-893-2 / 193-39-5							
27		dibenz[a,h]anthracene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		601-041-00-2 / 200-181-8 / 53-70-3							
28		benzo[ghi]perylene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-883-8 / 191-24-2							
29		coronene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-881-7 / 191-07-1							
30		benzo[b]fluoranthene		0.09 mg/kg		0.0775 mg/kg	0.00000775 %	✓	
		601-034-00-4 / 205-911-9 / 205-99-2							
31		benzo[k]fluoranthene		0.04 mg/kg		0.0344 mg/kg	0.00000344 %	✓	
		601-036-00-5 / 205-916-6 / 207-08-9							
32		benzo[j]fluoranthene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
		601-035-00-X / 205-910-3 / 205-82-3							
33		benzene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-020-00-8 / 200-753-7 / 71-43-2							
34		toluene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-021-00-3 / 203-625-9 / 108-88-3							
35		xylene		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		601-022-00-9 / 202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4] / 95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
36		ethylbenzene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-023-00-4 / 202-849-4 / 100-41-4							
37		polychlorobiphenyls; PCB		<0.035 mg/kg		<0.035 mg/kg	<0.0000035 %		<LOD
		602-039-00-4 / 215-648-1 / 1336-36-3							
38		pH		8.42 pH		8.42 pH	8.42 pH		
		PH							
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }		<0.5 mg/kg	1.884	<0.942 mg/kg	<0.0000942 %		<LOD
		006-007-00-5							
40		TPH (C6 to C40) petroleum group		<52 mg/kg		<52 mg/kg	<0.0052 %		<LOD
		TPH							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0489 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS50-01/10/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS50-01/10/2020-1.00-2.00m
Moisture content:
10.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.79 mg/kg	0.000179 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.6 mg/kg	1.32	13.708 mg/kg	0.00137 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		80 mg/kg	1.7	121.685 mg/kg	0.0122 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.531 mg/kg	0.000197 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		34 mg/kg	1.252	38.092 mg/kg	0.00381 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		39.9 mg/kg	1.462	52.193 mg/kg	0.00522 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	27.921 mg/kg	0.00179 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.5 mg/kg	1.5	7.385 mg/kg	0.000738 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		47.1 mg/kg	1.579	66.583 mg/kg	0.00666 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.515 mg/kg	0.000251 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		100 mg/kg	1.245	111.402 mg/kg	0.0111 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.017	mg/kg	0.000202 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				0.013	mg/kg		0.0116	mg/kg	0.00000116 %	✓	
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0493 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

benzene: (conc.: 1.16e-06%)

Classification of sample: WS48-01/10/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS48-01/10/2020-0.80-1.00m
Moisture content:
9.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.806 mg/kg	0.000181 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8 mg/kg	1.32	9.538 mg/kg	0.000954 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		59 mg/kg	1.7	90.545 mg/kg	0.00905 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.9 mg/kg	1.285	2.205 mg/kg	0.000172 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		20 mg/kg	1.252	22.607 mg/kg	0.00226 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		59.9 mg/kg	1.462	79.055 mg/kg	0.00791 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	21.128 mg/kg	0.00135 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.5 mg/kg	1.5	7.451 mg/kg	0.000745 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		29.6 mg/kg	1.579	42.218 mg/kg	0.00422 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		69 mg/kg	1.245	77.554 mg/kg	0.00776 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.1	mg/kg	3.22	3.198	mg/kg	0.00032 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.76	pH		8.76	pH	8.76 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0406 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS48-01/10/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS48-01/10/2020-0.00-1.00m
Moisture content:
12.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.748 mg/kg	0.000175 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14.3 mg/kg	1.32	16.502 mg/kg	0.00165 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		108 mg/kg	1.7	160.421 mg/kg	0.016 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.2 mg/kg	1.285	1.348 mg/kg	0.000105 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		39 mg/kg	1.252	42.668 mg/kg	0.00427 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		53.5 mg/kg	1.462	68.341 mg/kg	0.00683 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	67 mg/kg	1.56	91.34 mg/kg	0.00586 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.6 mg/kg	1.5	6.031 mg/kg	0.000603 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		31.2 mg/kg	1.579	43.071 mg/kg	0.00431 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.228 mg/kg	0.000123 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		128 mg/kg	1.245	139.249 mg/kg	0.0139 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.8	mg/kg	3.22	5.066	mg/kg	0.000507 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.08	mg/kg		0.0699	mg/kg	0.00000699 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.14	mg/kg		0.122	mg/kg	0.0000122 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.05	mg/kg		0.0437	mg/kg	0.00000437 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.24	mg/kg		0.21	mg/kg	0.000021 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.22	mg/kg		0.192	mg/kg	0.0000192 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.17	mg/kg		0.149	mg/kg	0.0000149 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.18	mg/kg		0.157	mg/kg	0.0000157 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.17	mg/kg		0.149	mg/kg	0.0000149 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.1	mg/kg		0.0874	mg/kg	0.00000874 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.13	mg/kg		0.114	mg/kg	0.0000114 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.22	mg/kg		0.192	mg/kg	0.0000192 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.09	mg/kg		0.0787	mg/kg	0.00000787 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.38	pH		8.38	pH	8.38 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.06 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS48-01/10/2020-1.30-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS48-01/10/2020-1.30-2.00m
Moisture content:
5.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 5.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.941 mg/kg	0.0000941 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		4.9 mg/kg	1.32	6.088 mg/kg	0.000609 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		27 mg/kg	1.7	43.18 mg/kg	0.00432 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.3 mg/kg	1.285	1.572 mg/kg	0.000122 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		15 mg/kg	1.252	17.669 mg/kg	0.00177 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		40 mg/kg	1.462	55.013 mg/kg	0.0055 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	9 mg/kg	1.56	13.21 mg/kg	0.000847 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.6 mg/kg	1.5	5.082 mg/kg	0.000508 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		20.5 mg/kg	1.579	30.469 mg/kg	0.00305 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		49 mg/kg	1.245	57.393 mg/kg	0.00574 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.515	mg/kg	0.000151 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.83	pH		8.83	pH	8.83 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0284 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS48-01/10/2020-2.40-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS48-01/10/2020-2.40-3.00m
Moisture content:
9.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.806 mg/kg	0.000181 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.1 mg/kg	1.32	10.85 mg/kg	0.00108 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		44 mg/kg	1.7	67.525 mg/kg	0.00675 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.9 mg/kg	1.285	2.205 mg/kg	0.000172 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		23 mg/kg	1.252	25.998 mg/kg	0.0026 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		35.7 mg/kg	1.462	47.116 mg/kg	0.00471 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11 mg/kg	1.56	15.494 mg/kg	0.000993 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.4 mg/kg	1.5	5.961 mg/kg	0.000596 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		31.7 mg/kg	1.579	45.213 mg/kg	0.00452 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.269 mg/kg	0.000127 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		67 mg/kg	1.245	75.306 mg/kg	0.00753 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.035	mg/kg	0.000204 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.87	pH		8.87	pH	8.87 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.035 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS49-01/10/2020-0.70-0.90m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS49-01/10/2020-0.70-0.90m
Moisture content:
8.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.836 mg/kg	0.000184 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.1 mg/kg	1.32	13.454 mg/kg	0.00135 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		75 mg/kg	1.7	117.012 mg/kg	0.0117 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.7 mg/kg	1.285	2.006 mg/kg	0.000156 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		25 mg/kg	1.252	28.728 mg/kg	0.00287 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		45 mg/kg	1.462	60.377 mg/kg	0.00604 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	37 mg/kg	1.56	52.981 mg/kg	0.0034 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.3 mg/kg	1.5	5.922 mg/kg	0.000592 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		27 mg/kg	1.579	39.149 mg/kg	0.00391 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		79 mg/kg	1.245	90.269 mg/kg	0.00903 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.2	mg/kg	3.22	3.547	mg/kg	0.000355 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.03	mg/kg		0.0275	mg/kg	0.00000275 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				0.08	mg/kg		0.0734	mg/kg	0.00000734 %	✓	
			201-469-6	83-32-9									
18		fluorene				0.09	mg/kg		0.0826	mg/kg	0.00000826 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.87	mg/kg		0.799	mg/kg	0.0000799 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.14	mg/kg		0.129	mg/kg	0.0000129 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.89	mg/kg		0.817	mg/kg	0.0000817 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.78	mg/kg		0.716	mg/kg	0.0000716 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.36	mg/kg		0.33	mg/kg	0.000033 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.38	mg/kg		0.349	mg/kg	0.0000349 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.25	mg/kg		0.229	mg/kg	0.0000229 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.13	mg/kg		0.119	mg/kg	0.0000119 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.17	mg/kg		0.156	mg/kg	0.0000156 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.4	mg/kg		0.367	mg/kg	0.0000367 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.15	mg/kg		0.138	mg/kg	0.0000138 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.91	pH		8.91	pH	8.91 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0456 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS49-01/10/2020-0.00-0.90m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS49-01/10/2020-0.00-0.90m
Moisture content:
11.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.766 mg/kg	0.000177 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		45.3 mg/kg	1.32	52.813 mg/kg	0.00528 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		134 mg/kg	1.7	201.09 mg/kg	0.0201 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	4.1 mg/kg	1.285	4.653 mg/kg	0.000362 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		28 mg/kg	1.252	30.949 mg/kg	0.00309 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		51.4 mg/kg	1.462	66.334 mg/kg	0.00663 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	49 mg/kg	1.56	67.489 mg/kg	0.00433 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4 mg/kg	1.5	5.299 mg/kg	0.00053 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		39.3 mg/kg	1.579	54.812 mg/kg	0.00548 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.241 mg/kg	0.000124 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		115 mg/kg	1.245	126.394 mg/kg	0.0126 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.2	mg/kg	3.22	3.412	mg/kg	0.000341 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				0.05	mg/kg		0.0442	mg/kg	0.00000441 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.5	mg/kg		0.442	mg/kg	0.0000442 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.09	mg/kg		0.0795	mg/kg	0.00000795 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.6	mg/kg		0.53	mg/kg	0.000053 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.52	mg/kg		0.459	mg/kg	0.0000459 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.27	mg/kg		0.238	mg/kg	0.0000238 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.31	mg/kg		0.274	mg/kg	0.0000274 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.2	mg/kg		0.177	mg/kg	0.0000177 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.1	mg/kg		0.0883	mg/kg	0.00000883 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.15	mg/kg		0.132	mg/kg	0.0000132 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.3	mg/kg		0.265	mg/kg	0.0000265 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.11	mg/kg		0.0971	mg/kg	0.00000971 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.33	pH		8.33	pH	8.33 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				0.01 mg/kg		0.0088 mg/kg	0.000000883 %	✓	
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0649 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

barium sulfate (EC Number: 231-784-4, CAS Number: 7727-43-7)

Conversion factor: 1.7
Description/Comments: No hazard statements
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/89983 Sigma Aldrich SDS dated 15/4/19
Data source date: 02 Apr 2020
Hazard Statements: None.

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **coronene** (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source:
http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2 H371

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

- **polychlorobiphenyls; PCB** (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

- **pH** (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

arsenic {arsenic trioxide}

Worst case species based on Hazard Statement.

barium {barium sulfate}

conservative

cadmium {cadmium sulfide}

Worst case species based on Hazard Statements.

copper {copper(II) oxide}

Reasonable

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

oxide conversion factor included

chromium in chromium(VI) compounds {chromium(VI) oxide}

most conservative

lead {lead chromate}

Worst case species based on Hazard Statements.

mercury {mercury dichloride}

Worst case species based on Hazard Statements.

molybdenum {molybdenum(VI) oxide}

Worst case species based on Hazard Statements.

nickel {nickel dihydroxide}

Worst case species based on Hazard Statements.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on Hazard Statements.

zinc {zinc oxide}

Concentrations of chromium VI insufficient for zinc chormate to be present.

boron {diboron trioxide; boric oxide}

Reasonable

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.310.4521.8789 (05 Nov 2020)
HazWasteOnline Database: 2020.310.4521.8789 (05 Nov 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

Waste Classification Report

9KU8C-FPHSX-BEEGR

Job name

EMT-20-14108-Batch-1-File-1

Description/Comments

Soil Samples

Project

B967/1

Site

Emmet Road

Related Documents

#	Name	Description
1	EMT-20-14108-Batch-1-File-1.HWOL	.hwol file used to create the Job

Waste Stream Template

EJEL Rilta

Classified by

Name:
Kate Moraes dos Santos
Date:
09 Nov 2020 10:53 GMT
Telephone:

Company:
O'Connor Sutton Cronin & Assoc. Ltd.
OCSC

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	08 Apr 2020
Advanced Hazardous Waste Classification	09 Apr 2020

Report

Created by: Kate Moraes dos Santos
Created date: 09 Nov 2020 10:53 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	TP19-09/10/2020-0.00-1.00m		Non Hazardous		3
2	TP19-09/10/2020-0.80-1.00m		Non Hazardous		6
3	TP19-09/10/2020-1.00-2.00m		Non Hazardous		9
4	TP19-09/10/2020-2.00-3.00m		Non Hazardous		12
5	TP27-09/10/2020-0.80-1.00m		Non Hazardous		15
6	TP27-09/10/2020-1.50-2.00m		Non Hazardous		18
7	TP27-09/10/2020-2.00-3.00m		Non Hazardous		21
8	TP27-09/10/2020-3.00-3.20m		Non Hazardous		24
9	TP35-09/10/2020-0.00-0.85m		Non Hazardous		27
10	TP35-09/10/2020-0.80-0.85m		Non Hazardous		30
11	TP35-09/10/2020-1.00-2.00m		Hazardous	HP 7, HP 11	33
12	TP35-09/10/2020-2.00-3.00m		Non Hazardous		36
13	TP35-09/10/2020-3.00-3.20m		Non Hazardous		39

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
14	TP33-09/10/2020-0.20-1.00m		Non Hazardous		42
15	TP33-09/10/2020-0.80-1.00m		Non Hazardous		45
16	TP33-09/10/2020-1.00-2.00m		Hazardous	HP 7, HP 11	48
17	TP33-09/10/2020-2.00-3.00m		Non Hazardous		51
18	TP33-09/10/2020-3.00-3.20m		Hazardous	HP 7, HP 11	54
19	TP28-09/10/2020-1.00-2.00m		Non Hazardous		57
20	TP28-09/10/2020-2.00-3.00m		Non Hazardous		60
21	TP49-12/10/2020-1.00-2.00m		Non Hazardous		63
22	TP49-12/10/2020-2.00-3.00m		Non Hazardous		66
23	TP49-12/10/2020-3.00-3.20m		Non Hazardous		69
24	TP50-12/10/2020-2.00-2.70m		Non Hazardous		72
25	TP51-12/10/2020-1.70-3.00m		Non Hazardous		75
26	TP51-12/10/2020-2.90-3.00m		Non Hazardous		78

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Appendix C: Version	83

Classification of sample: TP19-09/10/2020-0.00-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP19-09/10/2020-0.00-1.00m
Moisture content:
13.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.862 mg/kg	0.0000862 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		62.2 mg/kg	1.32	70.791 mg/kg	0.00708 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		111 mg/kg	1.7	162.613 mg/kg	0.0163 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.6 mg/kg	1.285	1.773 mg/kg	0.000138 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		39 mg/kg	1.252	42.082 mg/kg	0.00421 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		21.2 mg/kg	1.462	26.709 mg/kg	0.00267 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	103 mg/kg	1.56	138.49 mg/kg	0.00888 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.2 mg/kg	1.353	0.233 mg/kg	0.0000233 %	✓	
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.1 mg/kg	1.5	2.716 mg/kg	0.000272 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		39.2 mg/kg	1.579	53.372 mg/kg	0.00534 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.211 mg/kg	0.000121 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		143 mg/kg	1.245	153.431 mg/kg	0.0153 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.2	mg/kg	3.22	3.331	mg/kg	0.000333 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.19	mg/kg		0.164	mg/kg	0.0000164 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.05	mg/kg		0.0431	mg/kg	0.00000431 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.34	mg/kg		0.293	mg/kg	0.0000293 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.3	mg/kg		0.259	mg/kg	0.0000259 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.16	mg/kg		0.138	mg/kg	0.0000138 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.19	mg/kg		0.164	mg/kg	0.0000164 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.16	mg/kg		0.138	mg/kg	0.0000138 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.1	mg/kg		0.0862	mg/kg	0.00000862 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.12	mg/kg		0.103	mg/kg	0.0000103 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.22	mg/kg		0.19	mg/kg	0.000019 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.09	mg/kg		0.0776	mg/kg	0.00000776 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.44	pH		8.44	pH	8.44 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0664 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP19-09/10/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP19-09/10/2020-0.80-1.00m
Moisture content:
14.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.854 mg/kg	0.0000854 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		27.7 mg/kg	1.32	31.233 mg/kg	0.00312 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		84 mg/kg	1.7	121.917 mg/kg	0.0122 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.3 mg/kg	1.285	1.427 mg/kg	0.000111 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		39 mg/kg	1.252	41.692 mg/kg	0.00417 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		22.1 mg/kg	1.462	27.585 mg/kg	0.00276 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	97 mg/kg	1.56	129.212 mg/kg	0.00828 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.4 mg/kg	1.353	0.462 mg/kg	0.0000462 %	✓	
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		1.6 mg/kg	1.5	2.05 mg/kg	0.000205 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		30.9 mg/kg	1.579	41.681 mg/kg	0.00417 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.2 mg/kg	0.00012 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		132 mg/kg	1.245	140.314 mg/kg	0.014 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.2	mg/kg	3.22	3.3	mg/kg	0.00033 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.19	mg/kg		0.162	mg/kg	0.0000162 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.05	mg/kg		0.0427	mg/kg	0.00000427 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.39	mg/kg		0.333	mg/kg	0.0000333 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.35	mg/kg		0.299	mg/kg	0.0000299 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.21	mg/kg		0.179	mg/kg	0.0000179 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.23	mg/kg		0.196	mg/kg	0.0000196 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.2	mg/kg		0.171	mg/kg	0.0000171 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.12	mg/kg		0.102	mg/kg	0.0000102 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.12	mg/kg		0.102	mg/kg	0.0000102 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.28	mg/kg		0.239	mg/kg	0.0000239 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.11	mg/kg		0.0939	mg/kg	0.00000939 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.2	pH		8.2	pH	8.2 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0553 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP19-09/10/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP19-09/10/2020-1.00-2.00m
Moisture content:
15%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15% Wet Weight Moisture Correction applied (MC)

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
1		antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	1	2 mg/kg		1.7 mg/kg	0.00017 %	✓	
		051-003-00-9							
2		arsenic { arsenic trioxide }		14.2 mg/kg	1.32	15.936 mg/kg	0.00159 %	✓	
		033-003-00-0 / 215-481-4 / 1327-53-3							
3		barium { barium sulfate }		99 mg/kg	1.7	143.014 mg/kg	0.0143 %	✓	
		231-784-4 / 7727-43-7							
4		cadmium { cadmium sulfide }	1	1.7 mg/kg	1.285	1.857 mg/kg	0.000145 %	✓	
		048-010-00-4 / 215-147-8 / 1306-23-6							
5		copper { copper(II) oxide }		25 mg/kg	1.252	26.6 mg/kg	0.00266 %	✓	
		029-016-00-6 / 215-269-1 / 1317-38-0							
6		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		43.1 mg/kg	1.462	53.544 mg/kg	0.00535 %	✓	
		215-160-9 / 1308-38-9							
7		chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
		024-001-00-0 / 215-607-8 / 1333-82-0							
8		lead { lead chromate }	1	20 mg/kg	1.56	26.517 mg/kg	0.0017 %	✓	
		082-004-00-2 / 231-846-0 / 7758-97-6							
9		mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
		080-010-00-X / 231-299-8 / 7487-94-7							
10		molybdenum { molybdenum(VI) oxide }		4.9 mg/kg	1.5	6.248 mg/kg	0.000625 %	✓	
		042-001-00-9 / 215-204-7 / 1313-27-5							
11		nickel { nickel dihydroxide }		32.4 mg/kg	1.579	43.499 mg/kg	0.00435 %	✓	
		028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
		034-002-00-8							
13		zinc { zinc oxide }		86 mg/kg	1.245	90.989 mg/kg	0.0091 %	✓	
		030-013-00-7 / 215-222-5 / 1314-13-2							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.642	mg/kg	0.000164 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.05	mg/kg		0.0425	mg/kg	0.00000425 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.05	mg/kg		0.0425	mg/kg	0.00000425 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.73	pH		8.73	pH	8.73 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0458 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP19-09/10/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP19-09/10/2020-2.00-3.00m
Moisture content:
15.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 15.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.688 mg/kg	0.000169 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.9 mg/kg	1.32	8.803 mg/kg	0.00088 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		20 mg/kg	1.7	28.688 mg/kg	0.00287 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.4 mg/kg	1.285	1.519 mg/kg	0.000118 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		21 mg/kg	1.252	22.186 mg/kg	0.00222 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		46 mg/kg	1.462	56.743 mg/kg	0.00567 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	12 mg/kg	1.56	15.798 mg/kg	0.00101 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.7 mg/kg	1.5	5.951 mg/kg	0.000595 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		21.1 mg/kg	1.579	28.128 mg/kg	0.00281 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		66 mg/kg	1.245	69.336 mg/kg	0.00693 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.359	mg/kg	0.000136 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.45	pH		8.45	pH	8.45 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0291 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP27-09/10/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP27-09/10/2020-0.80-1.00m
Moisture content:
9.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.816 mg/kg	0.000182 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7 mg/kg	1.32	8.392 mg/kg	0.000839 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		59 mg/kg	1.7	91.047 mg/kg	0.0091 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2 mg/kg	1.285	2.334 mg/kg	0.000182 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		25 mg/kg	1.252	28.415 mg/kg	0.00284 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		42.6 mg/kg	1.462	56.534 mg/kg	0.00565 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	21.245 mg/kg	0.00136 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.4 mg/kg	1.5	5.994 mg/kg	0.000599 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		25.6 mg/kg	1.579	36.715 mg/kg	0.00367 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		78 mg/kg	1.245	88.156 mg/kg	0.00882 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.462	mg/kg	0.000146 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.04	mg/kg		0.0363	mg/kg	0.00000363 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.57	pH		8.57	pH	8.57 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0391 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP27-09/10/2020-1.50-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP27-09/10/2020-1.50-2.00m
Moisture content:
12.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	3 mg/kg		2.616 mg/kg	0.000262 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		20.9 mg/kg	1.32	24.063 mg/kg	0.00241 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		139 mg/kg	1.7	205.995 mg/kg	0.0206 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.802 mg/kg	0.000218 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		40 mg/kg	1.252	43.662 mg/kg	0.00437 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		36.9 mg/kg	1.462	47.028 mg/kg	0.0047 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	24.483 mg/kg	0.00157 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		13.1 mg/kg	1.5	17.137 mg/kg	0.00171 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		45.8 mg/kg	1.579	63.081 mg/kg	0.00631 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				10 mg/kg	1.405	12.252 mg/kg	0.00123 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		105 mg/kg	1.245	113.966 mg/kg	0.0114 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.965	mg/kg	0.000197 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.39	pH		8.39	pH	8.39 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0605 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP27-09/10/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP27-09/10/2020-2.00-3.00m
Moisture content:
8.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.838 mg/kg	0.000184 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10 mg/kg	1.32	12.134 mg/kg	0.00121 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		69 mg/kg	1.7	107.768 mg/kg	0.0108 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.4 mg/kg	1.285	2.835 mg/kg	0.000221 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		34 mg/kg	1.252	39.113 mg/kg	0.00391 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		34.6 mg/kg	1.462	46.474 mg/kg	0.00465 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	128 mg/kg	1.56	183.484 mg/kg	0.0118 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6.5 mg/kg	1.5	8.961 mg/kg	0.000896 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		34.8 mg/kg	1.579	50.514 mg/kg	0.00505 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.874 mg/kg	0.000387 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		75 mg/kg	1.245	85.792 mg/kg	0.00858 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.48	mg/kg	0.000148 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.33	pH		8.33	pH	8.33 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0533 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP27-09/10/2020-3.00-3.20m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP27-09/10/2020-3.00-3.20m
Moisture content:
10%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.8 mg/kg	0.00018 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.2 mg/kg	1.32	14.497 mg/kg	0.00145 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		246 mg/kg	1.7	376.273 mg/kg	0.0376 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.892 mg/kg	0.000225 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		36 mg/kg	1.252	40.558 mg/kg	0.00406 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		34.5 mg/kg	1.462	45.381 mg/kg	0.00454 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	25.269 mg/kg	0.00162 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		6 mg/kg	1.5	8.101 mg/kg	0.00081 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		42.6 mg/kg	1.579	60.558 mg/kg	0.00606 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.794 mg/kg	0.000379 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		95 mg/kg	1.245	106.423 mg/kg	0.0106 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.449	mg/kg	0.000145 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				0.015	mg/kg		0.0135	mg/kg	0.00000135 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.48	pH		8.48	pH	8.48 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0733 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

xylene: (conc.: 1.35e-06%)

Classification of sample: TP35-09/10/2020-0.00-0.85m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP35-09/10/2020-0.00-0.85m
Moisture content:
9.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.812 mg/kg	0.000181 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.4 mg/kg	1.32	10.048 mg/kg	0.001 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		60 mg/kg	1.7	92.386 mg/kg	0.00924 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.2 mg/kg	1.285	1.397 mg/kg	0.000109 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		85 mg/kg	1.252	96.399 mg/kg	0.00964 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		50.2 mg/kg	1.462	66.473 mg/kg	0.00665 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	24 mg/kg	1.56	33.917 mg/kg	0.00217 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.3 mg/kg	1.5	4.485 mg/kg	0.000449 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		27.4 mg/kg	1.579	39.21 mg/kg	0.00392 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		90 mg/kg	1.245	101.494 mg/kg	0.0101 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.042	mg/kg	0.000204 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.06	mg/kg		0.0544	mg/kg	0.00000544 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.06	mg/kg		0.0544	mg/kg	0.00000544 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.0272	mg/kg	0.00000272 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.46	pH		8.46	pH	8.46 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				0.01	mg/kg		0.009	mg/kg	0.000000906 %	✓	
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0494 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP35-09/10/2020-0.80-0.85m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP35-09/10/2020-0.80-0.85m
Moisture content:
8.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.83 mg/kg	0.000183 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.8 mg/kg	1.32	9.423 mg/kg	0.000942 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		54 mg/kg	1.7	83.973 mg/kg	0.0084 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.7 mg/kg	1.285	0.823 mg/kg	0.0000641 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		159 mg/kg	1.252	182.115 mg/kg	0.0182 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		53.4 mg/kg	1.462	71.413 mg/kg	0.00714 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	25 mg/kg	1.56	35.681 mg/kg	0.00229 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.7 mg/kg	1.5	5.079 mg/kg	0.000508 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		19 mg/kg	1.579	27.46 mg/kg	0.00275 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		79 mg/kg	1.245	89.974 mg/kg	0.009 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.768	mg/kg	0.000177 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.26	mg/kg		0.238	mg/kg	0.0000238 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.07	mg/kg		0.0641	mg/kg	0.00000641 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.36	mg/kg		0.329	mg/kg	0.0000329 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.33	mg/kg		0.302	mg/kg	0.0000302 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.2	mg/kg		0.183	mg/kg	0.0000183 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.21	mg/kg		0.192	mg/kg	0.0000192 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.16	mg/kg		0.146	mg/kg	0.0000146 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.1	mg/kg		0.0915	mg/kg	0.00000915 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.12	mg/kg		0.11	mg/kg	0.000011 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.23	mg/kg		0.21	mg/kg	0.000021 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.09	mg/kg		0.0823	mg/kg	0.00000823 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				193	mg/kg		176.595	mg/kg	0.0177 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0679 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0177%)

Classification of sample: TP35-09/10/2020-1.00-2.00m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
TP35-09/10/2020-1.00-2.00m
Moisture content:
10.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.178%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.178%)

Determinands

Moisture content: 10.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.786 mg/kg	0.000179 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.6 mg/kg	1.32	12.498 mg/kg	0.00125 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		71 mg/kg	1.7	107.754 mg/kg	0.0108 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.525 mg/kg	0.000196 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		29 mg/kg	1.252	32.417 mg/kg	0.00324 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		35.9 mg/kg	1.462	46.856 mg/kg	0.00469 %	✓	

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
7		chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
		024-001-00-0 / 215-607-8 / 1333-82-0							
8		lead { lead chromate }	1	13 mg/kg	1.56	18.108 mg/kg	0.00116 %	✓	
		082-004-00-2 / 231-846-0 / 7758-97-6							
9		mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
		080-010-00-X / 231-299-8 / 7487-94-7							
10		molybdenum { molybdenum(VI) oxide }		3.7 mg/kg	1.5	4.957 mg/kg	0.000496 %	✓	
		042-001-00-9 / 215-204-7 / 1313-27-5							
11		nickel { nickel dihydroxide }		32.6 mg/kg	1.579	45.982 mg/kg	0.0046 %	✓	
		028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		1 mg/kg	1.405	1.255 mg/kg	0.000125 %	✓	
		034-002-00-8							
13		zinc { zinc oxide }		75 mg/kg	1.245	83.365 mg/kg	0.00834 %	✓	
		030-013-00-7 / 215-222-5 / 1314-13-2							
14		boron { diboron trioxide; boric oxide }		0.7 mg/kg	3.22	2.013 mg/kg	0.000201 %	✓	
		005-008-00-8 / 215-125-8 / 1303-86-2							
15		naphthalene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		601-052-00-2 / 202-049-5 / 91-20-3							
16		acenaphthylene		0.17 mg/kg		0.152 mg/kg	0.0000152 %	✓	
		205-917-1 / 208-96-8							
17		acenaphthene		0.11 mg/kg		0.0982 mg/kg	0.00000982 %	✓	
		201-469-6 / 83-32-9							
18		fluorene		0.56 mg/kg		0.5 mg/kg	0.00005 %	✓	
		201-695-5 / 86-73-7							
19		phenanthrene		0.94 mg/kg		0.839 mg/kg	0.0000839 %	✓	
		201-581-5 / 85-01-8							
20		anthracene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1 / 120-12-7							
21		fluoranthene		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		<LOD
		205-912-4 / 206-44-0							
22		pyrene		0.07 mg/kg		0.0625 mg/kg	0.00000625 %	✓	
		204-927-3 / 129-00-0							
23		benzo[a]anthracene		<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
		601-033-00-9 / 200-280-6 / 56-55-3							
24		chrysene		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
		601-048-00-0 / 205-923-4 / 218-01-9							
25		benzo[a]pyrene; benzo[def]chrysene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		601-032-00-3 / 200-028-5 / 50-32-8							
26		indeno[123-cd]pyrene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-893-2 / 193-39-5							
27		dibenz[a,h]anthracene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		601-041-00-2 / 200-181-8 / 53-70-3							
28		benzo[ghi]perylene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-883-8 / 191-24-2							
29		coronene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-881-7 / 191-07-1							
30		benzo[b]fluoranthene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		601-034-00-4 / 205-911-9 / 205-99-2							
31		benzo[k]fluoranthene		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
		601-036-00-5 / 205-916-6 / 207-08-9							
32		benzo[j]fluoranthene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
		601-035-00-X / 205-910-3 / 205-82-3							
33		benzene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-020-00-8 / 200-753-7 / 71-43-2							
34		toluene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-021-00-3 / 203-625-9 / 108-88-3							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.204	mg/kg		0.182	mg/kg	0.0000182 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.025	mg/kg		0.0223	mg/kg	0.00000223 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.33	pH		8.33	pH	8.33 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				1995	mg/kg		1781.535	mg/kg	0.178 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.214 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 2.23e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 0.00001%)
TPH (C6 to C40) petroleum group: (conc.: 0.178%)

Classification of sample: TP35-09/10/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP35-09/10/2020-2.00-3.00m
Moisture content:
10.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.794 mg/kg	0.000179 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.1 mg/kg	1.32	10.777 mg/kg	0.00108 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		56 mg/kg	1.7	85.37 mg/kg	0.00854 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.4 mg/kg	1.285	2.767 mg/kg	0.000215 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		35 mg/kg	1.252	39.3 mg/kg	0.00393 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		43.6 mg/kg	1.462	57.16 mg/kg	0.00572 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	25.185 mg/kg	0.00161 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.2 mg/kg	1.5	5.652 mg/kg	0.000565 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		37.4 mg/kg	1.579	52.989 mg/kg	0.0053 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	5.041 mg/kg	0.000504 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		84 mg/kg	1.245	93.787 mg/kg	0.00938 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.022	mg/kg	0.000202 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.74	pH		8.74	pH	8.74 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0428 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP35-09/10/2020-3.00-3.20m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP35-09/10/2020-3.00-3.20m
Moisture content:
10.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.792 mg/kg	0.000179 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10 mg/kg	1.32	11.83 mg/kg	0.00118 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		59 mg/kg	1.7	89.843 mg/kg	0.00898 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.879 mg/kg	0.000224 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		32 mg/kg	1.252	35.891 mg/kg	0.00359 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		33.2 mg/kg	1.462	43.477 mg/kg	0.00435 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	14 mg/kg	1.56	19.566 mg/kg	0.00125 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.3 mg/kg	1.5	4.436 mg/kg	0.000444 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		34.1 mg/kg	1.579	48.259 mg/kg	0.00483 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.777 mg/kg	0.000378 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		79 mg/kg	1.245	88.106 mg/kg	0.00881 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.02	mg/kg	0.000202 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.67	pH		8.67	pH	8.67 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				107	mg/kg		95.872	mg/kg	0.00959 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
											Total:	0.0443 %	

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00959%)

Classification of sample: TP33-09/10/2020-0.20-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP33-09/10/2020-0.20-1.00m
Moisture content:
10.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.786 mg/kg	0.000179 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10 mg/kg	1.32	11.791 mg/kg	0.00118 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		85 mg/kg	1.7	129.002 mg/kg	0.0129 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.869 mg/kg	0.000223 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		24 mg/kg	1.252	26.828 mg/kg	0.00268 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		43.2 mg/kg	1.462	56.383 mg/kg	0.00564 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	25.072 mg/kg	0.00161 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.4 mg/kg	1.5	5.895 mg/kg	0.000589 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		32.2 mg/kg	1.579	45.418 mg/kg	0.00454 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.255 mg/kg	0.000125 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		77 mg/kg	1.245	85.588 mg/kg	0.00856 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.013	mg/kg	0.000201 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.46	pH		8.46	pH	8.46 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.044 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP33-09/10/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP33-09/10/2020-0.80-1.00m
Moisture content:
10.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.898 mg/kg	0.0000898 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.9 mg/kg	1.32	8.181 mg/kg	0.000818 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		39 mg/kg	1.7	59.52 mg/kg	0.00595 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.539 mg/kg	0.000198 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		21 mg/kg	1.252	23.606 mg/kg	0.00236 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		36.1 mg/kg	1.462	47.38 mg/kg	0.00474 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	67 mg/kg	1.56	93.848 mg/kg	0.00602 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.3 mg/kg	1.5	5.793 mg/kg	0.000579 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		27.5 mg/kg	1.579	39.006 mg/kg	0.0039 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		82 mg/kg	1.245	91.656 mg/kg	0.00917 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.157	mg/kg	0.000116 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.24	pH		8.24	pH	8.24 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				298	mg/kg		267.604	mg/kg	0.0268 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0612 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0268%)

Classification of sample: TP33-09/10/2020-1.00-2.00m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
TP33-09/10/2020-1.00-2.00m
Moisture content:
12.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.231%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.231%)

Determinands

Moisture content: 12.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.746 mg/kg	0.000175 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.9 mg/kg	1.32	11.411 mg/kg	0.00114 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		95 mg/kg	1.7	140.949 mg/kg	0.0141 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.6 mg/kg	1.285	2.917 mg/kg	0.000227 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		29 mg/kg	1.252	31.691 mg/kg	0.00317 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		41.6 mg/kg	1.462	53.079 mg/kg	0.00531 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
7		chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<**LOD**
		024-001-00-0	215-607-8	1333-82-0									
8		lead { lead chromate }			1	14	mg/kg	1.56	19.064	mg/kg	0.00122 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
9		mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<**LOD**
		080-010-00-X	231-299-8	7487-94-7									
10		molybdenum { molybdenum(VI) oxide }				4.9	mg/kg	1.5	6.417	mg/kg	0.000642 %	✓	
		042-001-00-9	215-204-7	1313-27-5									
11		nickel { nickel dihydroxide }				35.4	mg/kg	1.579	48.813	mg/kg	0.00488 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				2	mg/kg	1.405	2.453	mg/kg	0.000245 %	✓	
		034-002-00-8											
13		zinc { zinc oxide }				95	mg/kg	1.245	103.23	mg/kg	0.0103 %	✓	
		030-013-00-7	215-222-5	1314-13-2									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.405	mg/kg	0.000141 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.16	mg/kg		0.14	mg/kg	0.000014 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.44	mg/kg		0.384	mg/kg	0.0000384 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				0.32	mg/kg		0.279	mg/kg	0.0000279 %	✓	
			201-469-6	83-32-9									
18		fluorene				1.32	mg/kg		1.152	mg/kg	0.000115 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				2.65	mg/kg		2.313	mg/kg	0.000231 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.11	mg/kg		0.096	mg/kg	0.0000096 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.11	mg/kg		0.096	mg/kg	0.0000096 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.17	mg/kg		0.148	mg/kg	0.0000148 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.06	mg/kg		0.0524	mg/kg	0.00000524 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.585	mg/kg		0.511	mg/kg	0.0000511 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.104	mg/kg		0.0908	mg/kg	0.00000908 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38		pH				7.97	pH		7.97	pH	7.97 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				2646	mg/kg		2309.958	mg/kg	0.231 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.273 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 9.08e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 0.00005%)
TPH (C6 to C40) petroleum group: (conc.: 0.231%)

Classification of sample: TP33-09/10/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP33-09/10/2020-2.00-3.00m
Moisture content:
9.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.806 mg/kg	0.000181 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.7 mg/kg	1.32	9.18 mg/kg	0.000918 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		53 mg/kg	1.7	81.337 mg/kg	0.00813 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.1 mg/kg	1.285	2.437 mg/kg	0.00019 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		27 mg/kg	1.252	30.52 mg/kg	0.00305 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		37.3 mg/kg	1.462	49.228 mg/kg	0.00492 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	12 mg/kg	1.56	16.902 mg/kg	0.00108 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.7 mg/kg	1.5	6.367 mg/kg	0.000637 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		29.6 mg/kg	1.579	42.218 mg/kg	0.00422 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.806 mg/kg	0.000381 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		76 mg/kg	1.245	85.422 mg/kg	0.00854 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.163	mg/kg	0.000116 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.21	mg/kg		0.19	mg/kg	0.000019 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.17	mg/kg		0.154	mg/kg	0.0000154 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				0.15	mg/kg		0.135	mg/kg	0.0000135 %	✓	
			201-469-6	83-32-9									
18		fluorene				0.61	mg/kg		0.551	mg/kg	0.0000551 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				1.15	mg/kg		1.038	mg/kg	0.000104 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.06	mg/kg		0.0542	mg/kg	0.00000542 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.09	mg/kg		0.0813	mg/kg	0.00000813 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				0.164	mg/kg		0.148	mg/kg	0.0000148 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.028	mg/kg		0.0253	mg/kg	0.00000253 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.13	pH		8.13	pH	8.13 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				933	mg/kg		842.499	mg/kg	0.0842 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.117 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 2.53e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 0.00001%)
TPH (C6 to C40) petroleum group: (conc.: 0.0842%)

Classification of sample: TP33-09/10/2020-3.00-3.20m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
TP33-09/10/2020-3.00-3.20m
Moisture content:
11.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.129%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.129%)

Determinands

Moisture content: 11.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.884 mg/kg	0.0000884 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.1 mg/kg	1.32	9.454 mg/kg	0.000945 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		81 mg/kg	1.7	121.692 mg/kg	0.0122 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.8 mg/kg	1.285	2.045 mg/kg	0.000159 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		24 mg/kg	1.252	26.558 mg/kg	0.00266 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		38.4 mg/kg	1.462	49.613 mg/kg	0.00496 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
7		chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<**LOD**
		024-001-00-0	215-607-8	1333-82-0									
8		lead { lead chromate }			1	16	mg/kg	1.56	22.062	mg/kg	0.00141 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
9		mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<**LOD**
		080-010-00-X	231-299-8	7487-94-7									
10		molybdenum { molybdenum(VI) oxide }				4	mg/kg	1.5	5.305	mg/kg	0.00053 %	✓	
		042-001-00-9	215-204-7	1313-27-5									
11		nickel { nickel dihydroxide }				32.6	mg/kg	1.579	45.519	mg/kg	0.00455 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				2	mg/kg	1.405	2.484	mg/kg	0.000248 %	✓	
		034-002-00-8											
13		zinc { zinc oxide }				60	mg/kg	1.245	66.02	mg/kg	0.0066 %	✓	
		030-013-00-7	215-222-5	1314-13-2									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.423	mg/kg	0.000142 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.14	mg/kg		0.124	mg/kg	0.0000124 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.09	mg/kg		0.0796	mg/kg	0.00000796 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				0.09	mg/kg		0.0796	mg/kg	0.00000796 %	✓	
			201-469-6	83-32-9									
18		fluorene				0.34	mg/kg		0.301	mg/kg	0.0000301 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.66	mg/kg		0.583	mg/kg	0.0000583 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				0.03	mg/kg		0.0265	mg/kg	0.00000265 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.07	mg/kg		0.0619	mg/kg	0.00000619 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.02	mg/kg		0.0177	mg/kg	0.00000177 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.041	mg/kg		0.0362	mg/kg	0.00000362 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36	●	ethylbenzene				0.007	mg/kg		0.0061	mg/kg	0.000000619 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37	●	polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38	●	pH				8.21	pH		8.21	pH	8.21 pH		
				PH									
39		cyanides { ● salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40	●	TPH (C6 to C40) petroleum group				1461	mg/kg		1291.524	mg/kg	0.129 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.164 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 6.19e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 3.62e-06%)
TPH (C6 to C40) petroleum group: (conc.: 0.129%)

Classification of sample: TP28-09/10/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP28-09/10/2020-1.00-2.00m
Moisture content:
11.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.778 mg/kg	0.000178 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.4 mg/kg	1.32	13.381 mg/kg	0.00134 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		68 mg/kg	1.7	102.739 mg/kg	0.0103 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.3 mg/kg	1.285	2.628 mg/kg	0.000204 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		35 mg/kg	1.252	38.949 mg/kg	0.00389 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		38.2 mg/kg	1.462	49.634 mg/kg	0.00496 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	23.573 mg/kg	0.00151 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.7 mg/kg	1.5	7.602 mg/kg	0.00076 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		38.3 mg/kg	1.579	53.78 mg/kg	0.00538 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		84 mg/kg	1.245	92.95 mg/kg	0.0093 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.004	mg/kg	0.0002 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0437 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP28-09/10/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP28-09/10/2020-2.00-3.00m
Moisture content:
11.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.766 mg/kg	0.000177 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.2 mg/kg	1.32	10.726 mg/kg	0.00107 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		48 mg/kg	1.7	72.032 mg/kg	0.0072 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.1 mg/kg	1.285	2.383 mg/kg	0.000185 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		31 mg/kg	1.252	34.265 mg/kg	0.00343 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		36.4 mg/kg	1.462	46.976 mg/kg	0.0047 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	23.414 mg/kg	0.0015 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.9 mg/kg	1.5	6.491 mg/kg	0.000649 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		36.1 mg/kg	1.579	50.349 mg/kg	0.00503 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.722 mg/kg	0.000372 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		86 mg/kg	1.245	94.521 mg/kg	0.00945 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.99	mg/kg	0.000199 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.31	pH		8.31	pH	8.31 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0395 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP49-12/10/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP49-12/10/2020-1.00-2.00m
Moisture content:
11.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.764 mg/kg	0.000176 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.8 mg/kg	1.32	14.906 mg/kg	0.00149 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		64 mg/kg	1.7	95.934 mg/kg	0.00959 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.3 mg/kg	1.285	2.607 mg/kg	0.000203 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		37 mg/kg	1.252	40.85 mg/kg	0.00409 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		38.3 mg/kg	1.462	49.372 mg/kg	0.00494 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	29 mg/kg	1.56	39.897 mg/kg	0.00256 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.1 mg/kg	1.5	6.748 mg/kg	0.000675 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		41.8 mg/kg	1.579	58.232 mg/kg	0.00582 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		101 mg/kg	1.245	110.882 mg/kg	0.0111 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.988	mg/kg	0.000199 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.24	mg/kg		0.212	mg/kg	0.0000212 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.05	mg/kg		0.0441	mg/kg	0.00000441 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.2	mg/kg		0.176	mg/kg	0.0000176 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.18	mg/kg		0.159	mg/kg	0.0000159 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.1	mg/kg		0.0882	mg/kg	0.00000882 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.09	mg/kg		0.0794	mg/kg	0.00000794 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.07	mg/kg		0.0617	mg/kg	0.00000617 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.08	mg/kg		0.0706	mg/kg	0.00000706 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.03	mg/kg		0.0265	mg/kg	0.00000265 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.65	pH		8.65	pH	8.65 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0466 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP49-12/10/2020-2.00-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP49-12/10/2020-2.00-3.00m
Moisture content:
12.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.744 mg/kg	0.000174 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14.7 mg/kg	1.32	16.924 mg/kg	0.00169 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		72 mg/kg	1.7	106.702 mg/kg	0.0107 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.4 mg/kg	1.285	2.69 mg/kg	0.000209 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		38 mg/kg	1.252	41.479 mg/kg	0.00415 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		32.5 mg/kg	1.462	41.42 mg/kg	0.00414 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	19 mg/kg	1.56	25.843 mg/kg	0.00166 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.7 mg/kg	1.5	6.148 mg/kg	0.000615 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		41.3 mg/kg	1.579	56.883 mg/kg	0.00569 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.675 mg/kg	0.000368 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		102 mg/kg	1.245	110.71 mg/kg	0.0111 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.246	mg/kg	0.000225 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.03	mg/kg		0.0262	mg/kg	0.00000262 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.03	mg/kg		0.0262	mg/kg	0.00000262 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.03	mg/kg		0.0262	mg/kg	0.00000262 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0462 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP49-12/10/2020-3.00-3.20m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP49-12/10/2020-3.00-3.20m
Moisture content:
9.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.818 mg/kg	0.000182 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.4 mg/kg	1.32	14.882 mg/kg	0.00149 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		67 mg/kg	1.7	103.506 mg/kg	0.0104 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.921 mg/kg	0.000227 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		34 mg/kg	1.252	38.687 mg/kg	0.00387 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		40.2 mg/kg	1.462	53.408 mg/kg	0.00534 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	22.686 mg/kg	0.00145 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.3 mg/kg	1.5	7.227 mg/kg	0.000723 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		42.2 mg/kg	1.579	60.589 mg/kg	0.00606 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				6 mg/kg	1.405	7.663 mg/kg	0.000766 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		89 mg/kg	1.245	100.699 mg/kg	0.0101 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	2.049	mg/kg	0.000205 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.55	pH		8.55	pH	8.55 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0463 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP50-12/10/2020-2.00-2.70m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP50-12/10/2020-2.00-2.70m
Moisture content:
7.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.846 mg/kg	0.000185 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12.8 mg/kg	1.32	15.599 mg/kg	0.00156 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		63 mg/kg	1.7	98.825 mg/kg	0.00988 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.4 mg/kg	1.285	2.847 mg/kg	0.000222 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		34 mg/kg	1.252	39.283 mg/kg	0.00393 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		33.3 mg/kg	1.462	44.922 mg/kg	0.00449 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	24.475 mg/kg	0.00157 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.1 mg/kg	1.5	7.062 mg/kg	0.000706 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		40.6 mg/kg	1.579	59.19 mg/kg	0.00592 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	5.187 mg/kg	0.000519 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		97 mg/kg	1.245	111.44 mg/kg	0.0111 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.486	mg/kg	0.000149 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.41	pH		8.41	pH	8.41 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0458 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP51-12/10/2020-1.70-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP51-12/10/2020-1.70-3.00m
Moisture content:
9.1%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.1% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.818 mg/kg	0.000182 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.7 mg/kg	1.32	12.842 mg/kg	0.00128 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		50 mg/kg	1.7	77.243 mg/kg	0.00772 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2 mg/kg	1.285	2.337 mg/kg	0.000182 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		31 mg/kg	1.252	35.274 mg/kg	0.00353 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		67.1 mg/kg	1.462	89.146 mg/kg	0.00891 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	21.268 mg/kg	0.00136 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.5 mg/kg	1.5	6.137 mg/kg	0.000614 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		53.2 mg/kg	1.579	76.383 mg/kg	0.00764 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	5.109 mg/kg	0.000511 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		93 mg/kg	1.245	105.224 mg/kg	0.0105 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.463	mg/kg	0.000146 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.45	pH		8.45	pH	8.45 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0481 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP51-12/10/2020-2.90-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP51-12/10/2020-2.90-3.00m
Moisture content:
7.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 7.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.846 mg/kg	0.000185 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.6 mg/kg	1.32	14.136 mg/kg	0.00141 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		39 mg/kg	1.7	61.178 mg/kg	0.00612 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.61 mg/kg	0.000203 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		39 mg/kg	1.252	45.06 mg/kg	0.00451 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		40 mg/kg	1.462	53.961 mg/kg	0.0054 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	21.596 mg/kg	0.00138 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5 mg/kg	1.5	6.923 mg/kg	0.000692 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		37.3 mg/kg	1.579	54.379 mg/kg	0.00544 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				7 mg/kg	1.405	9.078 mg/kg	0.000908 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		88 mg/kg	1.245	101.101 mg/kg	0.0101 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.6	mg/kg	3.22	1.783	mg/kg	0.000178 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.37	pH		8.37	pH	8.37 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0421 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

barium sulfate (EC Number: 231-784-4, CAS Number: 7727-43-7)

Conversion factor: 1.7
Description/Comments: No hazard statements
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/89983 Sigma Aldrich SDS dated 15/4/19
Data source date: 02 Apr 2020
Hazard Statements: None.

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

pyrene (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **coronene** (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source:
http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2 H371

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

- **polychlorobiphenyls; PCB** (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

- **pH** (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

arsenic {arsenic trioxide}

Worst case species based on Hazard Statement.

barium {barium sulfate}

conservative

cadmium {cadmium sulfide}

Worst case species based on Hazard Statements.

copper {copper(II) oxide}

Reasonable

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

oxide conversion factor included

chromium in chromium(VI) compounds {chromium(VI) oxide}

most conservative

lead {lead chromate}

Worst case species based on Hazard Statements.

mercury {mercury dichloride}

Worst case species based on Hazard Statements.

molybdenum {molybdenum(VI) oxide}

Worst case species based on Hazard Statements.

nickel {nickel dihydroxide}

Worst case species based on Hazard Statements.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on Hazard Statements.

zinc {zinc oxide}

Concentrations of chromium VI insufficient for zinc chormate to be present.

boron {diboron trioxide; boric oxide}

Reasonable

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.310.4521.8789 (05 Nov 2020)
HazWasteOnline Database: 2020.310.4521.8789 (05 Nov 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

Waste Classification Report

MR3JL-M7F3J-6NLK9

Job name

EMT-20-14172-Batch-1-File-2

Description/Comments

Soil Samples

Project

B967/1

Site

Emmet Road

Related Documents

#	Name	Description
1	EMT-20-14172-Batch-1-File-2.hwol	.hwol file used to create the Job

Waste Stream Template

EJEL Rilta

Classified by

Name:
Kate Moraes dos Santos
Date:
20 Nov 2020 18:14 GMT
Telephone:

Company:
O'Connor Sutton Cronin & Assoc. Ltd.
OCSC

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	08 Apr 2020
Advanced Hazardous Waste Classification	09 Apr 2020

Report

Created by: Kate Moraes dos Santos
Created date: 20 Nov 2020 18:14 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	BH03-09/10/2020-0.80-1.00m		Non Hazardous		2
2	BH03-09/10/2020-3.00-3.40m		Non Hazardous		5

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Appendix A: Classifier defined and non CLP determinands	8
Appendix B: Rationale for selection of metal species	9
Appendix C: Version	10

Classification of sample: BH03-09/10/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH03-09/10/2020-0.80-1.00m
Moisture content:
10%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5.8 mg/kg	1.32	6.892 mg/kg	0.000689 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		27 mg/kg	1.7	41.298 mg/kg	0.00413 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.7 mg/kg	1.285	0.81 mg/kg	0.000063 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		13 mg/kg	1.252	14.646 mg/kg	0.00146 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		44.4 mg/kg	1.462	58.404 mg/kg	0.00584 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	20 mg/kg	1.56	28.077 mg/kg	0.0018 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.8 mg/kg	1.5	5.131 mg/kg	0.000513 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		15.7 mg/kg	1.579	22.318 mg/kg	0.00223 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		38 mg/kg	1.245	42.569 mg/kg	0.00426 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.159	mg/kg	0.000116 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.09	pH		8.09	pH	8.09 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.0269 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH03-09/10/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH03-09/10/2020-3.00-3.40m
Moisture content:
8.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.836 mg/kg	0.000184 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.8 mg/kg	1.32	14.302 mg/kg	0.00143 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		40 mg/kg	1.7	62.406 mg/kg	0.00624 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.9 mg/kg	1.285	2.242 mg/kg	0.000174 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		31 mg/kg	1.252	35.623 mg/kg	0.00356 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		43.5 mg/kg	1.462	58.364 mg/kg	0.00584 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	22.911 mg/kg	0.00147 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.9 mg/kg	1.5	8.125 mg/kg	0.000813 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		39.3 mg/kg	1.579	56.984 mg/kg	0.0057 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.869 mg/kg	0.000387 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		73 mg/kg	1.245	83.413 mg/kg	0.00834 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.182	mg/kg	0.000118 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.08	mg/kg		0.0734	mg/kg	0.00000734 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.04	mg/kg		0.0367	mg/kg	0.00000367 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.09	pH		8.09	pH	8.09 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0398 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

- **barium sulfate** (EC Number: 231-784-4, CAS Number: 7727-43-7)

Conversion factor: 1.7
Description/Comments: No hazard statements
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/89983 Sigma Aldrich SDS dated 15/4/19
Data source date: 02 Apr 2020
Hazard Statements: None.

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

coronene (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source:
http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2 H371

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

polychlorobiphenyls; PCB (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

arsenic {arsenic trioxide}

Worst case species based on Hazard Statement.

barium {barium sulfate}

conservative

cadmium {cadmium sulfide}

Worst case species based on Hazard Statements.

copper {copper(II) oxide}

Reasonable

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

oxide conversion factor included

chromium in chromium(VI) compounds {chromium(VI) oxide}

most conservative

lead {lead chromate}

Worst case species based on Hazard Statements.

mercury {mercury dichloride}

Worst case species based on Hazard Statements.

molybdenum {molybdenum(VI) oxide}

Worst case species based on Hazard Statements.

nickel {nickel dihydroxide}

Worst case species based on Hazard Statements.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on Hazard Statements.

zinc {zinc oxide}

Concentrations of chromium VI insufficient for zinc chormate to be present.

boron {diboron trioxide; boric oxide}

Reasonable

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.315.4525.8798 (10 Nov 2020)
HazWasteOnline Database: 2020.315.4525.8798 (10 Nov 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2019 - Regulation (EU) 2019/1021 of 20 June 2019

Waste Classification Report

3EQHL-GSNN4-77623

Job name

EMT-20-14178-Batch-1-File-2

Description/Comments

Soil Samples

Project

B967/1

Site

Emmet Road

Related Documents

#	Name	Description
1	EMT-20-14178-Batch-1-File-2.hwol	.hwol file used to create the Job

Waste Stream Template

EJEL Rilta

Classified by

Name:
Kate Moraes dos Santos
Date:
09 Nov 2020 10:56 GMT
Telephone:

Company:
O'Connor Sutton Cronin & Assoc. Ltd.
OCSC

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	08 Apr 2020
Advanced Hazardous Waste Classification	09 Apr 2020

Report

Created by: Kate Moraes dos Santos
Created date: 09 Nov 2020 10:56 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	TP 37-13/10/2020-1.00-2.00m		Non Hazardous		3
2	TP 37-13/10/2020-2.00-3.00m		Hazardous	HP 7, HP 11	6
3	TP 37-13/10/2020-3.00-3.20m		Non Hazardous		9
4	TP 40-13/10/2020-2.40-3.00m		Non Hazardous		12
5	TP 40-13/10/2020-3.00-3.20m		Hazardous	HP 7, HP 11	15
6	TP 09-13/10/2020-0.80-1.00m		Non Hazardous		18
7	TP 17-13/10/2020-0.80-1.00m		Non Hazardous		21
8	TP 22-13/10/2020-0.80-1.00m		Non Hazardous		24
9	TP 25-13/10/2020-0.80-1.00m		Non Hazardous		27

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Appendix C: Version	32

Classification of sample: TP 37-13/10/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP 37-13/10/2020-1.00-2.00m
Moisture content:
10.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.897 mg/kg	0.0000897 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.2 mg/kg	1.32	12.08 mg/kg	0.00121 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		105 mg/kg	1.7	160.069 mg/kg	0.016 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.882 mg/kg	0.000224 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		21 mg/kg	1.252	23.58 mg/kg	0.00236 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		38.3 mg/kg	1.462	50.212 mg/kg	0.00502 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	12 mg/kg	1.56	16.79 mg/kg	0.00108 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.6 mg/kg	1.5	6.19 mg/kg	0.000619 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		36.2 mg/kg	1.579	51.289 mg/kg	0.00513 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		79 mg/kg	1.245	88.204 mg/kg	0.00882 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.444	mg/kg	0.000144 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.67	pH		8.67	pH	8.67 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0464 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP 37-13/10/2020-2.00-3.00m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
TP 37-13/10/2020-2.00-3.00m
Moisture content:
9.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.112%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.112%)

Determinands

Moisture content: 9.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.908 mg/kg	0.0000908 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.5 mg/kg	1.32	8.991 mg/kg	0.000899 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		99 mg/kg	1.7	152.773 mg/kg	0.0153 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.4 mg/kg	1.285	1.634 mg/kg	0.000127 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		20 mg/kg	1.252	22.732 mg/kg	0.00227 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		35.9 mg/kg	1.462	47.643 mg/kg	0.00476 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
7		chromium in chromium(VI) compounds { chromium(VI) oxide }				<0.3	mg/kg	1.923	<0.577	mg/kg	<0.0000577 %		<**LOD**
		024-001-00-0	215-607-8	1333-82-0									
8		lead { lead chromate }			1	12	mg/kg	1.56	16.996	mg/kg	0.00109 %	✓	
		082-004-00-2	231-846-0	7758-97-6									
9		mercury { mercury dichloride }				<0.1	mg/kg	1.353	<0.135	mg/kg	<0.0000135 %		<**LOD**
		080-010-00-X	231-299-8	7487-94-7									
10		molybdenum { molybdenum(VI) oxide }				3.5	mg/kg	1.5	4.768	mg/kg	0.000477 %	✓	
		042-001-00-9	215-204-7	1313-27-5									
11		nickel { nickel dihydroxide }				26.7	mg/kg	1.579	38.293	mg/kg	0.00383 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				2	mg/kg	1.405	2.551	mg/kg	0.000255 %	✓	
		034-002-00-8											
13		zinc { zinc oxide }				57	mg/kg	1.245	64.421	mg/kg	0.00644 %	✓	
		030-013-00-7	215-222-5	1314-13-2									
14		boron { diboron trioxide; boric oxide }				0.9	mg/kg	3.22	2.631	mg/kg	0.000263 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<**LOD**
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
			201-469-6	83-32-9									
18		fluorene				0.23	mg/kg		0.209	mg/kg	0.0000209 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.15	mg/kg		0.136	mg/kg	0.0000136 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			204-371-1	120-12-7									
21		fluoranthene				0.04	mg/kg		0.0363	mg/kg	0.00000363 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.08	mg/kg		0.0726	mg/kg	0.00000726 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<**LOD**
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.0272	mg/kg	0.00000272 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<**LOD**
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<**LOD**
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<**LOD**
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.094	mg/kg		0.0854	mg/kg	0.00000854 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.017	mg/kg		0.0154	mg/kg	0.00000154 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.16	pH		8.16	pH	8.16 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				1228	mg/kg		1115.024	mg/kg	0.112 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.148 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 1.54e-06%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 8.54e-06%)
TPH (C6 to C40) petroleum group: (conc.: 0.112%)

Classification of sample: TP 37-13/10/2020-3.00-3.20m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP 37-13/10/2020-3.00-3.20m
Moisture content:
8.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	<1 mg/kg		<1 mg/kg	<0.0001 %		<**LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.4 mg/kg	1.32	8.911 mg/kg	0.000891 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		77 mg/kg	1.7	119.347 mg/kg	0.0119 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.1 mg/kg	1.285	1.289 mg/kg	0.0001 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		17 mg/kg	1.252	19.408 mg/kg	0.00194 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		35 mg/kg	1.462	46.653 mg/kg	0.00467 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11 mg/kg	1.56	15.648 mg/kg	0.001 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3 mg/kg	1.5	4.105 mg/kg	0.00041 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		32.2 mg/kg	1.579	46.384 mg/kg	0.00464 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.281 mg/kg	0.000128 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		46 mg/kg	1.245	52.218 mg/kg	0.00522 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1	mg/kg	3.22	2.937	mg/kg	0.000294 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				0.07	mg/kg		0.0638	mg/kg	0.00000638 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.07	mg/kg		0.0638	mg/kg	0.00000638 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				0.025	mg/kg		0.0228	mg/kg	0.00000228 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.26	pH		8.26	pH	8.26 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				830	mg/kg		756.96	mg/kg	0.0757 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.107 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 2.28e-06%)
TPH (C6 to C40) petroleum group: (conc.: 0.0757%)

Classification of sample: TP 40-13/10/2020-2.40-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP 40-13/10/2020-2.40-3.00m
Moisture content:
17.7%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 17.7% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.646 mg/kg	0.000165 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13.4 mg/kg	1.32	14.561 mg/kg	0.00146 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		85 mg/kg	1.7	118.89 mg/kg	0.0119 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.3 mg/kg	1.285	2.433 mg/kg	0.000189 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		29 mg/kg	1.252	29.876 mg/kg	0.00299 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		43 mg/kg	1.462	51.723 mg/kg	0.00517 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	59 mg/kg	1.56	75.74 mg/kg	0.00486 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.6 mg/kg	1.5	6.914 mg/kg	0.000691 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		40.8 mg/kg	1.579	53.037 mg/kg	0.0053 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.156 mg/kg	0.000116 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		107 mg/kg	1.245	109.611 mg/kg	0.011 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.9	mg/kg	3.22	5.035	mg/kg	0.000503 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				0.06	mg/kg		0.0494	mg/kg	0.00000494 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				0.1	mg/kg		0.0823	mg/kg	0.00000823 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.06	mg/kg		0.0494	mg/kg	0.00000494 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.05	mg/kg		0.0412	mg/kg	0.00000411 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				0.006	mg/kg		0.0049	mg/kg	0.000000494 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.16	pH		8.16	pH	8.16 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				644	mg/kg		530.012	mg/kg	0.053 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0976 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 4.94e-07%)
TPH (C6 to C40) petroleum group: (conc.: 0.053%)

Classification of sample: TP 40-13/10/2020-3.00-3.20m

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:
TP 40-13/10/2020-3.00-3.20m
Moisture content:
18.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.195%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.195%)

Determinands

Moisture content: 18.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.817 mg/kg	0.0000817 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8.7 mg/kg	1.32	9.385 mg/kg	0.000938 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		48 mg/kg	1.7	66.648 mg/kg	0.00666 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.4 mg/kg	1.285	1.47 mg/kg	0.000114 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		26 mg/kg	1.252	26.59 mg/kg	0.00266 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		38.3 mg/kg	1.462	45.734 mg/kg	0.00457 %	✓	

#		Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number / EC Number / CAS Number							
7		chromium in chromium(VI) compounds { chromium(VI) oxide }		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
		024-001-00-0 / 215-607-8 / 1333-82-0							
8		lead { lead chromate }	1	22 mg/kg	1.56	28.036 mg/kg	0.0018 %	✓	
		082-004-00-2 / 231-846-0 / 7758-97-6							
9		mercury { mercury dichloride }		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
		080-010-00-X / 231-299-8 / 7487-94-7							
10		molybdenum { molybdenum(VI) oxide }		4.4 mg/kg	1.5	5.393 mg/kg	0.000539 %	✓	
		042-001-00-9 / 215-204-7 / 1313-27-5							
11		nickel { nickel dihydroxide }		36.9 mg/kg	1.579	47.618 mg/kg	0.00476 %	✓	
		028-008-00-X / 235-008-5 [1] 234-348-1 [2] / 12054-48-7 [1] 11113-74-9 [2]							
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }		2 mg/kg	1.405	2.296 mg/kg	0.00023 %	✓	
		034-002-00-8							
13		zinc { zinc oxide }		65 mg/kg	1.245	66.101 mg/kg	0.00661 %	✓	
		030-013-00-7 / 215-222-5 / 1314-13-2							
14		boron { diboron trioxide; boric oxide }		1.3 mg/kg	3.22	3.42 mg/kg	0.000342 %	✓	
		005-008-00-8 / 215-125-8 / 1303-86-2							
15		naphthalene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		601-052-00-2 / 202-049-5 / 91-20-3							
16		acenaphthylene		0.05 mg/kg		0.0409 mg/kg	0.00000409 %	✓	
		205-917-1 / 208-96-8							
17		acenaphthene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6 / 83-32-9							
18		fluorene		0.31 mg/kg		0.253 mg/kg	0.0000253 %	✓	
		201-695-5 / 86-73-7							
19		phenanthrene		0.49 mg/kg		0.4 mg/kg	0.00004 %	✓	
		201-581-5 / 85-01-8							
20		anthracene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		204-371-1 / 120-12-7							
21		fluoranthene		0.05 mg/kg		0.0409 mg/kg	0.00000409 %	✓	
		205-912-4 / 206-44-0							
22		pyrene		0.07 mg/kg		0.0572 mg/kg	0.00000572 %	✓	
		204-927-3 / 129-00-0							
23		benzo[a]anthracene		<0.06 mg/kg		<0.06 mg/kg	<0.000006 %		<LOD
		601-033-00-9 / 200-280-6 / 56-55-3							
24		chrysene		0.04 mg/kg		0.0327 mg/kg	0.00000327 %	✓	
		601-048-00-0 / 205-923-4 / 218-01-9							
25		benzo[a]pyrene; benzo[def]chrysene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		601-032-00-3 / 200-028-5 / 50-32-8							
26		indeno[123-cd]pyrene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-893-2 / 193-39-5							
27		dibenz[a,h]anthracene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		601-041-00-2 / 200-181-8 / 53-70-3							
28		benzo[ghi]perylene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-883-8 / 191-24-2							
29		coronene		<0.04 mg/kg		<0.04 mg/kg	<0.000004 %		<LOD
		205-881-7 / 191-07-1							
30		benzo[b]fluoranthene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		601-034-00-4 / 205-911-9 / 205-99-2							
31		benzo[k]fluoranthene		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
		601-036-00-5 / 205-916-6 / 207-08-9							
32		benzo[j]fluoranthene		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
		601-035-00-X / 205-910-3 / 205-82-3							
33		benzene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-020-00-8 / 200-753-7 / 71-43-2							
34		toluene		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
		601-021-00-3 / 203-625-9 / 108-88-3							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
35		xylene				0.074	mg/kg		0.0605	mg/kg	0.00000605 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				0.012	mg/kg		0.0098	mg/kg	0.00000098 %	✓	
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<**LOD**
		602-039-00-4	215-648-1	1336-36-3									
38		pH				7.99	pH		7.99	pH	7.99 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<**LOD**
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				2384	mg/kg		1947.728	mg/kg	0.195 %	✓	
				TPH									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.224 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 9.8e-07%)

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 6.05e-06%)
TPH (C6 to C40) petroleum group: (conc.: 0.195%)

Classification of sample: TP 09-13/10/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP 09-13/10/2020-0.80-1.00m
Moisture content:
13.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.724 mg/kg	0.000172 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.8 mg/kg	1.32	8.877 mg/kg	0.000888 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		84 mg/kg	1.7	123.059 mg/kg	0.0123 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	3.6 mg/kg	1.285	3.988 mg/kg	0.00031 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		23 mg/kg	1.252	24.818 mg/kg	0.00248 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		55.7 mg/kg	1.462	70.174 mg/kg	0.00702 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17 mg/kg	1.56	22.858 mg/kg	0.00147 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.4 mg/kg	1.5	6.983 mg/kg	0.000698 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		37.6 mg/kg	1.579	51.193 mg/kg	0.00512 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.211 mg/kg	0.000121 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		80 mg/kg	1.245	85.835 mg/kg	0.00858 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1	mg/kg	3.22	2.776	mg/kg	0.000278 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.64	pH		8.64	pH	8.64 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4							
42		phenol				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2							
								Total:	0.045 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP 17-13/10/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP 17-13/10/2020-0.80-1.00m
Moisture content:
14.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.712 mg/kg	0.000171 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		10.4 mg/kg	1.32	11.754 mg/kg	0.00118 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		66 mg/kg	1.7	96.016 mg/kg	0.0096 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.2 mg/kg	1.285	2.42 mg/kg	0.000188 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		25 mg/kg	1.252	26.788 mg/kg	0.00268 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		44.2 mg/kg	1.462	55.298 mg/kg	0.00553 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	16 mg/kg	1.56	21.363 mg/kg	0.00137 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.7 mg/kg	1.5	4.751 mg/kg	0.000475 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		38.8 mg/kg	1.579	52.46 mg/kg	0.00525 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		84 mg/kg	1.245	89.5 mg/kg	0.00895 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.205	mg/kg	0.00022 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.55	pH		8.55	pH	8.55 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0413 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP 22-13/10/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP 22-13/10/2020-0.80-1.00m
Moisture content:
24.9%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 24.9% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	4 mg/kg		3.004 mg/kg	0.0003 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17.3 mg/kg	1.32	17.154 mg/kg	0.00172 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		145 mg/kg	1.7	185.069 mg/kg	0.0185 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.3 mg/kg	1.285	1.255 mg/kg	0.0000976 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		52 mg/kg	1.252	48.884 mg/kg	0.00489 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		22.5 mg/kg	1.462	24.697 mg/kg	0.00247 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		**<LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	160 mg/kg	1.56	187.427 mg/kg	0.012 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		**<LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.3 mg/kg	1.5	2.591 mg/kg	0.000259 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		28.2 mg/kg	1.579	33.451 mg/kg	0.00335 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1 mg/kg	1.405	1.055 mg/kg	0.000106 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		237 mg/kg	1.245	221.543 mg/kg	0.0222 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1.7	mg/kg	3.22	4.111	mg/kg	0.000411 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				0.12	mg/kg		0.0901	mg/kg	0.00000901 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.09	mg/kg		0.0676	mg/kg	0.00000676 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				0.24	mg/kg		0.18	mg/kg	0.000018 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.24	mg/kg		0.18	mg/kg	0.000018 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.15	mg/kg		0.113	mg/kg	0.0000113 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.17	mg/kg		0.128	mg/kg	0.0000128 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.17	mg/kg		0.128	mg/kg	0.0000128 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.08	mg/kg		0.0601	mg/kg	0.00000601 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.12	mg/kg		0.0901	mg/kg	0.00000901 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.24	mg/kg		0.18	mg/kg	0.000018 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.09	mg/kg		0.0676	mg/kg	0.00000676 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				0.015	mg/kg		0.0113	mg/kg	0.00000113 %	✓	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				7.44	pH		7.44	pH	7.44 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				89	mg/kg		66.839	mg/kg	0.00668 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0734 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinands:

xylene: (conc.: 1.13e-06%)
TPH (C6 to C40) petroleum group: (conc.: 0.00668%)

Classification of sample: TP 25-13/10/2020-0.80-1.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
TP 25-13/10/2020-0.80-1.00m
Moisture content:
11.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 11.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.884 mg/kg	0.0000884 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.3 mg/kg	1.32	8.52 mg/kg	0.000852 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		67 mg/kg	1.7	100.659 mg/kg	0.0101 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.3 mg/kg	1.285	1.477 mg/kg	0.000115 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		16 mg/kg	1.252	17.705 mg/kg	0.00177 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		46.8 mg/kg	1.462	60.466 mg/kg	0.00605 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	18 mg/kg	1.56	24.82 mg/kg	0.00159 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		3.4 mg/kg	1.5	4.509 mg/kg	0.000451 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		30.2 mg/kg	1.579	42.168 mg/kg	0.00422 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<**LOD**
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		66 mg/kg	1.245	72.622 mg/kg	0.00726 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.7	mg/kg	3.22	1.992	mg/kg	0.000199 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.69	pH		8.69	pH	8.69 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0383 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

- **barium sulfate** (EC Number: 231-784-4, CAS Number: 7727-43-7)

Conversion factor: 1.7
Description/Comments: No hazard statements
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/89983 Sigma Aldrich SDS dated 15/4/19
Data source date: 02 Apr 2020
Hazard Statements: None.

- **chromium(III) oxide (worst case)** (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

- **acenaphthene** (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

- **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

- **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

indeno[123-cd]pyrene (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

benzo[ghi]perylene (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

coronene (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source:
http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2 H371

ethylbenzene (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

polychlorobiphenyls; PCB (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

TPH (C6 to C40) petroleum group (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

arsenic {arsenic trioxide}
Worst case species based on Hazard Statement.
barium {barium sulfate}
conservative
cadmium {cadmium sulfide}
Worst case species based on Hazard Statements.
copper {copper(II) oxide}
Reasonable
chromium in chromium(III) compounds {chromium(III) oxide (worst case)}
oxide conversion factor included
chromium in chromium(VI) compounds {chromium(VI) oxide}
most conservative
lead {lead chromate}
Worst case species based on Hazard Statements.
mercury {mercury dichloride}
Worst case species based on Hazard Statements.
molybdenum {molybdenum(VI) oxide}
Worst case species based on Hazard Statements.
nickel {nickel dihydroxide}
Worst case species based on Hazard Statements.
selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}
Worst case species based on Hazard Statements.
zinc {zinc oxide}
Concentrations of chromium VI insufficient for zinc chormate to be present.
boron {diboron trioxide; boric oxide}
Reasonable
cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}
Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.310.4521.8789 (05 Nov 2020)
HazWasteOnline Database: 2020.310.4521.8789 (05 Nov 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

Waste Classification Report

H6NE6-DXKG4-CZPJU

Job name

EMT-20-14656-Batch-1-File-2

Description/Comments

Soil Samples

Project

B967/1

Site

Emmet Road

Related Documents

#	Name	Description
1	EMT-20-14656-Batch-1-File-2.hwol	.hwol file used to create the Job

Waste Stream Template

EJEL Rilta

Classified by

Name:
Kate Moraes dos Santos
Date:
20 Nov 2020 18:13 GMT
Telephone:

Company:
O'Connor Sutton Cronin & Assoc. Ltd.
OCSC

HazWasteOnline™ Training Record:

Course	Date
Hazardous Waste Classification	08 Apr 2020
Advanced Hazardous Waste Classification	09 Apr 2020

Report

Created by: Kate Moraes dos Santos
Created date: 20 Nov 2020 18:13 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	BH02-15/10/2020-2.50-2.80m		Non Hazardous		3
2	BH02-15/10/2020-7.00-7.30m		Non Hazardous		4
3	BH03-07/10/2020-3.50-4.00m		Non Hazardous		5
4	BH04-07/10/2020-2.50m		Non Hazardous		6
5	BH04-07/10/2020-3.40m		Non Hazardous		7
6	BH06-09/10/2020-0.20-0.60m		Non Hazardous		10
7	BH07-12/10/2020-2.50m		Non Hazardous		11
8	BH07-12/10/2020-3.00-3.40m		Non Hazardous		12
9	BH07-12/10/2020-5.00-5.50m		Non Hazardous		15
10	BH08-12/10/2020-1.00-2.00m		Non Hazardous		16
11	BH08-12/10/2020-3.00-3.40m		Non Hazardous		19
12	BH09-12/10/2020-0.50-0.80m		Non Hazardous		22
13	BH09-13/10/2020-2.20-2.50m		Non Hazardous		23

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
14	BH11-13/10/2020-0.35-1.05m		Non Hazardous		24
15	BH12-14/10/2020-1.85-3.00m		Non Hazardous		25
16	BH12-14/10/2020-3.00-3.40m		Non Hazardous		28

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Appendix A: Classifier defined and non CLP determinands	31
Appendix B: Rationale for selection of metal species	32
Appendix C: Version	33

Classification of sample: BH02-15/10/2020-2.50-2.80m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH02-15/10/2020-2.50-2.80m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	pH		PH		8.54 pH		8.54 pH	8.54 pH		
								Total:	0%		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH02-15/10/2020-7.00-7.30m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH02-15/10/2020-7.00-7.30m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1		pH		PH		8.47 pH		8.47 pH	8.47 pH		
								Total:	0%		

Key

	User supplied data
	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH03-07/10/2020-3.50-4.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH03-07/10/2020-3.50-4.00m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	pH				8.45 pH		8.45 pH	8.45 pH		
				PH							
								Total:	0%		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH04-07/10/2020-2.50m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH04-07/10/2020-2.50m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	pH		PH		8.67 pH		8.67 pH	8.67 pH		
								Total:	0%		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH04-07/10/2020-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH04-07/10/2020-3.40m
Moisture content:
10.8%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 10.8% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.784 mg/kg	0.000178 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11.1 mg/kg	1.32	13.073 mg/kg	0.00131 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		77 mg/kg	1.7	116.73 mg/kg	0.0117 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2.5 mg/kg	1.285	2.866 mg/kg	0.000223 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		43 mg/kg	1.252	48.013 mg/kg	0.0048 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		40.7 mg/kg	1.462	53.061 mg/kg	0.00531 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	20.87 mg/kg	0.00134 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		5.6 mg/kg	1.5	7.494 mg/kg	0.000749 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		42.9 mg/kg	1.579	60.442 mg/kg	0.00604 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				4 mg/kg	1.405	5.013 mg/kg	0.000501 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		87 mg/kg	1.245	96.595 mg/kg	0.00966 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.436	mg/kg	0.000144 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.06	mg/kg		0.0535	mg/kg	0.00000535 %	✓	
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.03	mg/kg		0.0268	mg/kg	0.00000268 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.22	pH		8.22	pH	8.22 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0475 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH06-09/10/2020-0.20-0.60m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH06-09/10/2020-0.20-0.60m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	pH		PH		8.94 pH		8.94 pH	8.94 pH		
								Total:	0%		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH07-12/10/2020-2.50m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH07-12/10/2020-2.50m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1		pH		PH		8.29 pH		8.29 pH	8.29 pH		
								Total:	0%		

Key

	User supplied data
	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH07-12/10/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH07-12/10/2020-3.00-3.40m
Moisture content:
9.2%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.2% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.816 mg/kg	0.000182 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9.9 mg/kg	1.32	11.869 mg/kg	0.00119 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		72 mg/kg	1.7	111.108 mg/kg	0.0111 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	2 mg/kg	1.285	2.334 mg/kg	0.000182 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		34 mg/kg	1.252	38.645 mg/kg	0.00386 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		34.8 mg/kg	1.462	46.183 mg/kg	0.00462 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	15 mg/kg	1.56	21.245 mg/kg	0.00136 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		4.6 mg/kg	1.5	6.266 mg/kg	0.000627 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		39 mg/kg	1.579	55.933 mg/kg	0.00559 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				3 mg/kg	1.405	3.827 mg/kg	0.000383 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		89 mg/kg	1.245	100.588 mg/kg	0.0101 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.462	mg/kg	0.000146 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.38	pH		8.38	pH	8.38 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0449 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH07-12/10/2020-5.00-5.50m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH07-12/10/2020-5.00-5.50m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1		pH		PH		8.4 pH		8.4 pH	8.4 pH		
								Total:	0%		

Key

	User supplied data
	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH08-12/10/2020-1.00-2.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH08-12/10/2020-1.00-2.00m
Moisture content:
2.4%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 2.4% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5.6 mg/kg	1.32	7.216 mg/kg	0.000722 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		31 mg/kg	1.7	51.421 mg/kg	0.00514 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.3 mg/kg	1.285	0.376 mg/kg	0.0000293 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		10 mg/kg	1.252	12.217 mg/kg	0.00122 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		44.4 mg/kg	1.462	63.336 mg/kg	0.00633 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<LOD
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	6 mg/kg	1.56	9.134 mg/kg	0.000586 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<LOD
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.4 mg/kg	1.5	3.514 mg/kg	0.000351 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		8.8 mg/kg	1.579	13.566 mg/kg	0.00136 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		68 mg/kg	1.245	82.609 mg/kg	0.00826 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.3	mg/kg	3.22	0.943	mg/kg	0.0000943 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				0.09	mg/kg		0.0878	mg/kg	0.00000878 %	✓	
			201-581-5	85-01-8									
20		anthracene				0.05	mg/kg		0.0488	mg/kg	0.00000488 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				0.1	mg/kg		0.0976	mg/kg	0.00000976 %	✓	
			205-912-4	206-44-0									
22		pyrene				0.11	mg/kg		0.107	mg/kg	0.0000107 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				0.08	mg/kg		0.0781	mg/kg	0.00000781 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				0.06	mg/kg		0.0586	mg/kg	0.00000586 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				0.07	mg/kg		0.0683	mg/kg	0.00000683 %	✓	
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				0.05	mg/kg		0.0488	mg/kg	0.00000488 %	✓	
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				0.06	mg/kg		0.0586	mg/kg	0.00000586 %	✓	
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				0.08	mg/kg		0.0781	mg/kg	0.00000781 %	✓	
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				0.03	mg/kg		0.0293	mg/kg	0.00000293 %	✓	
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				9.15	pH		9.15	pH	9.15 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				178	mg/kg		173.728	mg/kg	0.0174 %	✓	
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0421 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Concentrations too low to be flammable. No evidence of free draining hydrocarbon liquid.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0174%)

Classification of sample: BH08-12/10/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH08-12/10/2020-3.00-3.40m
Moisture content:
6.6%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 6.6% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	2 mg/kg		1.868 mg/kg	0.000187 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5.1 mg/kg	1.32	6.289 mg/kg	0.000629 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		22 mg/kg	1.7	34.922 mg/kg	0.00349 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	1.8 mg/kg	1.285	2.161 mg/kg	0.000168 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		20 mg/kg	1.252	23.383 mg/kg	0.00234 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		28.7 mg/kg	1.462	39.178 mg/kg	0.00392 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	9 mg/kg	1.56	13.112 mg/kg	0.000841 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.3 mg/kg	1.5	3.223 mg/kg	0.000322 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		20.8 mg/kg	1.579	30.685 mg/kg	0.00307 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.625 mg/kg	0.000262 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		56 mg/kg	1.245	65.104 mg/kg	0.00651 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.5	mg/kg	3.22	1.504	mg/kg	0.00015 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.18	pH		8.18	pH	8.18 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0274 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH09-12/10/2020-0.50-0.80m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH09-12/10/2020-0.50-0.80m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	pH		PH		8.17 pH		8.17 pH	8.17 pH		
								Total:	0%		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH09-13/10/2020-2.20-2.50m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH09-13/10/2020-2.20-2.50m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	pH				8.23 pH		8.23 pH	8.23 pH		
				PH							
								Total:	0%		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH11-13/10/2020-0.35-1.05m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH11-13/10/2020-0.35-1.05m

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Wet Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1	●	pH		PH		8.42 pH		8.42 pH	8.42 pH		
								Total:	0%		

Key

	User supplied data
●	Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH12-14/10/2020-1.85-3.00m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH12-14/10/2020-1.85-3.00m
Moisture content:
8.3%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 8.3% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.917 mg/kg	0.0000917 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6.9 mg/kg	1.32	8.354 mg/kg	0.000835 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		21 mg/kg	1.7	32.728 mg/kg	0.00327 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.2 mg/kg	1.285	0.236 mg/kg	0.0000183 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		22 mg/kg	1.252	25.253 mg/kg	0.00253 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		28.7 mg/kg	1.462	38.465 mg/kg	0.00385 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	12 mg/kg	1.56	17.164 mg/kg	0.0011 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		1.8 mg/kg	1.5	2.476 mg/kg	0.000248 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		39.1 mg/kg	1.579	56.632 mg/kg	0.00566 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.577 mg/kg	0.000258 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		25 mg/kg	1.245	28.535 mg/kg	0.00285 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				0.8	mg/kg	3.22	2.362	mg/kg	0.000236 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.49	pH		8.49	pH	8.49 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0265 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH12-14/10/2020-3.00-3.40m

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
BH12-14/10/2020-3.00-3.40m
Moisture content:
9.5%
(wet weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 9.5% Wet Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	antimony { antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex }	051-003-00-9			1	1 mg/kg		0.905 mg/kg	0.0000905 %	✓	
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7.4 mg/kg	1.32	8.842 mg/kg	0.000884 %	✓	
3	barium { barium sulfate }		231-784-4	7727-43-7		23 mg/kg	1.7	35.375 mg/kg	0.00354 %	✓	
4	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1	0.6 mg/kg	1.285	0.698 mg/kg	0.0000543 %	✓	
5	copper { copper(II) oxide }	029-016-00-6	215-269-1	1317-38-0		24 mg/kg	1.252	27.189 mg/kg	0.00272 %	✓	
6	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		27.1 mg/kg	1.462	35.845 mg/kg	0.00358 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<0.3 mg/kg	1.923	<0.577 mg/kg	<0.0000577 %		<**LOD**
8	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	10 mg/kg	1.56	14.116 mg/kg	0.000905 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.1 mg/kg	1.353	<0.135 mg/kg	<0.0000135 %		<**LOD**
10	molybdenum { molybdenum(VI) oxide }	042-001-00-9	215-204-7	1313-27-5		2.6 mg/kg	1.5	3.53 mg/kg	0.000353 %	✓	
11	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		40.5 mg/kg	1.579	57.893 mg/kg	0.00579 %	✓	
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2 mg/kg	1.405	2.543 mg/kg	0.000254 %	✓	
13	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		37 mg/kg	1.245	41.679 mg/kg	0.00417 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		boron { diboron trioxide; boric oxide }				1	mg/kg	3.22	2.914	mg/kg	0.000291 %	✓	
		005-008-00-8	215-125-8	1303-86-2									
15		naphthalene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-917-1	208-96-8									
17		acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9									
18		fluorene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			201-695-5	86-73-7									
19		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
20		anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			204-371-1	120-12-7									
21		fluoranthene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-912-4	206-44-0									
22		pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			204-927-3	129-00-0									
23		benzo[a]anthracene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
25		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-883-8	191-24-2									
29		coronene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
			205-881-7	191-07-1									
30		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
31		benzo[k]fluoranthene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
32		benzo[j]fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-035-00-X	205-910-3	205-82-3									
33		benzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
36		ethylbenzene				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
37		polychlorobiphenyls; PCB				<0.035	mg/kg		<0.035	mg/kg	<0.0000035 %		<LOD
		602-039-00-4	215-648-1	1336-36-3									
38		pH				8.47	pH		8.47	pH	8.47 pH		
				PH									
39		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.5	mg/kg	1.884	<0.942	mg/kg	<0.0000942 %		<LOD
		006-007-00-5											
40		TPH (C6 to C40) petroleum group				<52	mg/kg		<52	mg/kg	<0.0052 %		<LOD
				TPH									

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
41		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.005	mg/kg		<0.005	mg/kg	<0.0000005 %		<**LOD**
		603-181-00-X	216-653-1	1634-04-4									
42		phenol				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0282 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
ND	Not detected
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

barium sulfate (EC Number: 231-784-4, CAS Number: 7727-43-7)

Conversion factor: 1.7
Description/Comments: No hazard statements
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/89983 Sigma Aldrich SDS dated 15/4/19
Data source date: 02 Apr 2020
Hazard Statements: None.

chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

fluoranthene (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **coronene** (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source:
http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2 H371

- **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

CLP index number: 601-023-00-4
Description/Comments:
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

- **polychlorobiphenyls; PCB** (EC Number: 215-648-1, CAS Number: 1336-36-3)

CLP index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans; POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 1A H350
Reason for additional Hazards Statement(s):
29 Sep 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

- **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

CLP index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

antimony {antimony compounds, with the exception of the tetroxide (Sb2O4), pentoxide (Sb2O5), trisulphide (Sb2S3), pentasulphide (Sb2S5) and those specified elsewhere in this Annex}

Worst case species based on risk phrases

arsenic {arsenic trioxide}

Worst case species based on Hazard Statement.

barium {barium sulfate}

conservative

cadmium {cadmium sulfide}

Worst case species based on Hazard Statements.

copper {copper(II) oxide}

Reasonable

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

oxide conversion factor included

chromium in chromium(VI) compounds {chromium(VI) oxide}

most conservative

lead {lead chromate}

Worst case species based on Hazard Statements.

mercury {mercury dichloride}

Worst case species based on Hazard Statements.

molybdenum {molybdenum(VI) oxide}

Worst case species based on Hazard Statements.

nickel {nickel dihydroxide}

Worst case species based on Hazard Statements.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Worst case species based on Hazard Statements.

zinc {zinc oxide}

Concentrations of chromium VI insufficient for zinc chormate to be present.

boron {diboron trioxide; boric oxide}

Reasonable

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2020.315.4525.8798 (10 Nov 2020)
HazWasteOnline Database: 2020.315.4525.8798 (10 Nov 2020)

This classification utilises the following guidance and legislation:
WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
10th ATP - Regulation (EU) 2017/776 of 4 May 2017
HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
POPs Regulation 2019 - Regulation (EU) 2019/1021 of 20 June 2019

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Appendix F
Waste Soil Classification Grids

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2020 Waste Soil Classification Grids

Field sampling completed in October 2020

Waste Soil Classification Grid Map

Borehole Surface Elevation varies between 23.45 to 26.76mAOD

LEGEND

- A - Inert
- B1 - Inert Licensed
- B2 - Inert Licensed with Elevated Limits
- C1 - Non-Haz Criteria
- C2 - Non-Haz Criteria but with Quantifiable Asbestos
- D - Hazardous

- 25 x 25 meter grid
- Inaccessible
- Site Location Boundary
- Sample Locations (Trial Pit, Geobore and Window Sample)

WS01 WS02 WS03 WS04 WS05 WS06 WS07 WS08 WS09 WS10 WS11 WS13 WS14 WS15 WS16 WS17 WS18 WS20 WS21 WS22 WS23 WS24 WS25 WS26 WS27 WS28 WS29 WS30 WS31 WS32 WS34 WS36 WS37 WS38 WS39 WS40 WS41 WS42 WS43 WS44 WS45 WS46 WS47 WS48 WS49 WS50 WS51

BH03 BH04 BH07 BH08 BH12

TP09 TP17 TP19 TP22 TP25 TP27 TP28 TP33 TP35 TP37 TP40 TP42 TP47 TP49 TP50 TP51

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2020 Waste Soil Classification Grids

Field sampling completed in October 2020

Waste Soil Classification Grid Map 1

26.76 to 25.76mAOD

LEGEND

- A - Inert
- B1 - Inert Licensed
- B2 - Inert Licensed with Elevated Limits
- C1 - Non-Haz Criteria
- C2 - Non-Haz Criteria but with Quantifiable Asbestos
- D - Hazardous

- 25 x 25 meter grid
- Inaccessible
- Sample Locations (Trial Pit, Geobore and Window Sample)

WS01 WS02 WS03 WS04 WS05 WS06 WS07 WS08 WS09 WS10 WS11 WS13 WS14 WS15 WS16 WS17 WS18 WS20 WS21 WS22 WS23 WS24 WS25 WS26 WS27 WS28 WS29 WS30 WS31 WS32 WS34 WS36 WS38 WS39 WS40 WS41 WS42 WS43 WS44 WS45 WS46 WS47 WS48

BH03 BH04 BH07 BH08 BH12

TP09 TP17 TP19 TP22 TP25 TP27 TP28 TP33 TP35 TP37 TP40 TP42 TP47 TP49 TP50 TP51

B1 from 26.03mAOD

B1 from 25.95mAOD

B1 from 25.79mAOD

B1 from 26.23mAOD

B1 from 26.09mAOD

C1 from 26.70mAOD

B1 from 26.27mAOD

B1 from 25.87mAOD

B1 from 26.48mAOD

B1 from 26.20mAOD

B1 from 26.09mAOD

N

Emmet Road OCSC

2020 Waste Soil Classification Grids

Field sampling completed in October 2020

Waste Soil Classification Grid Map 2

25.76 to 24.76mAOD

LEGEND

- A - Inert
- B1 - Inert Licensed
- B2 - Inert Licensed with Elevated Limits
- C1 - Non-Haz Criteria
- C2 - Non-Haz Criteria but with Quantifiable Asbestos
- D - Hazardous
- D - Hazardous with >0.1% Asbestos
- 25 x 25 meter grid
- Inaccessible
- Sample Locations (Trial Pit, Geobore and Window Sample)

WS01 WS02 WS03 WS04 WS05 WS06 WS07 WS08 WS09 WS10 WS11 WS13 WS14 WS15 WS16 WS17 WS18 WS20 WS21 WS22 WS23 WS24 WS26 WS27 WS28 WS29 WS30 WS32 WS34 WS36 WS37 WS38 WS39 WS40 WS41 WS42 WS43 WS44 WS45 WS46 WS48 WS50 WS51

BH03 BH04 BH07 BH08 BH12

TP09 TP17 TP19 TP22 TP25 TP27 TP33 TP35 TP37 TP40 TP42 TP47 TP49 TP50 TP51

D from 24.83mAOD

B1 from 25.03mAOD

B1 from 25.31mAOD

B1 from 24.97mAOD

B1 from 25.42mAOD

B1 from 25.25mAOD

B1 from 24.83mAOD

B1 from 25.71mAOD

B1 from 25.45mAOD

B1 from 25.17mAOD

B1 from 24.78mAOD

B1 from 25.69mAOD

B1 from 25.36mAOD

D from 25.53mAOD

B1 from 25.35mAOD

B1 til 24.79mAOD

B1 from 25.36mAOD

B1 from 25.58mAOD

B1 from 25.56mAOD

D from 25.63mAOD

C1 til 25.70mAOD then B1

B1 from 25.46mAOD

B1 til 25.58mAOD then B1 from 25.49mAOD

N

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2020 Waste Soil Classification Grids

Field sampling completed in October 2020

Waste Soil Classification Grid Map 3

24.76 to 23.76mAOD

LEGEND

- A - Inert
- B1 - Inert Licensed
- B2 - Inert Licensed with Elevated Limits
- C1 - Non-Haz Criteria
- C2 - Non-Haz Criteria but with Quantifiable Asbestos
- D - Hazardous
- D - Hazardous with >1% Asbestos
- 25 x 25 meter grid
- Inaccessible
- Sample Locations (Trial Pit, Geobore and Window Sample)

WS02
WS03
WS04
WS07
WS08
WS06
BH04
WS10
TP09
WS13
WS14
WS15
WS16
WS17
TP17
TP22
BH07
WS20
WS21
WS23
WS24
TP25
WS25
WS26
WS27
WS28
WS29
WS30
TP28
TP33
WS32
WS34
TP35
WS36
TP37
WS38
WS41
WS42
WS43
WS40
TP40
TP42
WS44
WS45
WS46
WS47
TP47
WS48
TP49
TP50
WS49
WS51

B1 from 24.27mAOD

B1 from 24.17mAOD

B1 from 24.51mAOD

B1 from 24.19mAOD

B1 from 23.80mAOD

D til 23.83mAOD then B1

B1 from 24.58mAOD

B1 from 24.38mAOD

B2 from 24.73mAOD

B1 from 24.63mAOD

B1 from 24.41mAOD

C1 from 24.65mAOD

B1 from 24.51mAOD

B1 from 24.57mAOD

B1 til 24.17mAOD then D

B1 til 23.78mAOD then D

B1 til 24.56mAOD then D

B1 til 24.50mAOD then D from 24.35mAOD

B1 til 24.03mAOD then D

B1 from 23.79mAOD

B1 til 24.36mAOD then D

B1 til 24.59mAOD then C1 from 24.09mAOD

B1 til 24.70mAOD then B2

B1 til 24.27mAOD then C1

B1 til 23.87mAOD then A

D til 24.63mAOD then B1 til 23.86mAOD then B2

A from 24.36mAOD

B1 til 24.20mAOD then B2 from 24.26mAOD

N

Emmet Road OCSC

2020 Waste Soil Classification Grids

Field sampling completed in October 2020

Waste Soil Classification Grid Map 4

23.76 to 22.76mAOD

LEGEND

- A - Inert
- B1 - Inert Licensed
- B2 - Inert Licensed with Elevated Limits
- C1 - Non-Haz Criteria
- C2 - Non-Haz Criteria but with Quantifiable Asbestos
- D - Hazardous

- 25 x 25 meter grid
- Inaccessible
- Sample Locations (Trial Pit, Geobore and Window Sample)

B1 from 23.72mAOD

B1 from 23.37mAOD

B1 from 23.56mAOD

B1 from 23.50mAOD

D from 23.27mAOD

B1 from 23.49mAOD

B1 til 22.83mAOD

B1 til 23.03mAOD then B2

B1 til 22.97mAOD then B2

B1 til 23.51mAOD then D

B1 til 23.42mAOD then B2

B1 til 23.25mAOD then B2

B1 til 22.83mAOD then C1

B1 til 23.57mAOD then C1 til 23.07mAOD then B1 from 22.90mAOD

B1 til 23.45mAOD

D til 23.17mAOD then C1

D til 23.18mAOD then B2

D til 23.56mAOD then C1

D til 23.53mAOD then C1

D til 23.35mAOD then B1

B1 til 23.53mAOD

D til 23.03mAOD then C1

B1 til 22.79mAOD

B1 til 23.69mAOD then D til 23.49mAOD

C1 til 23.59mAOD

B1 til 23.58mAOD then A

B1 til 23.56mAOD then B2

B2 til 23.70mAOD then A

C1 til 22.87mAOD

A til 23.37mAOD

B1 til 23.06mAOD

B1 til 23.49mAOD then B2 til 23.29mAOD

B2 til 23.56mAOD

N

Emmet Road OCSC

2020 Waste Soil Classification Grids

Field sampling completed in October 2020

Waste Soil Classification Grid Map 5

22.76 to 21.76mAOD

LEGEND

- A - Inert
- B1 - Inert Licensed
- B2 - Inert Licensed with Elevated Limits
- C1 - Non-Haz Criteria
- C2 - Non-Haz Criteria but with Quantifiable Asbestos
- D - Hazardous
- 25 x 25 meter grid
- Inaccessible
- Sample Locations (Trial Pit, Geobore and Window Sample)

B1 til 22.29mAOD then A

B1 til 21.81mAOD then A

B1 til 22.25mAOD then A

B1 til 22.49mAOD then B2

D til 22.42mAOD then B1

B1 til 21.92mAOD then B2

B1 til 22.28mAOD then B2

B1 til 22.51mAOD then A

B1 til 22.71mAOD then B2

B1 til 22.41mAOD then B2

B2 til 22.03mAOD

B1 til 22.41mAOD then C2

B1 til 22.44mAOD then B2

B2 til 21.97mAOD then C1

C1 til 22.65mAOD then B2

B1 til 22.40mAOD then B2

B2 til 22.42mAOD then A til 22.02mAOD

B2 til 22.05mAOD

C1 til 22.03mAOD

B1 til 22.75mAOD

C1 til 22.45mAOD til 22.05mAOD

C1 til 22.17mAOD then B2 til 21.77mAOD

B2 from 21.90mAOD

B1 til 22.69mAOD

C1 til 22.56mAOD then D til 22.36mAOD

C1 til 22.13mAOD

B2 til 22.15mAOD

D til 22.16mAOD

B2 til 22.31mAOD

WS03 WS04 WS07 WS08 WS06 BH04 WS11 WS10 TP09 WS13 WS16 WS27 WS18 TP17 TP22 BH07 WS20 WS21 WS23 WS24 TP25 WS26 WS27 WS28 WS29 WS30 WS31 BH08 TP33 WS34 TP35 WS32 WS36 TP37 WS38 WS39 WS37 WS42 WS41 WS40 WS43 TP40 TP42 TP47 WS45 WS46 WS44 TP49 TP50 TP51 WS48 WS49 WS50 WS51

N

Emmet Road OCSC

2020 Waste Soil Classification Grids

Field sampling completed in October 2020

Waste Soil Classification Grid Map 6

21.76 to 20.76mAOD

LEGEND

- A - Inert
- B1 - Inert Licensed
- B2 - Inert Licensed with Elevated Limits
- C1 - Non-Haz Criteria
- C2 - Non-Haz Criteria but with Quantifiable Asbestos
- D - Hazardous
- 25 x 25 meter grid
- Inaccessible
- Sample Locations (Trial Pit, Geobore and Window Sample)

A til 21.06mAOD

B1 til 21.37mAOD then A

A til 21.59mAOD

A til 21.35mAOD then B2 from 21.13mAOD

B2 til 21.49mAOD then C1

B1 til 21.50mAOD then B2

B2 til 20.92mAOD then C1

A til 21.51mAOD then B2 til 21.21mAOD

B2 til 21.28mAOD then C1 til 20.88mAOD

B2 til 21.71mAOD then C1 til 21.31mAOD

B2 til 21.41mAOD then C1 til 21.01mAOD

B1 til 21.73mAOD then C1 til 21.33mAOD

B1 til 21.63mAOD then B2 til 21.23mAOD

C2 til 21.41mAOD

C1 til 21.57mAOD

B2 til 21.25mAOD

D til 21.51mAOD then C1 til 21.11mAOD

B2 til 21.20mAOD

B2 til 21.50mAOD

WS03 WS04 WS07 WS08 BH04 WS11 WS13 WS16 BH07 WS20 WS21 TP22 WS24 TP25 WS25 WS26 WS27 WS28 TP28 WS29 WS30 WS31 TP33 WS32 WS34 TP35 WS36 TP37 WS37 WS38 WS39 WS40 WS41 WS42 TP42 WS43 TP40 WS44 WS45 WS46 TP47 WS47 BH12 TP49 WS48 WS49 TP50 WS50 TP51 WS51

N

Emmet Road OCSC

2020 Waste Soil Classification Grids

Field sampling completed in October 2020

Waste Soil Classification Grid Map 7

20.76 to 19.76mAOD

LEGEND

- A - Inert
- B1 - Inert Licensed
- B2 - Inert Licensed with Elevated Limits
- C1 - Non-Haz Criteria
- C2 - Non-Haz Criteria but with Quantifiable Asbestos
- D - Hazardous
- 25 x 25 meter grid
- Inaccessible
- Sample Locations (Trial Pit, Geobore and Window Sample)

A til 20.37mAOD then C1 til 19.97mAOD

B1 til 20.16mAOD

B1 til 20.42mAOD then C1 til 20.02mAOD

B2 til 20.50mAOD then C1 til 20.10mAOD

C1 til 20.49mAOD

B2 til 20.73mAOD

C1 til 20.52mAOD

C1 from 20.73mAOD til 20.33mAOD

WS01 WS02 WS03 WS06 WS07 WS08 WS09 WS10 WS11 WS13 WS14 WS15 WS16 WS17 WS18 WS20 WS21 WS22 WS23 WS24 WS25 WS26 WS27 WS28 WS29 WS30 WS31 WS32 WS34 WS36 WS37 WS38 WS39 WS40 WS41 WS42 WS43 WS44 WS45 WS46 WS47 WS48 WS49 WS50 WS51

TP09 TP17 TP19 TP22 TP25 TP27 TP28 TP33 TP35 TP37 TP40 TP42 TP47 TP49 TP50 TP51

BH04 BH07 BH08 BH12

N

Appendix C2 GII Report 2020

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Ground Investigations Ireland

Emmet Road

OCSC

Ground Investigation Report

December 2020

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Ground Investigations Ireland Ltd. present the results of the fieldworks and laboratory testing in accordance with the specification and related documents provided by or on behalf of the client The possibility of variation in the ground and/or groundwater conditions between or below exploratory locations or due to the investigation techniques employed must be taken into account when this report and the appendices inform designs or decisions where such variation may be considered relevant. Ground and/or groundwater conditions may vary due to seasonal, man-made or other activities not apparent during the fieldworks and no responsibility can be taken for such variation. The data presented and the recommendations included in this report and associated appendices are intended for the use of the client and the client's geotechnical representative only and any duty of care to others is excluded unless approved in writing.

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APPENDICES

Appendix 1	**Site Location Plan**
Appendix 2	**Trial Pit Records**
Appendix 3	**Foundation Pit Records**
Appendix 4	**Soakaway Records**
Appendix 5	**Plate Bearing Test Records**
Appendix 6	**Slit Trench Records**
Appendix 7	**Window Sample Records**
Appendix 8	**Rotary Core Records**
Appendix 9	**Laboratory Test Results**

1.0 Preamble

On the instructions of OCSC Consulting Engineers, a site investigation was carried out by Ground Investigations Ireland Ltd., between October and December 2020 at the site of the proposed Site on Emmet Road Inchicore Dublin 8.

2.0 Overview

2.1. Background

It is proposed to construct a mixed use Residential and Commercial development with Community facilities and associated services, access roads and car parking at the proposed site. The site is currently occupied by St Michaels Estate green space with Golden Bridge Cemetery running along the southern boundary of the site. Richmond Barracks runs along the eastern boundary of the site. The Inchicore Pigeon Club and a HSE Facility on Emmet Road and St Johns Bosco Community Centre in the northern portion of the site. The proposed construction is envisaged to consist of conventional foundations and pavement make up with some local excavations for services and plant.

2.2. Purpose and Scope

The purpose of the site investigation was to investigate subsurface conditions utilising a variety of investigative methods in accordance with the project specification. The scope of the work undertaken for this project included the following:

- Visit project site to observe existing conditions
- Carry out 18 No. Trial Pits to a maximum depth of 3.60m BGL
- Carry out 9 No. Foundation Inspection Pits to determine existing foundation details
- Carry out 2 No. Soakaways to determine a soil infiltration value to BRE digest 365
- Carry out 6 No Plate Bearing Test to determine the subgrade modulus
- Carry out 12 No Slit Trenches to expose services and existing services and foundations
- Carry out 52 No. Window Sample Boreholes to recover soil samples
- Carry out 12 No. Rotary Core Boreholes to a maximum depth of 15.40m BGL
- Installation of 4 No. Groundwater monitoring wells
- Installation of 6 No. Gas Monitoring wells
- Geotechnical & Environmental Laboratory testing
- Report with Recommendations

3.0 Subsurface Exploration

3.1. General

During the ground investigation a programme of intrusive investigation specified by the Consulting Engineer was undertaken to determine the sub surface conditions at the proposed site. Regular

sampling and in-situ testing was undertaken in the exploratory holes to facilitate the geotechnical descriptions and to enable laboratory testing to be carried out on the soil samples recovered during excavation and drilling.
The procedures used in this site investigation are in accordance with Eurocode 7 Part 2: Ground Investigation and testing (ISEN 1997 – 2:2007) and B.S. 5930:2015.

3.2. Trial Pits

The trial pits were excavated using a 3T tracked excavator at the locations shown in the exploratory hole location plan in Appendix 1. The locations were checked using a CAT scan to minimise the potential for encountering services during the excavation. The trial pits were sampled, logged and photographed by a Geotechnical Engineer/Engineering Geologist prior to backfilling with arisings. Notes were made of any services, inclusions, pit stability, groundwater encountered and the characteristics of the strata encountered and are presented on the trial pit logs which are provided in Appendix 2 of this Report.

3.3. Foundation Pits

The foundation inspection pits were excavated at the locations shown in the exploratory hole location plan in Appendix 1. The exposed foundations were logged and sketched prior to backfilling and reinstatement. The logs and sketches are provided in Appendix 3 of this Report.

3.4. Soakaway Testing

The soakaway testing was carried out in selected trial pits at the locations shown in the exploratory hole location plan in Appendix 1. These pits were carefully excavated and filled with water to assess the infiltration characteristics of the proposed site. The pits were allowed to drain and the drop in water level was recorded over time as required by BRE Digest 365. The pits were logged prior to completing the soakaway test and were backfilled with arising's upon completion. The soakaway test results are provided in Appendix 4 of this Report.

3.5. Insitu Plate Bearing Test

The plate bearing tests were carried out using a 305mm or 450mm diameter plate at the locations shown on the site plan in Appendix 1. The plate was loaded in increments using a hydraulic jack and an excavator to provide a reaction and the displacement was monitored in accordance with BS1377 Part 9 using independently mounted digital strain gauges. The constrained modulus and equivalent CBR are calculated in accordance with HD29/75 and are provided on the test reports in Appendix 5 of this Report.

3.6. Slit Trenching

The slit trenches were excavated using 3T tracked excavator at the locations shown in the exploratory hole location plan in Appendix 1. The locations were checked using a CAT scan to minimise the potential for encountering services during the excavation. The soil was slowly stripped using a spotter on the trench to alert the driver if any services were seen, to avoid damage to any underlying services. The slit trenches were sampled, logged and photographed by a Geotechnical Engineer/Engineering Geologist prior to backfilling with arisings. Notes were made of any services, inclusions, pit stability, groundwater encountered and the characteristics of the strata encountered and are presented on the slit trench records which are provided in Appendix 6 of this Report.

3.7. Window Sampling

The window sampling was carried out at the locations shown in the location plan in Appendix 1 using a Tecopsa SPT Tec 10 percussion drilling rig. The window sampling consists of a 1m long steel tube with a cutting edge and an internal plastic liner which is mechanically driven into the ground utilising a 50kg weight falling a height of 500mm. Upon completion of the 1m sample, the tube is withdrawn and the plastic liner removed and sealed for logging and sub sampling by a Geotechnical Engineer/Engineering Geologist. The tube is replaced in the borehole and a subsequent 1m sample can be recovered. Occasionally outer casing or a reduced diameter tube is utilised to enable the window sample to progress in difficult drilling conditions. Geotechnical or environmental soil samples can be recovered from each of the liners following logging. The window sample records are provided in Appendix 7 of this Report.

3.8. Rotary Boreholes

The rotary coring was carried out by a track mounted T44 Beretta rig at the locations shown on the location plan in Appendix 1. The rotary boreholes were completed from the ground surface or alternatively, where noted on the individual borehole log, from the base of the cable percussion borehole where a temporary liner was installed to facilitate follow-on rotary coring.

The T44 Beretta is equipped with rubber tracks which allow for short travel on pavement surfaces avoiding any damage to the surface. The T44 Beretta utilises a triple tube core barrel system operated using a wireline drilling process. The outer barrel is rotated by the drill rods and at its lower end, carries the coring bit. The inner barrel is mounted on a swivel so that it does not rotate during the process. The third barrel or liner is placed within the second one to retain the core intact and to preserve as much as possible the fabric of the drilling stratum. The core is cut by the coring bit and passes to the inner liner. The core is brought up to the surface within the inner barrel on a small diameter wire rope or line attached to the “overshoot” recovery tool which is then placed into a core box in order of recovery. A drilling fluid, typically air mist or water flush is passed from the surface through hollow drill rods to the drill bit, and is used to cool the drill bit. Temporary casing is used in some situations to support unstable ground or to seal off fissures or voids.

It should be noted that the rotary coring can only achieve limited recovery in overburden, particularly granular or weakly cemented strata due to the flushing medium washing away the cohesive fraction

during coring. The recovery achieved, where required is noted on the borehole logs and core photographs are provided to allow assessment of the core recovered. The rotary borehole logs are provided in Appendix 8 of this Report.

3.9. Surveying

The exploratory hole locations have been recorded using a Geomax Zenith System which records the coordinates and elevation of the locations to ITM or Irish National Grid as required by the project specification. The coordinates and elevations are provided on the exploratory hole logs in the appendices of this Report.

3.10. Groundwater & Gas Monitoring Installations

Groundwater and Gas Monitoring Installation were installed upon the completion of the boreholes to enable sampling and the determination of the equilibrium groundwater level. The typical groundwater monitoring installation consists of a 50mm HDPE slotted pipe with a pea gravel response zone and bentonite seal installed to the Engineers specification. Where required the standpipe is sealed with a gas tap and finished with a durable steel cover fixed in place with a concrete surround. The installation details are provided on the exploratory hole logs in the appendices of this Report.

3.11. Laboratory Testing

Samples were selected from the exploratory holes for a range of geotechnical and environmental testing to assist in the classification of soils and to provide information for the proposed design.
Environmental & Chemical testing as required by the specification, including the Rilta Suite, pH and sulphate testing was carried out by Element Materials Technology Laboratory in the UK. The Rilta suite testing includes both Solid Waste and Leachate Waste Acceptance Criteria.
Geotechnical testing consisting of moisture content, Atterberg limits, Particle Size Distribution (PSD), tests were carried out in NMTL's Geotechnical Laboratory in Carlow. Specialist shear strength testing consisting of quick undrained, consolidated undrained triaxial, testing was carried out on undisturbed Geobor S samples where recovered.
Rock strength testing including Point Load (Is_{50}) testing was carried out in James Fisher Testing Services Laboratory in Portlaoise.
The results of the laboratory testing are included in Appendix 9 of this Report.

4.0 Ground Conditions

4.1. General

The ground conditions encountered during the investigation are summarised below with reference to insitu and laboratory test results. The full details of the strata encountered during the ground investigation are provided in the exploratory hole logs included in the appendices of this report.

The sequence of strata encountered were consistent across the site and are generally comprised;

- Topsoil/Surfacing
- Made Ground
- Granular Deposits
- Cohesive Deposits
- Weathered Bedrock
- Bedrock

TOPSOIL: Topsoil was encountered in the majority of exploratory holes and was present to a maximum depth of 0.30m BGL. Tarmac surfacing was present typically to a depth of 0.10m BGL and was present I exploratory holes to the north of the site.

MADE GROUND: Made Ground deposits were encountered beneath the Topsoil/Surfacing and were present to a varying depths of between 1.0m and 3.50m BGL. These deposits were described generally as *brown* or *grey slightly sandy slightly gravelly CLAY* or *Brown slightly sandy clayey subangular to subrounded fine to medium GRAVEL with occasional cobbles and boulders and contained occasional fragments of concrete, red brick, glass and plastic*.

It should be noted that recovery in the upper runs of the Geobor S boreholes varied with some of the unconsolidated made ground not fully recovered due to the nature of the material and the rotary drilling techniques. Recovery was consistently 100% in the firm to stiff or stiff cohesive deposits. In the majority of window samples carried out adjacent to the boreholes Made Ground deposits were recovered where Geobor S boreholes had produced poor recovery.

COHESIVE DEPOSITS: Cohesive deposits were encountered beneath the Made Ground and were described typically as *brown slightly sandy gravelly CLAY with occasional cobbles and boulders* overlying a *stiff dark grey slightly sandy gravelly CLAY with occasional cobbles and boulders*. The secondary sand and gravel constituents varied across the site and with depth, with granular lenses occasionally present in the glacial till matrix. The strength of the cohesive deposits typically increased with depth and was firm to stiff or stiff below 2.5m BGL in the majority of the exploratory holes. These deposits had some, occasional or frequent cobble and boulder content where noted on the exploratory hole logs.

GRANULAR DEPOSITS: The granular deposits were encountered within the cohesive deposits and were typically described as G*rey brown slightly sandy subangular to subrounded GRAVEL* or *dark grey clayey fine to coarse SAND with occasional cobbles and rare boulders.* The secondary sand/gravel and silt/clay constituents varied across the site and with depth while occasional or frequent cobble and boulder content also present where noted on the exploratory hole logs.
Based on the SPT N values the deposits are typically medium dense and become dense with depth. It should be noted that many of the trial pits where granular deposits or groundwater were encountered, experienced instability. This was described either as side wall spalling or as side wall collapse in the remarks section at the base of the trial pit logs. A significant groundwater strike was noted in the boreholes on encountering the granular deposits and the driller noted blowing sands or gravels during drilling.

WEATHERED BEDROCK: In some of the exploratory boreholes weathered rock was encountered. This material was recovered typically as angular gravel and cobbles of Limestone/Mudstone however there was some variability in the fracture spacing and the ease at which the excavator could progress. Some clay and sand were also present with the rock mass either from weathering or as infilling to fractures which were opened upon excavation.

BEDROCK: The rotary core boreholes recovered Medium strong to very strong grey/dark grey fine to medium grained laminated LIMESTONE interbedded with weak black fine grained laminated MUDSTONE. This is typical of the Calp Formation, which is noted on the geological mapping to the east of the proposed site. Rare visible pyrite veins were noted during logging which are typically present within the Calp Limestone.
The depth to rock varies from 3.05m BGL in BH11 to the south of the site to a maximum of 12.60m BGL in BH04 to the north of the site. The total core recovery is good, typically 100% with some of the uppermost runs dropping to 80 or 90%. The SCR and RQD both are relatively poor in the upper weathered zone, often recovered as non-intact, however both indices show an increase with depth in each of the boreholes.

4.2. Groundwater

Groundwater strikes are noted on the exploratory hole logs where they occurred and where possible drilling was suspended for twenty minutes to allow the subsequent rise in groundwater to be recorded. We would point out that these exploratory holes did not remain open for sufficiently long periods of time to establish the hydrogeological regime and groundwater levels would be expected to vary with the tide, time of year, rainfall, nearby construction and other factors. For this reason, standpipes were installed in BH02, BH07, BH08 and BH12 to allow the equilibrium groundwater level to be determined. OCSC are monitoring the groundwater levels post fieldworks.

4.3. Laboratory Testing

4.3.1. Geotechnical Laboratory Testing

The geotechnical testing carried out on soil samples recovered generally confirm the descriptions on the logs with the primary constituent of the cohesive deposits found to be a CLAY of low to intermediate plasticity. The Particle Size Distribution tests confirm that generally the cohesive deposits are well-graded with percentages of sands and gravels ranging between 13.8% and 62.7% generally with fines contents of 20.6 to 43.2%.
The Particle Size Distribution tests confirm that generally the granular deposits are well-graded with percentages of sands/gravels and silt/clay typically 17.0% with a gravel/sand content of typically 15.1% to 62.7%.

The cohesive strength parameters derived from the quick undrained triaxial testing on cohesive samples at 2.50m BGL and 6.25m BGL ranged from 99.8 kPa to 488.3 kPa consecutively on remoulded samples. The consolidated undrained testing to determine the effective shear strength parameters, gave an effective angle of friction of 37.5 degrees at 4.10m BGL with an effective cohesion for both samples of 0 kPa.

4.3.2. Chemical Laboratory Testing

The pH and sulphate testing carried out indicate that pH results are near neutral and that the water soluble sulphate results is low when compared to the guideline values from BRE Special Digest 1:2005. The samples tested classify the soil as a Design Sulphate Level DS-1.

4.3.3. Environmental Laboratory Testing

The waste classification report is included under the cover of a sperate report by OCSC.

4.3.4. Rock Laboratory Testing

The rock testing carried out on samples recovered from the boreholes reported Unconfined Compressive Strength (UCS) values ranging between 30.5 and 38.1 MPa while the point load testing gave Is50 values ranging between 0.55 to 6.40MPa. The Is_{50} results correlate to the UCS values using a factor of approximately 20, giving values of 10.0 MPa and 124.60 MPa. These results correlate to the strength descriptions ranging between of Weak to Very Strong and confirming the variability of this stratum and the descriptions on the logs.

The results from the completed laboratory testing are included in Appendix 9 of this report.

4.4. Geotechnical Design Parameters

Preliminary geotechnical design parameters for the materials encountered during the ground investigation have been summarised in Table 1 Geotechnical Design Parameters. Both laboratory test and SPT N results, using standard empirical relationships, have been used to determine the geotechnical parameters of the overburden strata.

Shear strength parameters have been determined using laboratory testing and established empirical relationships for the relevant materials. Based on the relationship published by Stroud, the correlation of $Cu = f_1 \times N$ is used to estimate the undrained shear strength of the cohesive deposits, where f1 is determined using a correlation with the plasticity index.

The shear strength parameters from the granular stratum are provided using the effective shear strength parameters determined from the uncorrected SPT N values after Peck et al reported by Tomlinson Foundation Design and Construction 7th Ed. (2001).

A range is provided for the compressibility parameter mv based on correlations with the SPT N value based on the relationship published by Stroud, the correlation of $M_v = 1/(f_2 \times N)$ where f_2 is determined using a correlation with the plasticity index.

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Table 1 Recommended Geotechnical Parameters based on GII GI Data

Stratum	Bulk Density (kN/m^3)	SPT 'N' Correlated	Undrained Shear Strength C_u (kN/m^2)	Effective Strength Parameters		Poisson's Ratio v (v_u)	Co-efficient of Compressibility
				Cohesion c' (kN/m^2)	ϕ' degrees		m_v (m^2/MN)
Granular Made Ground Deposits	16 – 20*1	1 - 20	n/a	-	28 – 30*4	0.1 – 0.3	n/a
Cohesive Made Ground Deposits	16 – 20*1	1 - 20	5 – 100*2	0	25 - 30*4	0.2 (0.5)	0.1-1.5*3
Soft Cohesive Deposits	16 – 20*1	1 - 8	5 - 40*2	0 - 1	25 - 28*4	0.2 (0.5)	0.1 – 1.5*3
Firm Cohesive Deposits	18 – 20[1]	8 – 15	40 - 75*2	0 - 3	28 – 30*4	0.2 (0.5)	0.1 – 0.3*3
Stiff Cohesive Deposits	19 – 20*1	15 – 25	75 - 150*2	0 - 5	30 - 33*4	0.2 (0.5)	0.05 – 0.1*3
Very Stiff Cohesive Deposits	20 – 22	25+	150+	0 – 5	30 – 33+*4	0.2 (0.5)	0.05 – 0.1*3
Loose Granular Deposits[1]	16 – 18*1	1 - 10	n/a	n/a	28 – 30 *4	0.1 – 0.3	n/a
Medium Dense Granular Deposits[1]	18 – 21*1	10 - 30	n/a	n/a	30 – 36 *4	0.1 – 0.3	n/a
Dense Granular Deposits[1]	21 - 23*1	30+	n/a	n/a	36+ *4	0.1 – 0.3	n/a

*1 Values for bulk density assumed

*2 Based on correlated SPT N values

*3 Based on correlated SPT N values and published data. Caution should be exercised when selecting design values for the variable Made Ground Stratum.

*4 Testing on undisturbed samples is recommended to determine the design value of this parameter for detailed design.

NOTE: The values in Table 1 represent a range of recommended values based on the typical soil types, insitu testing and laboratory testing scheduled by the Consulting Engineer. The values presented are recommended for outline guidance only and specific designs should derive design values based on the exploratory hole logs and lab testing for each specific site. To determine specific design values relevant to the design being undertaken in a particular area, reference should be made to the relevant specific exploratory hole logs. Further testing is recommended to determine the specific geotechnical parameters required for foundation design and temporary works design

5.0 Recommendations & Conclusions

5.1. General

The recommendations given and opinions expressed in this report are based on the findings as detailed in the exploratory hole records. Where an opinion is expressed on the material between exploratory hole locations, this is for guidance only and no liability can be accepted for its accuracy. No responsibility can be accepted for conditions which have not been revealed by the exploratory holes. Limited information has been provided at the ground investigation stage and any designs based on the recommendations or conclusions should be completed in accordance with the current design codes, taking into account the variation and the specific details contained within the exploratory hole logs.

5.2. Foundations

The proposed scheme is thought to consist of a series of different units comprising multistorey accommodation, community, and commercial units. No basement excavations are envisaged as part of the development. The variation of the strength and depth of the Made Ground deposits (up to 3.5m BGL) across the site, mean the proposed bearing capacities have been recommended on the shallowest practical depth for the proposed foundations over the northern portion of the site. The shallow depth to rock in the southern portion of the site warrants separate consideration from a foundation point of view, the depth of made ground or soft cohesive deposits over this portion of the site mean it may be more economically to excavate and pour deeper but smaller pads on the intact bedrock below the site. BH08 to BH013 represent a shallow rise in rock level from 5.3m to 5.5m BGL (BH8 – BH10) in the middle to 3.3m to 3.5m BGL (BH12 & BH13) at the southernmost end of the site.

An allowable bearing capacity of 250 kN/m^2 is recommended for conventional strip or pad foundations on the stiff dark grey (black) cohesive deposits which are generally present at a depth of 2.5m BGL across the northern portion of the site with the exceptions noted below. Where granular lenses are encountered within the boulder clay they are advised to be removed and replaced with lean mix trench fill where the structure is founded both on these and the cohesive deposits to avoid problems with differential settlement.

At the locations of BH02, BH08, WS4, WS8, WS20, WS22 & 23 on the northern portion of the site where locally softer or looser deposits are present or where the Made Ground deposits are deeper than 2.5m BGL, lean mix trench fill is recommended to achieve the recommended allowable bearing capacity. The stiff dark grey cohesive deposits are generally between 3.0 to 4.0m BGL at these locations.

In the southern portion of the site, the variable depth of made ground and the presence of soft deposits in the window sample locations an allowable bearing capacity of 1000 kN/m^2 is recommended on the intact competent Limestone/Mudstone rock deposits. Where a significant depth of weathered rock is encountered a reduced allowable bearing capacity of 500 kN/m^2 is recommended. The deeper depths of Made Ground or soft cohesive deposits were present at the locations of BH08, BH09, BH10, BH11, WS27 to WS30, WS34, WS36 to WS38, WS39 & WS44 on the southern portion of the site.

In any part of the site, should part of the foundation on one structural unit be on the bedrock stratum we would recommend that all the foundations of the unit in question be lowered to this competent rock stratum to avoid problems with differential settlement.

Depending on the loading anticipated and the depth of excavation/removal of made ground from the site, piled foundations may be more economically advantageous for the proposed building. The type, size and depth of the pile foundations should be confirmed by a specialist piling contractor based on the loading from the proposed building.

The possibility for variation in the depth of the made ground in the vicinity of these foundations should be considered and foundation inspections should be carried out. Any soft spots encountered at the proposed foundation depths should be excavated and replaced with lean mix concrete.

Due to the depth of Made Ground across the site, the floor slabs are recommended to be suspended, unless there is such an area or structure within the proposed scheme that the firm or firm to stiff cohesive deposits are consistent and less than 0.9m below the proposed slab.

The pH and sulphate testing completed on samples recovered from the exploratory holes indicates the pH results are near neutral and the sulphate results are low, when compared to the guideline values from BRE Special Digest 1:2005. No special precautions are required for concrete foundations to prevent sulphate attack. The samples tested were below the limits of DS1 in the BRE Special Digest 1:2005.

5.3. External Pavements

The proposed pavements are recommended to be designed in accordance with the CBR test results included in the Appendixes of this Report. The low CBR test results indicate that a capping layer or a sufficient depth of crushed stone fill may be required. Plate bearing tests are recommended at the time of construction to verify the design assumptions for the proposed pavement make up and to verify adequate compaction has been achieved.
The use of a geogrid and separation membrane may improve the performance of the proposed pavement and enable a more economical pavement design to be achieved, a specialist supplier is recommended to advise of the required strength, depth and type of geotextile for the proposed design.

5.4. Excavations

Short term temporary excavations in the cohesive deposits will remain stable for a limited time only and will require to be appropriately battered or the sides supported if the excavation is below 1.25m BGL or is required to permit man entry.
Excavations in the Made Ground or soft Cohesive Deposits will require to be appropriately battered or the sides supported due to the low strength of these deposits.

Any excavations which penetrate the granular deposits will require to be appropriately battered or the sides supported and are likely to require dewatering due to the groundwater seepages noted in the exploratory hole logs in the Appendices of this Report.

The groundwater and stability noted on the trial pit logs should be consulted when determining the most appropriate construction methods for excavations. Generally, where significant excavations are required in water bearing granular deposits a cut-off wall may be more cost effective than extensive dewatering. An assessment by a specialist dewatering contractor is recommended to determine the most cost effective approach to the proposed excavation.

Excavations in the upper cohesive and weathered rock deposits are expected to be excavatable with conventional excavation equipment, with zones of more intact bedrock below this depth requiring rock breaking techniques. Based on the fracture spacing, the rock strength testing and Pettifer & Fookes (1994) Revised Excavatability Graph, the Calp Limestone ranges from hard digging to hard ripping with hydraulic breaking, however the zones recovered as non-intact should be easy to hard digging.

Any waste material to be removed off site should be disposed of to a suitably licenced landfill.

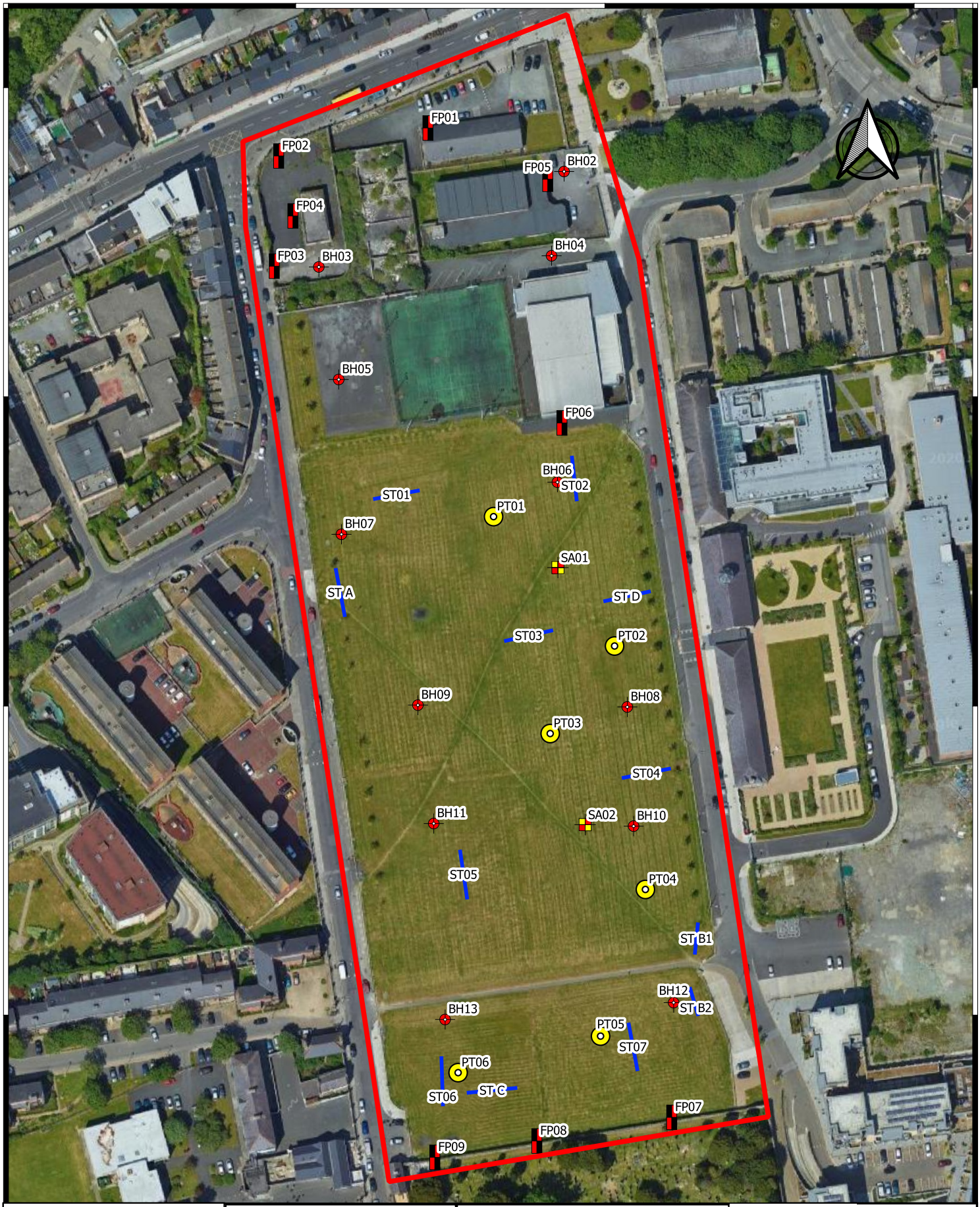
The environmental testing completed during the ground investigation is reported under the cover of a separate OCSC Environmental Report.

5.5. Soakaway Design

At the locations of SA01 and SA02 the water level dropped too slowly to allow calculation of ‘f’ the soil infiltration rate. These locations are therefore not recommended as suitable for soakaway design and construction.

The recommendations provided in this report should be verified in the design of the proposed buildings, using the full details of the loading conditions and taking into consideration the allowable tolerable settlements/movements that the building can accommodate. The founding strata should be inspected and verified by a suitably qualified engineer prior to construction of the building foundations.

APPENDIX 1 - Site Location Plan



GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

Ground Investigations Ireland Ltd.
Catherinstown House,
Hazelhatch Road,
Newcastle, Co. Dublin
www.gii.ie 01-6015175/5176

Client:

Comhairle Cathrach Bhaile Átha Cliath
Dublin City Council

0 10 20 30 40 50 60 m

Project Title:
Emmet Road

Drawing Title:
Figure 3 Structural Locations

GII Project Reference:
9897-07-20

Drawn By:
AB

Date:
01/12/2020

Site Boundary
RC Borehole
Slit Trenches
Foundation Pit
CBR Test
Soakaway test



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Geotechnical & Environmental

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Catherinstown House,
Hazelhatch Road,
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Client:
Comhairle Cathrach Bhaile Átha Cliath
Dublin City Council

Project Title:
Emmet Road

Drawing Title:
Figure 2 Environmental

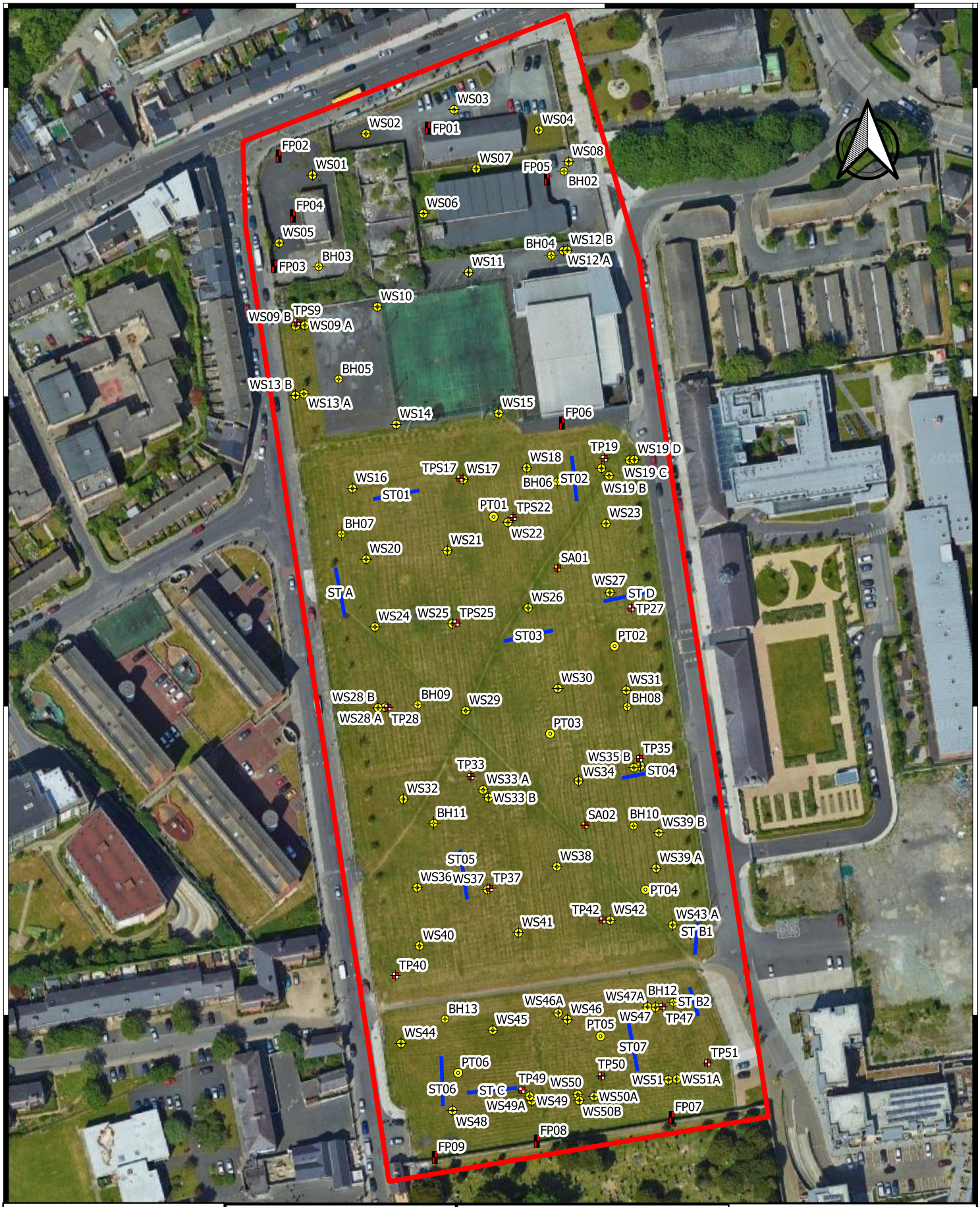
GII Project Reference:
9897-07-20

0 10 20 30 40 50 60 m

Drawn By:
AB

Date:
11/11/2020

Site Boundary
RC Borehole
Trial Pit
Window Sample



GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

Ground Investigations Ireland Ltd.
Catherinstown House,
Hazelhatch Road,
Newcastle, Co. Dublin
www.gii.ie 01-6015175/5176

Client:

Comhairle Cathrach Bhaile Átha Cliath
Dublin City Council

0 10 20 30 40 50 60 m

Project Title:
Emmet Road

Drawing Title:
Figure 1 Site Location

GII Project Reference:
9897-07-20

Drawn By:
AB

Date:
03/11/2020

- Slit Trench
- RC Borehole
- Trial Pit
- Window Sample
- Site Boundary
- Foundation Pit
- CBR Test
- Soakaway Test

APPENDIX 2 – Trial Pit Records

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP09
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.40m x 2.80m x 1.00m	**Ground Level (mOD)** 24.47	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712000.4 E 733424 N	**Dates** 13/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.15)	Brown slightly sandy slighgtly gravelly TOPSOIL with rootlets		
				24.32	0.15			
					(0.15)	MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with fragments of red brick, concrete and glass		
				24.17	0.30			
						MADE GROUND: Brown slightly sandy slightly gravelly silty Clay with fragments of red brick and concrete		
					(0.50)			
				23.67	0.80			
					(0.20)	MADE GROUND: Greyish brown slightly sandy gravelly Clay with fragments of glass, concrete and shells		
				23.47	1.00			
						Complete at 1.00m		

Plan

Remarks

No groundwater encountered]
Trial pit stable
Complete at 1.00m BGL

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP09

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP17
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.40m x 2.80m x 1.00m	**Ground Level (mOD)** 24.76	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712053.1 E 733373.5 N	**Dates** 13/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.61	(0.15) 0.15	Brown slightly sandy slighgtly gravelly TOPSOIL with rootlets		
					(0.55)	MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with fragments of red brick, concrete and glass		
				24.06	0.70	MADE GROUND: Brown mottled grey slightly sandy slightly gravelly silty Clay with fragments of red brick, concrete and charcoal		
				23.76	(0.30) 1.00	Complete at 1.00m		

Plan

Remarks

No groundwater encountered]
Trial pit stable
Complete at 1.00m BGL

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP17

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP19
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 1.20m x 3.10m x 3.10m	**Ground Level (mOD)** 24.41	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712099.8 E 733379.9 N	**Dates** 09/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.20)	Brown slightly sandy slightly gravelly TOPOIL with rootlets		
				24.21	0.20	MADE GROUND: Dark brown slightly sandy slighgtly gravelly Clay with fragments of red brick, concrete, plastic, glass, ceramic and rubbish		
0.50	B				(1.10)			
				23.11	1.30	Firm brown mottled grey slightly sandy slightly gravelly CLAY with occasional cobbles		
1.50	B				(0.70)			
			Slow Seepage(1) at 2.00m.	22.41	2.00	Dark grey clayey gravelly fine to coarse SAND		▽1
2.50	B		Fast ingress(2) at 2.50m.		(1.10)			▽2
				21.31	3.10	Complete at 3.10m		

Plan

Remarks

Groundwater encountered at 2.00m BGL and 2.50m BGL
Trial pit spalling below 2.80m BGL
Trial pit terminated at 3.10m BGL due to excess groundwater
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP19

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP22
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.40m x 2.40m x 1.00m	**Ground Level (mOD)** 24.56	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712070.3 E 733360.8 N	**Dates** 13/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.41	(0.15) 0.15	Brown slightly sandy slighgtly gravelly TOPSOIL with rootlets		
					(0.85)	MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with fragments of red brick, concrete and glass		
				23.56	1.00	Complete at 1.00m		

Plan

Remarks

No groundwater encountered]
Trial pit stable
Complete at 1.00m BGL

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP22

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP25
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.40m x 2.50m x 1.00m	**Ground Level (mOD)** 25.22	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712051.9 E 733326.6 N	**Dates** 13/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				25.12	(0.10) 0.10	Brown slightly sandy slighgtly gravelly TOPSOIL with rootlets		
					(0.60)	MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with fragments of red brick, concrete and glass		
				24.52	0.70			
					(0.30)	MADE GROUND: Brown mottled grey slightly sandy slightly gravelly silty Clay with fragments of red brick, concrete and charcoal		
				24.22	1.00	Complete at 1.00m		

Plan

Remarks

No groundwater encountered]
Trial pit stable
Complete at 1.00m BGL

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP25

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP27
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 2.80m x 3.20m	**Ground Level (mOD)** 24.40	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712108.6 E 733331.5 N	**Dates** 09/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.30	(0.10) 0.10	Brown slightly sandy slightly gravelly TOPOIL with rootlets		
0.50	B				(1.30)	MADE GROUND: Dark brown slightly sandy slighgtly gravelly Clay with fragments of red brick, concrete, plastic, glass, ceramic and rubbish		
1.50	B			23.00	1.40	Firm dark grey slightly sandy gravelly CLAY with strong hydrocarbon odour and some subangular cobbles. Gravel is fine to coarse, angular to subangular		
2.50	B			22.00	(1.00) 2.40	Stiff dark grey slightly sandy gravelly CLAY with slight hydrocarbon odour and many subangular cobbles and occasional boulders. Gravel is fine to coarse, angular to subangular		
				21.20	(0.80) 3.20	Complete at 3.20m		

Plan

Remarks

No groundwater encountered
Trial pit stable
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP27

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP28
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.70m x 3.00m x 3.20m	**Ground Level (mOD)** 25.75	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712029.9 E 733299.4 N	**Dates** 09/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				25.65	(0.10) 0.10	Brown slightly sandy slightly gravelly TOPSOIL with rootlets		
					(0.30)	FILL: Dark grey angular coarse Ggravel (Crushed Rock Fill)		
			Slow Seepage(1) at 0.40m.	25.35	0.40			▽1
0.50	B				(0.60)	MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with occasional fragments of red brick and concrete and occasional subangular cobbles		
				24.75	1.00			
					(0.70)	Soft brown slightly sandy gravelly CLAY with many subangular cobbles. Gravel is fine to coarse, angular to subangular		
1.50	B			24.05	1.70			
					(0.70)	Firm to stiff brown slightly sandy gravelly CLAY with many subangular cobbles and boulders. Gravel is fine to coarse, angular to subangular		
				23.35	2.40			
2.50	B				(0.80)	Stiff dark grey slightly sandy gravelly CLAY with many subangular cobbles and boulders. Gravel is fine to ccoarse, angular to subangular		
				22.55	3.20			
						Complete at 3.20m		

Plan

Remarks

Groundwater encountered at 0.40m BGL
Trial pit spalling below 0.60m BGL
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP28

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP33
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.70m x 2.70m x 3.00m	**Ground Level (mOD)** 25.56	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712056.7 E 733277.1 N	**Dates** 09/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				25.46	(0.10) 0.10	Brown slightly sandy slightly gravelly TOPSOIL with rootlets		
				25.36	(0.10) 0.20	TARMACADAM		
				25.16	(0.20) 0.40	MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with occasional fragments of red brick and concrete and occasional subangular cobbles		
0.50	B				(0.50)	Soft brown slightly sandy slightly gravelly CLAY with occasional subangular cobbles. (Possible Made ground)		
				24.66	0.90			
1.50	B		Medium Ingress(1) at 1.60m.		(0.80)	Soft to firm dark brown mottled grey slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular, Heavily contaminated with diesel		▽1
				23.86	1.70			
2.50	B				(1.30)	Soft to firm dark grey slightly sandy gravelly CLAY with many subangular cobbles. Gravel is fine to coarse, angular to subangular. Heavily contaminated with diesel		
				22.56	3.00			
						Complete at 3.00m		

Plan

Remarks

Groundwater encountered at 1.60m BGL, contaminated with diesel
Trial pit spalling below 1.60m BGL
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP33

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP35
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.70m x 2.90m x 3.20m	**Ground Level (mOD)** 25.35	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712111.3 E 733282.8 N	**Dates** 09/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.20)	Brown slightly sandy slightly gravelly TOPOIL with rootlets		
				25.15	0.20			
					(0.20)	MADE GROUND: Dark brown slightly sandy slighgtly gravelly Clay with fragments of red brick, concrete, plastic, glass, ceramic and rubbish		
				24.95	0.40			
0.50	B				(0.20)	FILL: Dark grey sandy angular coarse Gravel (Crushed Rock Fill)		
				24.75	0.60			
					(0.20)	MADE GROUND: :Light brown clayey sandy Gravel with occasional subangular cobbles		
				24.55	0.80			
					(0.20)	CONCRETE		
				24.35	1.00			
						Soft dark brown mottled black slightly sandy slightly gravelly CLAY with occasional cobbles. Heavily contaminated with diesel		
					(0.80)			
1.50	B							
				23.55	1.80			
						Soft to firm dark grey slightly sandy gravelly CLAY with some subangular cobbles. Gravel is fine to coarse, angular to subangular. Heavily contaminated with diesel		
					(1.40)			
2.50	B							
				22.15	3.20			
						Complete at 3.20m		

Plan

Remarks

No groundwater encountered
Trial pit stable
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP35

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP37
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 3.00m x 3.10m	**Ground Level (mOD)** 26.03	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712062.8 E 733240.9 N	**Dates** 13/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				25.93	(0.10) 0.10	Brown slightly sandy slighgtly gravelly TOPSOIL with rootlets		
						MADE GROUND: Brown slightly sandy gravelly Clay with occasional fragments of red brick and concrete		
0.50	B				(1.20)			
				24.73	1.30	Firm to stiff brown slightly sandy gravelly CLAY wirh many subangular cobbles. Gravel is fine to coarse, angular to subangular		
1.50	B				(0.60)			
				24.13	1.90	Dense dark grey clayey sandy fine to coarse GRAVEL with many subangular cobbles and boulders		
2.50	B				(1.20)			
			Slow Seepage(1) at 3.00m.	22.93	3.10	Terminated due to Bedrock Complete at 3.10m		▽1

Plan

Remarks

Groundwater encountered at 3.00m BGL
Trial pit stable
Trial pit terminated at 3.10m BGL due to bedrock

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP37

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP40
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 6.30m x 3.15m	**Ground Level (mOD)** 26.69	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712032.3 E 733212.6 N	**Dates** 13/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				26.59	(0.10) 0.10	Brown slightly sandy slighgtly gravelly TOPSOIL with rootlets		
						MADE GROUND: Brown slightly sandy gravelly Clay with occasional fragments of red brick and concrete		
					(1.90)			
				24.69	2.00	Firm brown mottled black slightly sandy silty gravelly CLAY with many cobbles and boulders. Gravel is fine to coarse angular tot subangular. Moderate hydrocarbon odour		
					(1.15)			
				23.54	3.15	Complete at 3.15m		

Plan

Remarks

No groundwater encountered
Trial pit stable
Complete at 3.15m BGL

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP40

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP42
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 4.20m x 2.80m	**Ground Level (mOD)** 25.64	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712099.4 E 733230.6 N	**Dates** 13/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				25.49	(0.15) 0.15	Brown slightly sandy slighgtly gravelly TOPSOIL with rootlets		
					(0.30)	MADE GROUND: Greyish brown slightly sandy slightly gravelly Clay with red brick and concrete fragments		
				25.19	0.45	MADE GROUND: Brown mottled black slightly sandy slightly gravelly silty Clay with fragments of tarmacadam and old pipe		
					(0.65)			
				24.54	1.10	Firm to stiff brown slightly sandy gravelly CLAY with many subangular cobbles and boulders. Gravel is fine to coarse, angular to subangular		
			Slow Seepage(1) at 2.00m.		(1.40)			▽1
				23.14	2.50	Stiff dark grey slightly sandy gravelly CLAY with many subangular cobbles and boulders. Gravel is fine to coarse, angular to subangular		
					(0.30)			
				22.84	2.80	Obstruction due to Bedrock		
						Complete at 2.80m		

Plan

Remarks

50mm Black PVC Pipe encountered at 0.40m BGL, 150mm cast iron pipe encountered at 1.90m BGL
Groundwater encountered at 2.00m BGL
Trial pit spalling below 1.50m BGL
Refusal at 2.80m BGL

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP42

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP47
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.70m x 2.80m x 2.00m	**Ground Level (mOD)** 25.79	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712118.6 E 733202.6 N	**Dates** 12/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.20)	Brown slightly sandy slighgtly gravelly TOPSOIL with rootlets		
				25.59	0.20	MADE GROUND: Brown slightly sandy gravelly Clay with occasional fragments of red brick and concrete		
					(0.20)			
				25.39	0.40	MADE GROUND: Black slightly sandy slightly gravelly Clay with rare fragments of red brick and concrete		
					(0.10)			
0.50	B			25.29	0.50	MADE GROUND: Brown slightly sandy gravelly Clay with rare fragments of red brick and concrete		
					(0.50)			
				24.79	1.00	Stiff brown slightly sandy gravelly CLAY wirh many subangular cobbles. Gravel is fine to coarse, angular to subangular		
					(0.60)			
1.50	B		Fast ingress(1) at 1.50m.	24.19	1.60	Stiff dark grey slightly sandy gravelly CLAY with many subangular cobbles and boulders. Gravel is fine to coarse, angular to subbangular		▽1
					(0.40)			
				23.79	2.00	Terminated due to large boulders		
						Complete at 2.00m		

Plan

Remarks

Groundwater encountered at 1.50m BGL
Trial pit stable
Trial pit terminated at 2.00m BGL due to large boulders

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP47

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP49
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 7.00m x 3.00m	**Ground Level (mOD)** 26.49	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712073.2 E 733175.6 N	**Dates** 12/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				26.39	(0.10) 0.10	Brown slightly sandy slighgtly gravelly TOPSOIL with rootlets		
						MADE GROUND: Dark brown slightly sandy gravelly Clay with occasional fragments of red brick and concrete		
0.50	B				(1.90)			
1.50	B							
			Slow Seepage(1) at 2.10m.	24.49	2.00	Firm brown slightly sandy gravelly CLAY with occasional cobbles and boulders		▽1
					(0.30)			
				24.19	2.30	Stiff dark grey slightly sandy gravelly CLAY with many subangular cobbles and boulders. Gravel is fine to coarse, angular to subbangular		
2.50	B				(0.70)			
				23.49	3.00	Complete at 3.00m		

Plan

Remarks

Groundwater encountered at 2.10m BGL
Trial pit stable
Trial pit complete at 3.00m BGL

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP49

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP50
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 3.20m x 2.70m	**Ground Level (mOD)** 26.26	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712098.9 E 733180.1 N	**Dates** 12/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				26.11	(0.15) 0.15	Brown slightly sandy slighgtly gravelly TOPSOIL with rootlets		
						MADE GROUND: Brown slightly sandy gravelly Clay with fragments of red brick and concrete		
0.50	B				(0.95)			
			Slow Seepage(1) at 1.00m.	25.16	1.10	Stiff dark brown slightly sandy gravelly CLAY with many subangular cobbles and boulders. Gravel is fine to coarse, angular to subangular		▽1
1.50	B				(0.60)			
				24.56	1.70	Stiff dark grey slightly sandy gravelly CLAY with many subangular cobbles and boulders. Gravel is fine to coarse, angular to subangular		
2.50	B				(1.00)			
				23.56	2.70	Terminated due to large boulders		
						Complete at 2.70m		

Plan

Remarks

Groundwater encountered at 1.00m BGL
Trial pit stable
Trial pit terminated at 2.70m due to large boulders

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP50

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP51
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 2.60m x 0.70m	**Ground Level (mOD)** 26.06	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712133.2 E 733184.4 N	**Dates** 12/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.20)	Brown slightly sandy slighgtly gravelly TOPSOIL with rootlets		
				25.86	0.20	MADE GROUND: Brown slightly sandy gravelly Clay with fragments of red brick and concrete		
					(0.50)			
				25.36	0.70	Terminated due to concrete pipe		
						Complete at 0.70m		

Plan

Remarks

No groundwater encountered
Trial pit stable
Trial pit terminated at 0.70m BGL due to concrete pipe

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP51

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP51A
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 2.90m x 0.70m	**Ground Level (mOD)** 26.06	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712134.2 E 733184.4 N	**Dates** 12/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.20)	Brown slightly sandy slighgtly gravelly TOPSOIL with rootlets		
				25.86	0.20	MADE GROUND: Brown slightly sandy gravelly Clay with fragments of red brick and concrete		
					(0.50)			
				25.36	0.70	Terminated due to concrete pipe		
						Complete at 0.70m		

Plan

Remarks

No groundwater encountered
Trial pit stable
Trial pit terminated at 0.70m BGL due to concrete pipe

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP51A

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** TP51B
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 4.40m x 3.00m	**Ground Level (mOD)** 26.06	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712135.2 E 733184.4 N	**Dates** 12/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.20)	Brown slightly sandy slighgtly gravelly TOPSOIL with rootlets		
				25.86	0.20			
					(0.10)	TARMACADAM		
				25.76	0.30			
					(0.15)	FILL: Grey/black sandy coarse angular Gravel (Crushed Rock Fill)		
				25.61	0.45			
0.50	B		Slow Seepage(1) at 0.50m.			MADE GROUND: Brown slightly sandy gravelly Clay with fragments of red brick and concrete		▽1
					(0.95)			
				24.66	1.40			
1.50	B				(0.30)	Stiff brown slightly sandy gravelly CLAY with many subangular cobbles and boulders. Gravel is fine to coarse, angular to subangular		
				24.36	1.70			
						Stiff dark grey slightly sandy gravelly CLAY with many subangular cobbles and boulders. Gravel is fine to coarse, angular to subangular		
					(1.30)			
2.50	B							
				23.06	3.00			
						Complete at 3.00m		

Plan

Remarks

Groundwater encountered at 0.50m BGL
Trial pit spalling below 0.70m BGL
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.TP51B

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Emmet Road
Additional TP Photos
TP09



TP09



TP09



TP17



TP17



TP17



TP19



TP19



TP19



TP22



TP22



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TP25



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TP27



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TP49



TP49



TP49



TP50



TP50



TP50



TP51B



TP51B



TP51B



APPENDIX 3 – Foundation Pit Records

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** FP01
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.35m x 0.85m x 0.95m	**Ground Level (mOD)** 23.47	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712042.8 E 733486.9 N	**Dates** 14/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				23.42	0.05	CONCRETE		
					(0.10)			
				23.32	0.15	CONCRETE BLOCKS		
						MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with fragments of plastic, red brick, concrete, glass and rubbish		
					(0.80)			
				22.52	0.95	Complete at 0.95m		

Plan

Remarks

No groundwater encountered
Foundation pit stable
Foundation pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.FP01

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** FP02
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 2.20m x 2.00m	**Ground Level (mOD)** 24.30	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 711994.5 E 733477.8 N	**Dates** 14/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.25	0.05	TARMACADAM		
					(0.15)			
				24.10	0.20	FILL: Dark grey sandy angular coarse Gravel (Crushed Rock Fill) with occasional rootlets		
						MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with fragments of red brick, concrete, glass, plastic and wood.		
					(0.80)			
				23.30	1.00	Firm brown mottled grey slightly sandy slightly gravelly CLAY with occasional subrounded cobbles (Possible Made Ground)		
					(1.00)			
				22.30	2.00	Complete at 2.00m		

Plan

Remarks

No groundwater encountered
Foundation pit stable
Foundation pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.FP02

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** FP03
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 1.70m x 1.70m	**Ground Level (mOD)** 24.07	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 711993.1 E 733442.2 N	**Dates** 14/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.02	0.05	TARMACADAM		
					(0.25)	FILL: Dark grey sandy angular coarse Gravel (Crushed Rock Fill) with occasional rootlets		
				23.77	0.30	MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with fragments of red brick, concrete, glass, plastic and wood.		
					(0.70)			
				23.07	1.00	Firm brown mottled grey slightly sandy slightly gravelly CLAY with occasional subrounded cobbles (Possible Made Ground)		
					(0.70)			
				22.37	1.70	Complete at 1.70m		

Plan

Remarks

No groundwater encountered
Foundation pit stable
Foundation pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.FP03

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** FP04
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 4.00m x 1.00m	**Ground Level (mOD)** 24.36	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 711999.1 E 733458.4 N	**Dates** 14/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.31	0.05	TARMACADAM		
					(0.15)			
				24.16	0.20	FILL: Dark grey sandy angular coarse Gravel (Crushed Rock Fill) with occasional rootlets		
						MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with fragments of red brick, concrete, glass, plastic and wood.		
					(0.80)			
				23.36	1.00	Complete at 1.00m		

Plan

Remarks

No groundwater encountered
Foundation pit stable
Foundation pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.FP04

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** FP05
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.80m x 1.10m x 1.50m	**Ground Level (mOD)** 23.45	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712081.5 E 733470.3 N	**Dates** 18/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				23.40	0.05 (0.10)	TARMACADAM		
				23.30	0.15 (0.15)	FILL: Black sandy angular coarse Gravel (Crushed Rock Fill)		
				23.15	0.30	MADE GROUND: Brown clayey sandy fine to coarse angular to subangular Ggravel with fragments of concrete and red brick		
					(1.20)	MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with fragments of red brick, concrete, plastic, rubble and glass		
				21.95	1.50	Complete at 1.50m		

Plan

Remarks

No groundwater encountered
Foundation pit stable
Foundation pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.FP05

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** FP06
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.65m x 1.60m x 1.25m	**Ground Level (mOD)** 24.09	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712086.1 E 733391.5 N	**Dates** 18/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.04	0.05 (0.10)	TARMACADAM		
				23.94	0.15 (0.10)	FILL: Black sandy angular coarse Gravel (Crushed Rock Fill)		
				23.84	0.25 (0.25)	FILL: Light grey sandy angular coarse Gravel (Crushed Rock Fill)		
				23.59	0.50 (0.75)	MADE GROUND: Grey slightly sandy gravelly Clay with many subangular cobbles and boulders MADE GROUND: Greyish brown slightly sandy gravelly Clay with many concrete fragments		
				22.84	1.25	Complete at 1.25m		

Plan

Remarks

No groundwater encountered
Foundation pit stable
Foundation pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.FP06

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** FP07
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 2.00m x 1.00m	**Ground Level (mOD)** 26.87	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712121.6 E 733166.9 N	**Dates** 14/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.40)	Brown slightly sandy slightly gravelly TOPOIL with rootlets		
				26.47	0.40			
0.50	B				(0.60)	MADE GROUND: Dark brown slightly sandy gravelly Clay with fragments of red brick, concrete and plastic		
				25.87	1.00			
						Complete at 1.00m		

Plan

Remarks

No groundwater encountered
Foundation pit stable
Foundation pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.FP07

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** FP08
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 1.40m x 0.80m	**Ground Level (mOD)** 27.24	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712078 E 733159.2 N	**Dates** 14/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy slightly gravelly TOPOIL with rootlets		
				26.94	0.30	MADE GROUND: Dark brown slightly sandy gravelly Clay with fragments of red brick, concrete and plastic		
					(0.50)			
				26.44	0.80	Complete at 0.80m		

Plan

Remarks

No groundwater encountered
Foundation pit stable
Foundation pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.FP08

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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** FP09
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.60m x 2.00m x 1.80m	**Ground Level (mOD)** 27.63	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712045 E 733153.9 N	**Dates** 14/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy slightly gravelly TOPOIL with rootlets		
				27.33	0.30	MADE GROUND: Dark brown slightly sandy gravelly Clay with fragments of red brick, concrete and plastic		
					(0.80)			
				26.53	1.10	Firm brown slightly sandy slightly gravlly silty CLAY with occasional subangular cobbles		
					(0.70)			
				25.83	1.80	Complete at 1.80m		

Plan

Remarks

No groundwater encountered
Foundation pit stable
Foundation pit backfilled upon completion

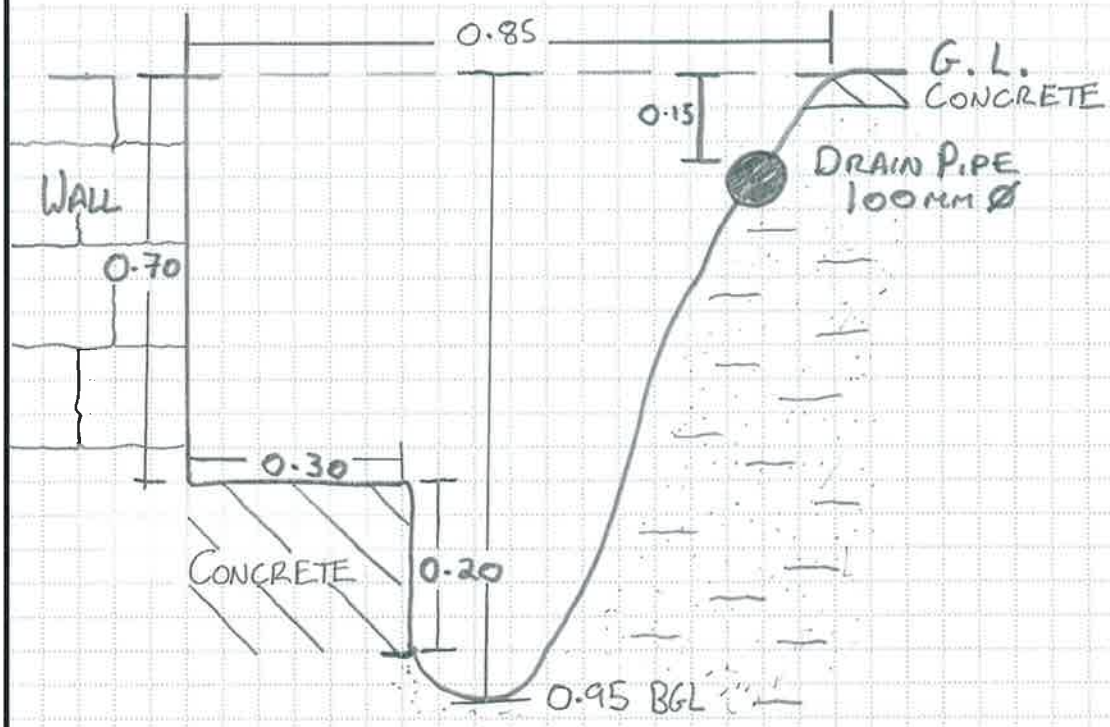
Scale (approx)	Logged By	Figure No.
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0.0 - 0.05: CONCRETE

0.05 - 0.15 : CONCRETE BLOCKS

0.15 - 0.95 : MADE GROUND : BROWN SLIGHTLY SANDY SLIGHTLY GRAVELLY CLAY with PLASTIC, RED BRICK + GLASS FRAGMENTS.

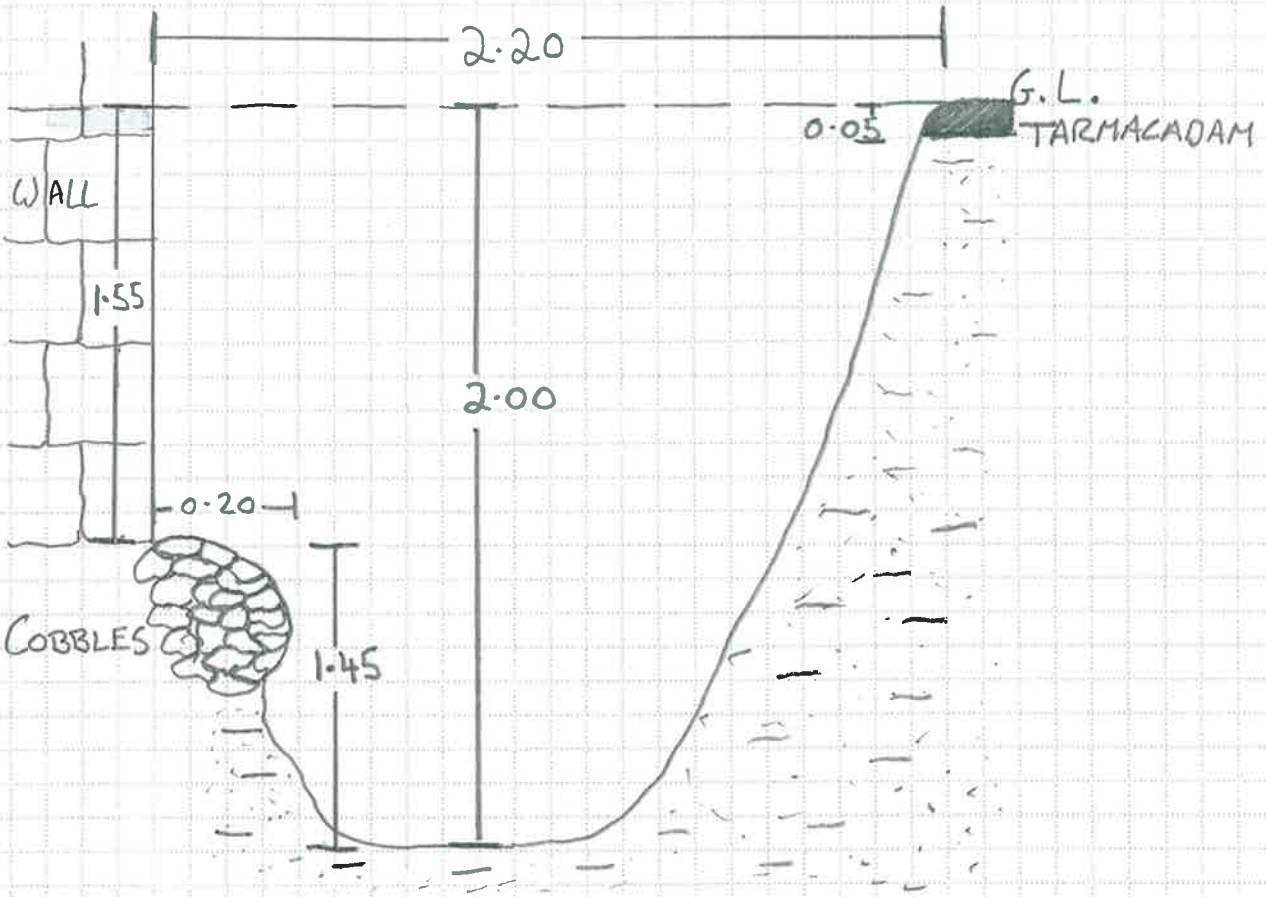
Project	Emmet Road
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Contractor	Ground Investigations Ireland Ltd

TP01

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0.0 - 0.05: TARMACADAM

0.05 - 0.20: MADE GROUND: BLACK SANDY MEDIUM ANGULAR GRAVEL (CRUSHED ROCK FILL)

0.20 - 1.00: MADE GROUND: BROWN SLIGHTLY SANDY SLIGHTLY GRAVELLY CLAY WITH RED BRICK, PLASTIC & GLASS FRAGMENTS

1.00 - 2.00: POSSIBLE MADE GROUND: BROWN SLIGHTLY SANDY SLIGHTLY GRAVELLY CLAY

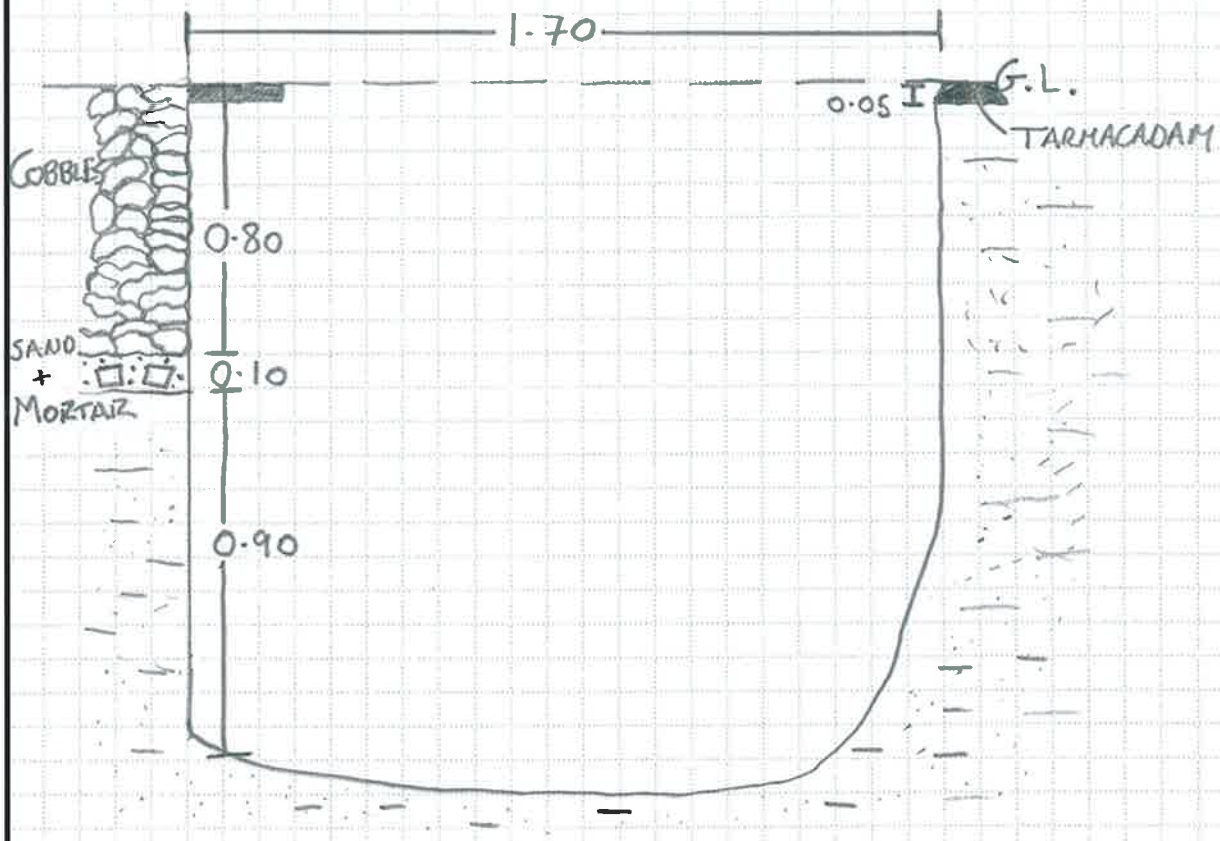
Project	Emmet Road
Client	Dublin City Council
Contractor	Ground Investigations Ireland Ltd

TP02

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0.0 - 0.05: TARMACADAM

0.05 - 0.30: GREY SANDY MEDIUM ANGULAR GRAVEL (CRUSHED ROCK FILL)

0.30 - 1.00: MADE GROUND: DARK BROWN SLIGHTLY SANDY SLIGHTLY GRAVELLY CLAY WITH GLASS, PLASTIC + WIRE.

1.00 - 1.80: POSSIBLE MADE GROUND: FIRM BROWN MOTTLED GREY SLIGHTLY SANDY SLIGHTLY GRAVELLY CLAY WITH OCCASSIONAL SUBROUNDED COBBLES.

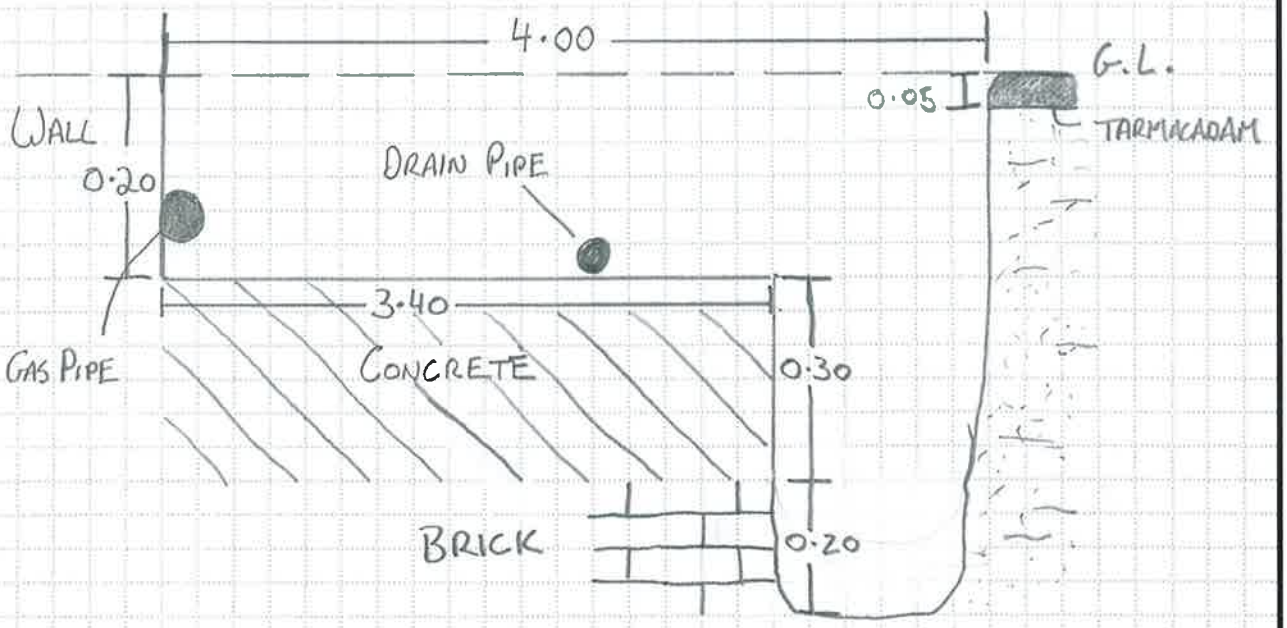
Project	Emmet Road
Client	Dublin City Council
Contractor	Ground Investigations Ireland Ltd

TP03

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

Catherinestown House,
Hazelhatch Road,
Newcastle,
Co. Dublin.
D22 YD52

Tel: 01 601 5175 / 5176
Email: info@gii.ie
Web: www.gii.ie



0.0-0.05: TARMACADAM

0.05-0.20: GREY SANDY MEDIUM ANGULAR GRAVEL (CRUSHED ROCK FILL)

0.20-0.70: MADE GROUND: BROWN SLIGHTLY SANDY SLIGHTLY GRAVELLY CLAY WITH RED BRICK + WIRE.

Project	Emmet Road
Client	Dublin City Council
Contractor	Ground Investigations Ireland Ltd

TP04

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

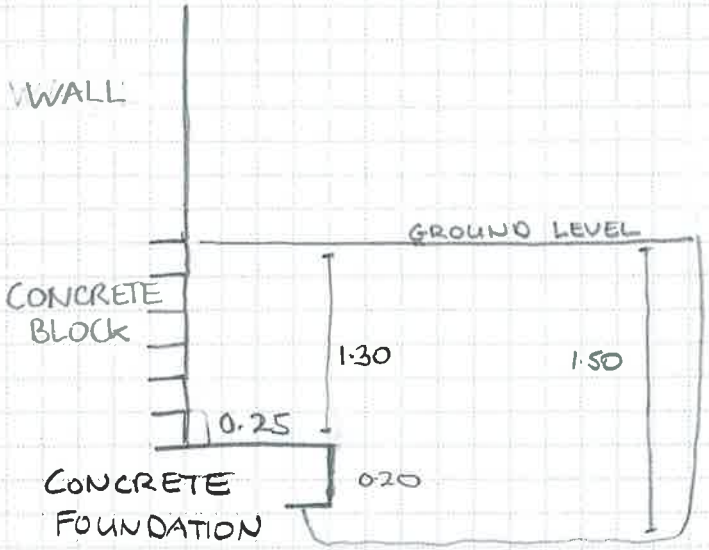
Catherinestown House,
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Newcastle,
Co. Dublin,
D22 YD52

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Email: info@gii.ie
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FOUNDATION PIT DIMENSIONS

0.80
2.10

PROFILE VIEW



GL - 0.05	TARMACADAM
0.05 - 0.15	BLACK CRF
0.15 - 0.30	BROWN CLAYEY SANDY F-C A-SA GRAVEL
0.30 - 1.50	M/G DARK BROWN SLIGHTLY SANDY SLIGHTLY GRAVELLY CLAY WITH RED BRICK, PLASTIC & GLASS FRAGMENTS

NO GROUND WATER ENCOUNTERED
FOUNDATION PIT SIDEWALL STABLE

Project	EMMET ROAD	FPOS
Client	OCSC	
Contractor	Ground Investigations Ireland Ltd	

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

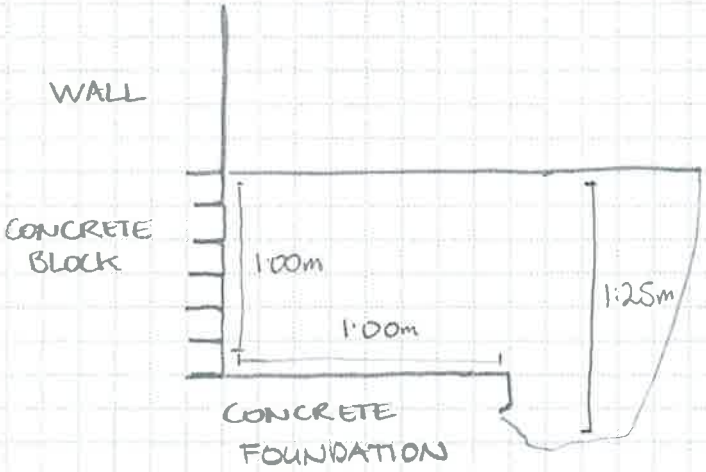
Catherinestown House,
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Co. Dublin,
D22 YD52

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Email: info@gii.ie
Web: www.gii.ie

FOUNDATION PIT DIMENSIONS



PROFILE VIEW



0·00 – 0·05	TARMACADAM
0·05 – 0·12	BLACK CRF
0·12 – 0·25	GREY CRF
0·25 – 0·50	M/G GREY SLIGHTLY SANDY GRAVELLY CLAY WITH MANY COBBLES & BOULDERS
0·50 – 1·25	M/G LIGHT BROWN SLIGHTY SANDY GRAVELLY CLAY WITH CONCRETE

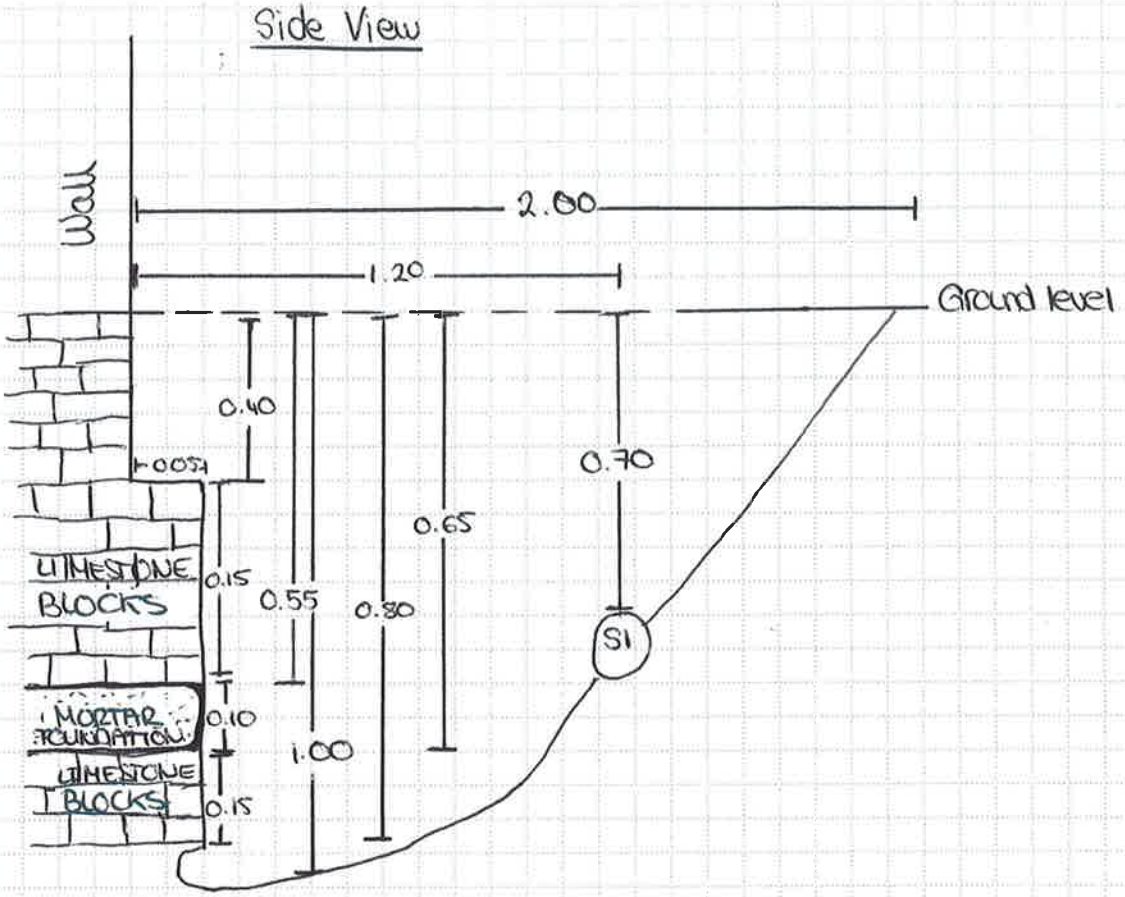
GROUNDWATER NOT ENCOUNTERED
FOUNDATION PIT SIDEWALLS STABLE

Project	EMMET ROAD	FP06
Client	OCSC	
Contractor	Ground Investigations Ireland Ltd	

GROUND INVESTIGATIONS IRELAND
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S1: ø100mm yellow pipe at 90° to foundation pit.

0.0-0.40: Brown slightly sandy slightly gravelly TOPSOIL with grass rootlets.

0.40-1.00: MADE GROUND: Dark brown slightly sandy slightly gravelly clay with red brick, concrete fragments and gas mains.

Project	Emmet Road
Client	Dublin City Council
Contractor	Ground Investigations Ireland Ltd

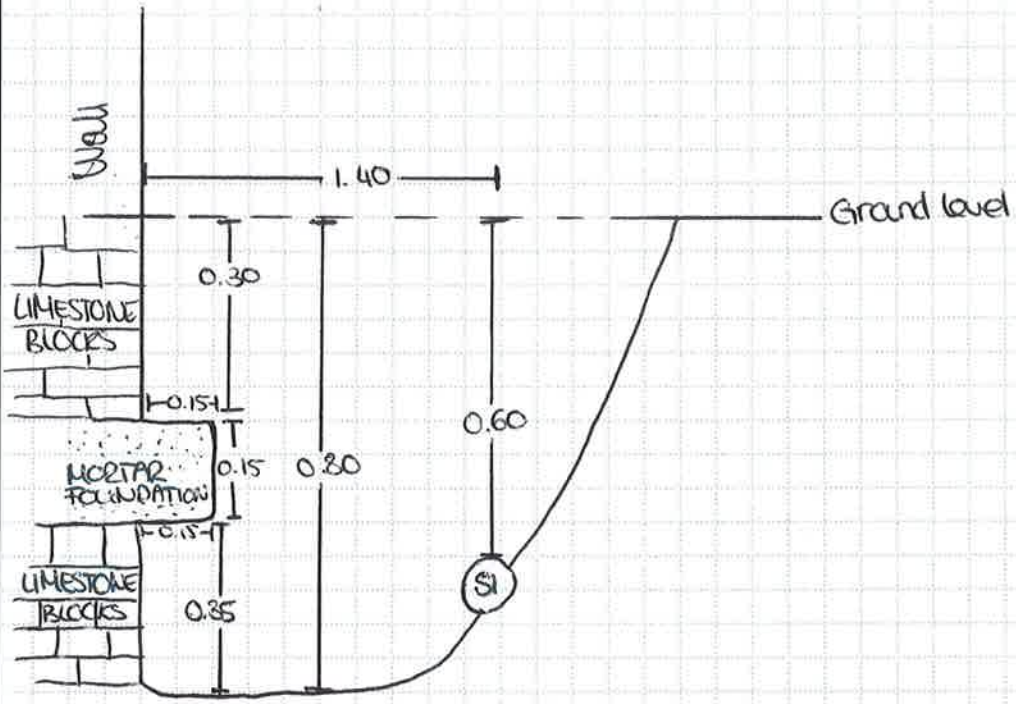
TP07

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

Catherinestown House,
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Newcastle,
Co. Dublin
D22 YD52

Tel: 01 601 5175 / 5176
Email: info@gii.ie
Web: www.gii.ie

SIDE VIEW



S1: ø100mm, yellow pipe at 90° to fondation pit.

0.0-0.30: Brown slightly sandy slightly gravelly TOPSOIL with grass rootlets.

0.30-0.80: MADE GROUND: Brown slightly sandy slightly gravelly clay with red brick, concrete fragments and gas mains.

Project	Emmet Road
Client	Dublin City Council
Contractor	Ground Investigations Ireland Ltd

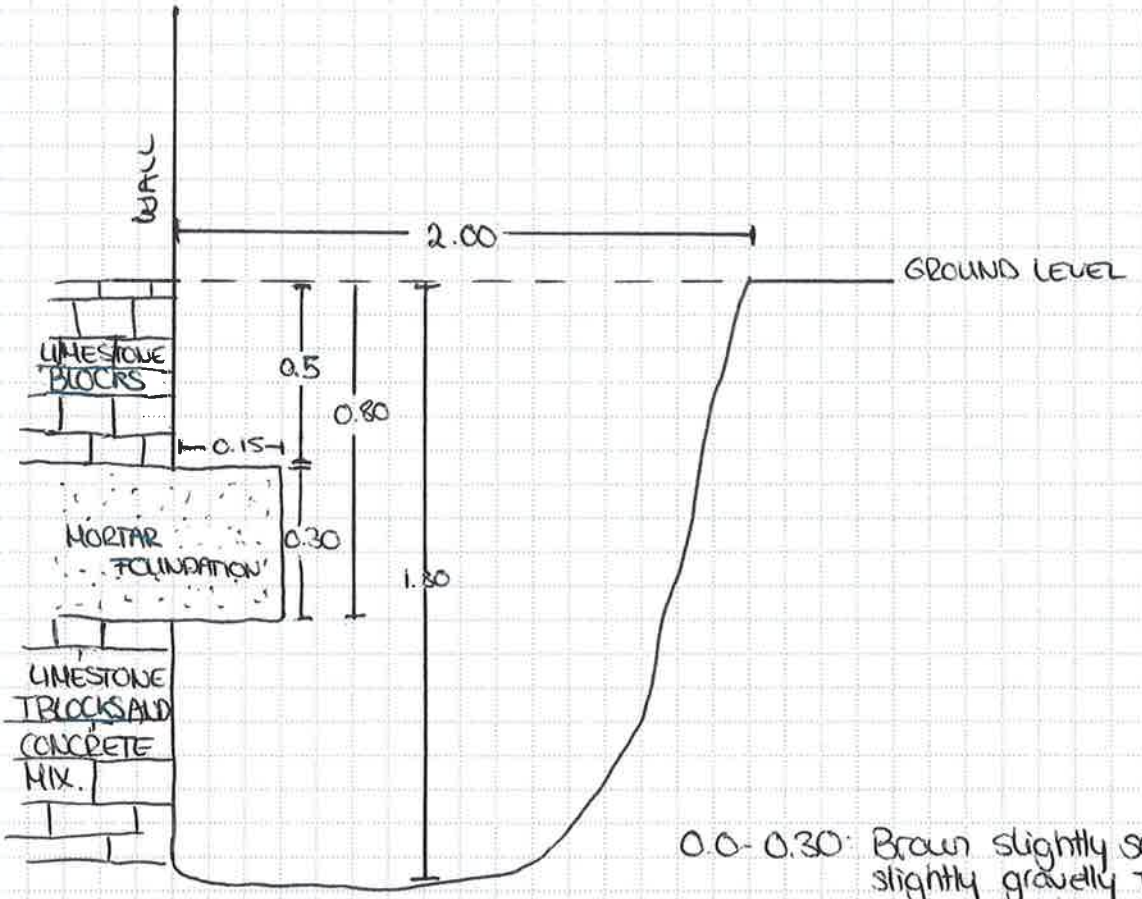
TP08

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

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Co. Dublin.
D22 YD52

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Email: info@gii.ie
Web: www.gii.ie

SIDE VIEW



0.0 - 0.30: Brown slightly sandy slightly gravelly TOPSOIL with rootlets.

0.30 - 1.10: MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with red brick, concrete and plastic fragments.

1.10 - 1.80: POSSIBLE MADE GROUND: Brown slightly sandy slightly gravelly Clay with occ. brick, cobbles and slate fragments.

Project	Emmet Road
Client	Dublin City Council
Contractor	Ground Investigations Ireland Ltd

TP09

Emmet Road – Foundation Pit Photographs

FP01





FP02







FP03











FP04







FP05





FP06





FP07







FP08







FP09







APPENDIX 4 – Soakaway Records

Ground Investigations Ireland Ltd
www.gii.ie

Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** SK01
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.40m x 2.50m x 2.00m	**Ground Level (mOD)** 24.77	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712084.7 E 733344.4 N	**Dates** 21/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.20)	Brown slightly sandy slightly gravelly TOPOIL with rootlets		
				24.57	0.20	MADE GROUND: Dark brown slightly sandy slighgtly gravelly Clay with fragments of red brick, concrete, plastic, glass and rubbish		
0.50	B				(0.60)			
				23.97	0.80	MADE GROUND: Brown slightly sandy slightly gravelly Clay with fragments of red brick, concrete and many subangular cobbles and boulders		
1.00	B				(0.40)			
				23.57	1.20			
					(0.20)	Firm brown mottled grey slightly sandy gravelly CLAY with many subangular cobbles. Gravel is fine to coarse, angular to subangular		
				23.37	1.40			
1.50	B					Firm brown slightly sandy gravelly CLAY with occasional subangular cobbles. Gravel is fine to coarse, angular to subangular		
					(0.60)			
				22.77	2.00			
						Complete at 2.00m		

Plan

Remarks

No groundwater encountered
Trial pit stable
Soakaway test carried out in trial pit in accordance to BRE Digest 365
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.SK01

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Ground Investigations Ireland Ltd
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Site Emmet Road, Inchicore, Dublin 8			**Trial Pit Number** SK02
Machine : 3T Excavator **Method :** Trial Pit	**Dimensions** 0.50m x 2.40m x 1.80m	**Ground Level (mOD)** 25.68	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712093.5 E 733261.3 N	**Dates** 21/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.20)	Brown slightly sandy slightly gravelly TOPOIL with rootlets		
				25.48	0.20	MADE GROUND: Brown slightly sandy slighgtly gravelly Clay with fragments of red brick, concrete, plastic, glass and rubbish		
					(0.70)			
				24.78	0.90	MADE GROUND: Light brown slightly sandy slightly gravelly Clay with fragments of red brick, concrete and many subangular cobbles and boulders		
					(0.50)			
				24.28	1.40	Soft dark grey slightly sandy gravelly CLAY with strong hydrocarbon odour		
					(0.40)			
				23.88	1.80	Complete at 1.80m		

Plan

Remarks

No groundwater encountered
Trial pit stable
Soakaway test carried out in trial pit in accordance to BRE Digest 365
Trial pit backfilled upon completion

Scale (approx)	Logged By	Figure No.
1:25	AB	9897-08-20.SK02

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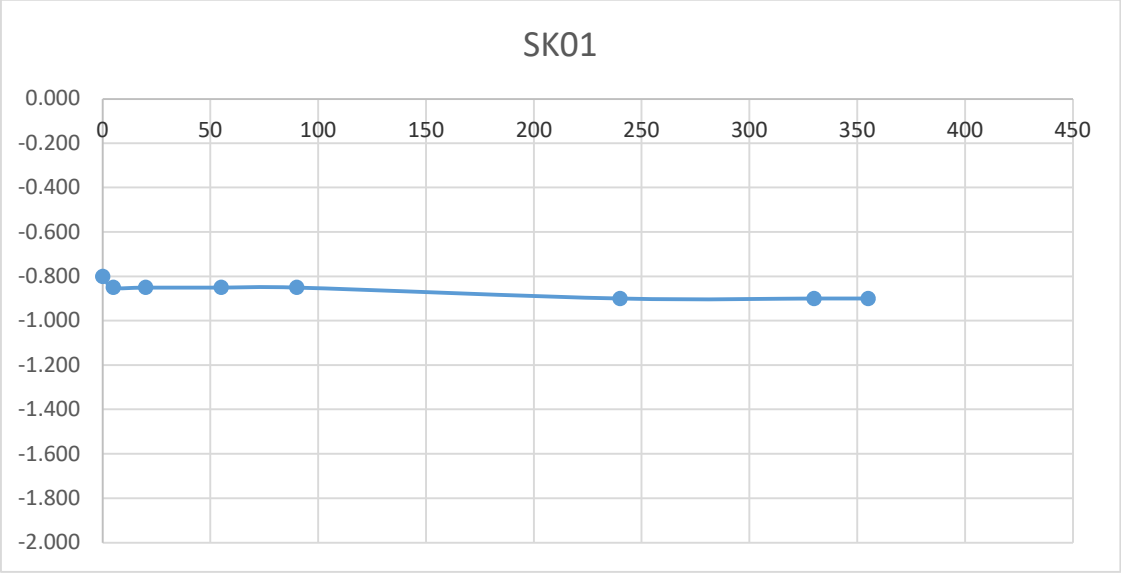
SK01

Soakaway Test to BRE Digest 365
Trial Pit Dimensions: 2.5m x 0.40m 2.0m (L x W x D)

Date	Time	Water level (m bgl)
21/09/2020	0	-0.800
21/09/2020	5	-0.850
21/09/2020	20	-0.850
21/09/2020	55	-0.850
21/09/2020	90	-0.850
21/09/2020	240	-0.900
21/09/2020	330	-0.900
21/09/2020	355	-0.900

***Soakaway failed - Pit backfilled**

Start depth	Depth of Pit	Diff	75% full	25%full
0.80	2.000	1.200	1.1	1.7



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Geotechnical & Environmental

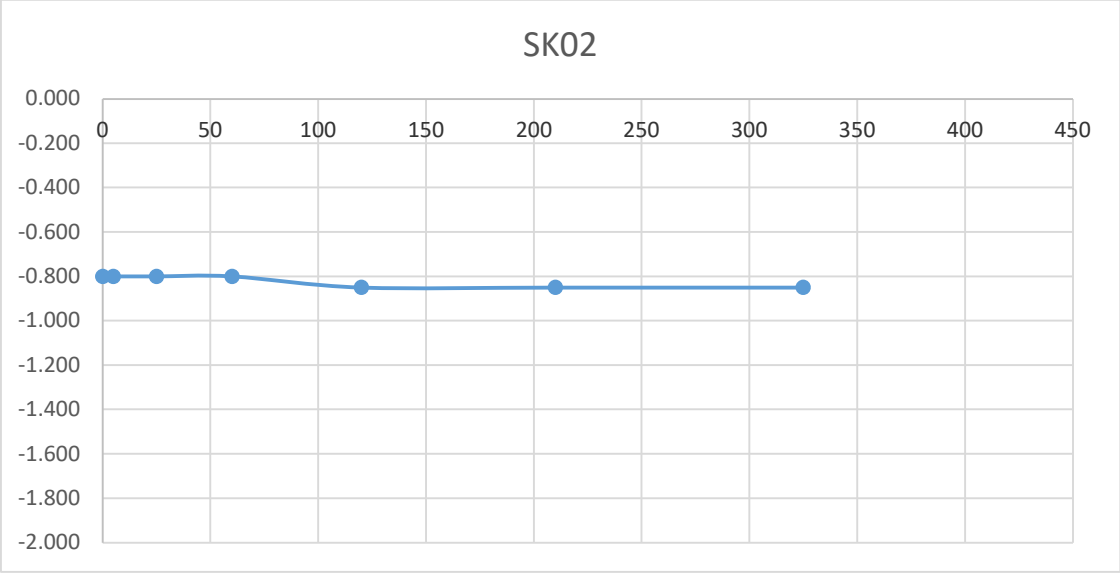
SK02

Soakaway Test to BRE Digest 365
Trial Pit Dimensions: 2.4m x 0.50m 1.8m (L x W x D)

Date	Time	Water level (m bgl)
21/09/2020	0	-0.800
21/09/2020	5	-0.800
21/09/2020	25	-0.800
21/09/2020	60	-0.800
21/09/2020	120	-0.850
21/09/2020	210	-0.850
21/09/2020	325	-0.850

***Soakaway failed - Pit backfilled**

Start depth	Depth of Pit	Diff	75% full	25%full
0.80	1.800	1.000	1.05	1.55



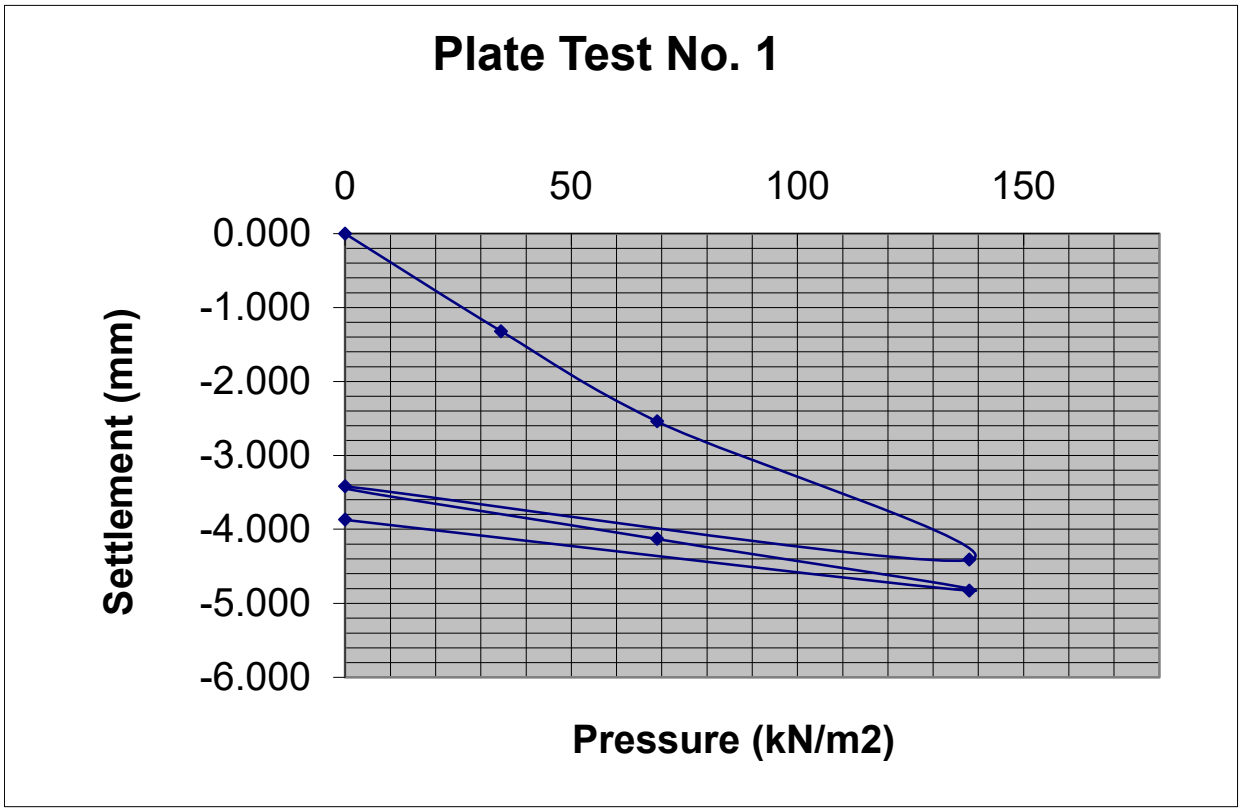
GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

APPENDIX 5 – Plate Bearing Test Records

Applied Load	Gauge settlement
0	**0.000**
34.5	-1.32
69	-2.54
138	-4.41
0	-3.42
69	-4.13
138	-4.83
0	-3.87

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

LOCATION	Emmet Road	**MATERIAL**	MADE GROUND: Dark brown slightly sandy gravelly Clay with red brick, concrete and rubble
CONTRACT NO.	9897-08-20		
DATE	16/09/2020		
CLIENT	Dublin City Council	**DEPTH**	0.50m
PLATE DIAMETER	457mm	**NOTES**	
TEST NO.	PT01	**SAMPLES**	



Modulus of subgrade reaction, K (Initial) = **18.36 MN/m2/m**

Modulus of subgrade reaction, K (Reload) = **65.67 MN/m2/m**

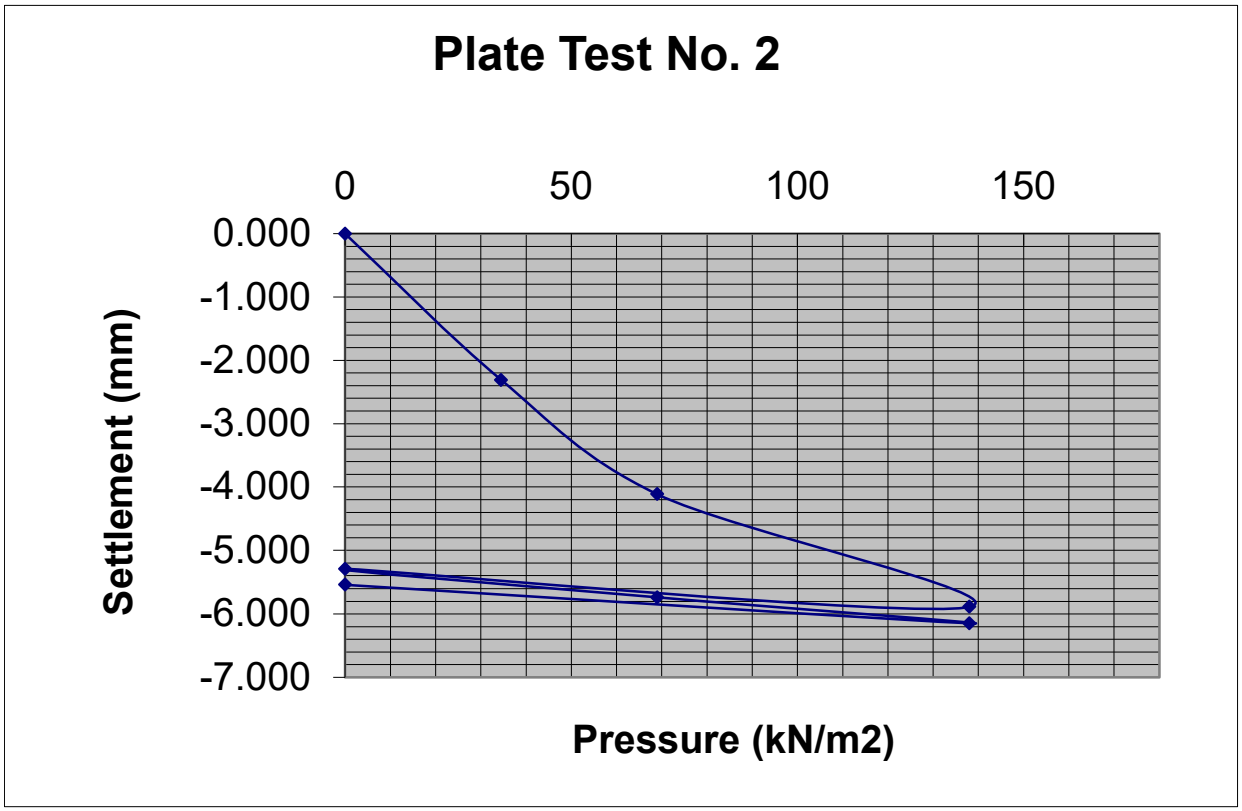
Equivalent CBR(initial)in accordance with HD25/94 volume7 section2 = **1.49 %**

Equivalent CBR(reload)in accordance with HD25/94 volume7 section2 = **13.61 %**

Applied Load	Gauge settlement
0	**0.000**
34.5	-2.31
69	-4.11
138	-5.89
0	-5.29
69	-5.74
138	-6.15
0	-5.54

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

LOCATION	Emmet Road	**MATERIAL**	FILL: Dark grey clayey sandy coarse angular Gravel (Crushed Rock Fill)
CONTRACT NO.	9897-08-20		
DATE	16/09/2020		
CLIENT	Dublin City Council	**DEPTH**	0.50m
PLATE DIAMETER	457mm	**NOTES**	
TEST NO.	PT02	**SAMPLES**	



Modulus of subgrade reaction, K (Initial) = **11.34 MN/m2/m**

Modulus of subgrade reaction, K (Reload) = **103.61 MN/m2/m**

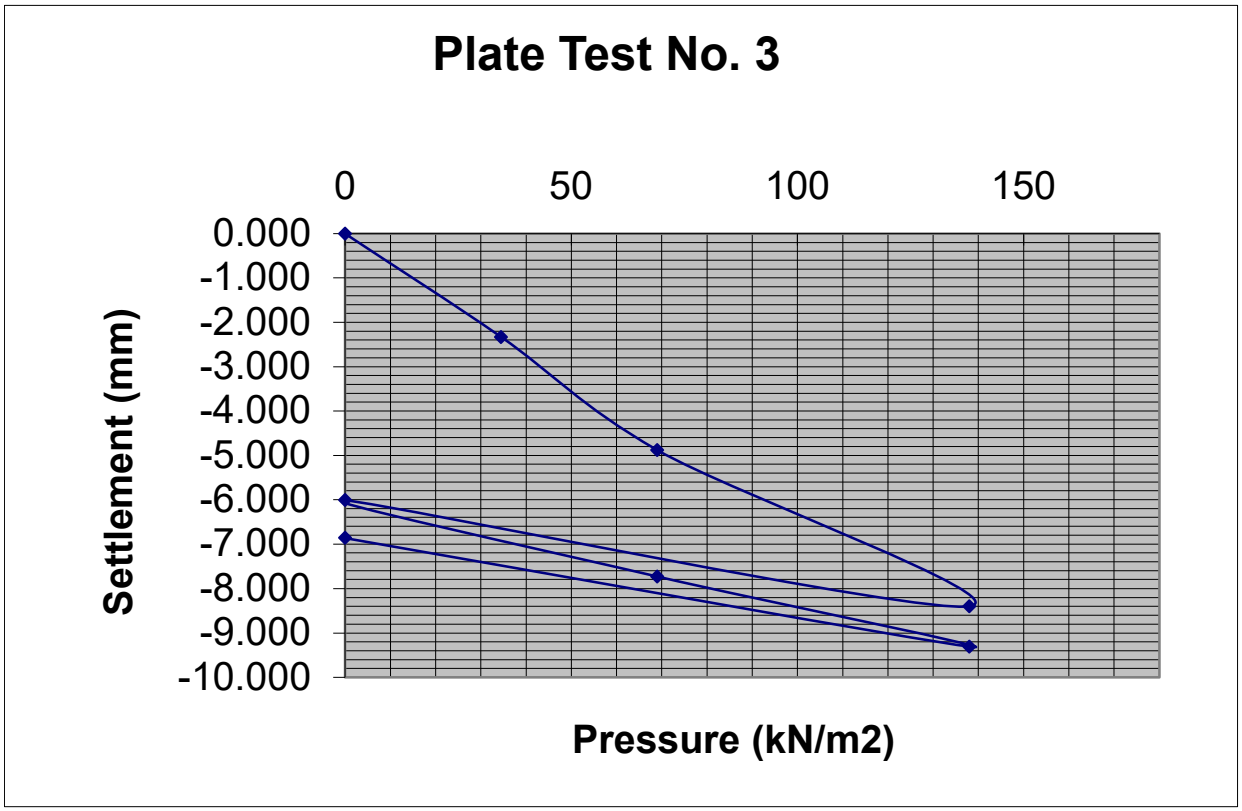
Equivalent CBR(initial)in accordance with HD25/94 volume7 section2 = **0.65 %**

Equivalent CBR(reload)in accordance with HD25/94 volume7 section2 = **29.99 %**

Applied Load	Gauge settlement
0	**0.000**
34.5	-2.33
69	-4.88
138	-8.4
0	-6.01
69	-7.73
138	-9.31
0	-6.86

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

LOCATION	Emmet Road	**MATERIAL**	MADE GROUND: Brown slightly sandy gravelly CLAY with red brick, concrete and tarmac
CONTRACT NO.	9897-08-20		
DATE	16/09/2020		
CLIENT	Dublin City Council	**DEPTH**	0.50m
PLATE DIAMETER	457mm	**NOTES**	
TEST NO.	PT03	**SAMPLES**	



Modulus of subgrade reaction, K (Initial) = **9.55 MN/m2/m**

Modulus of subgrade reaction, K (Reload) = **27.11 MN/m2/m**

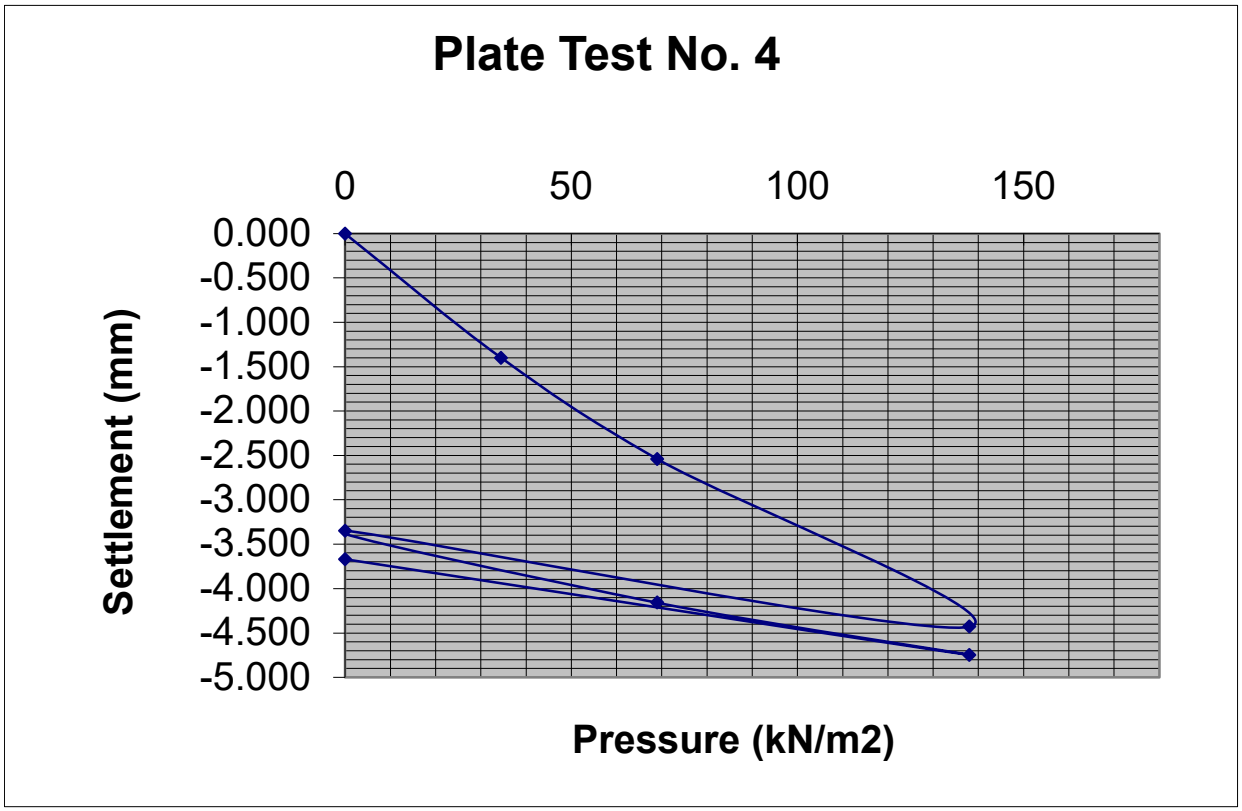
Equivalent CBR(initial)in accordance with HD25/94 volume7 section2 = **0.48 %**

Equivalent CBR(reload)in accordance with HD25/94 volume7 section2 = **2.94 %**

Applied Load	Gauge settlement
0	**0.000**
34.5	-1.4
69	-2.54
138	-4.43
0	-3.35
69	-4.16
138	-4.75
0	-3.67

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

LOCATION	Emmet Road	**MATERIAL**	MADE GROUND: Brown slightly sandy gravelly CLAY with red brick, concrete and tarmac
CONTRACT NO.	9897-08-20		
DATE	16/09/2020		
CLIENT	Dublin City Council	**DEPTH**	0.50m
PLATE DIAMETER	457mm	**NOTES**	
TEST NO.	PT04	**SAMPLES**	



Modulus of subgrade reaction, K (Initial) = **18.36 MN/m2/m**

Modulus of subgrade reaction, K (Reload) = **57.56 MN/m2/m**

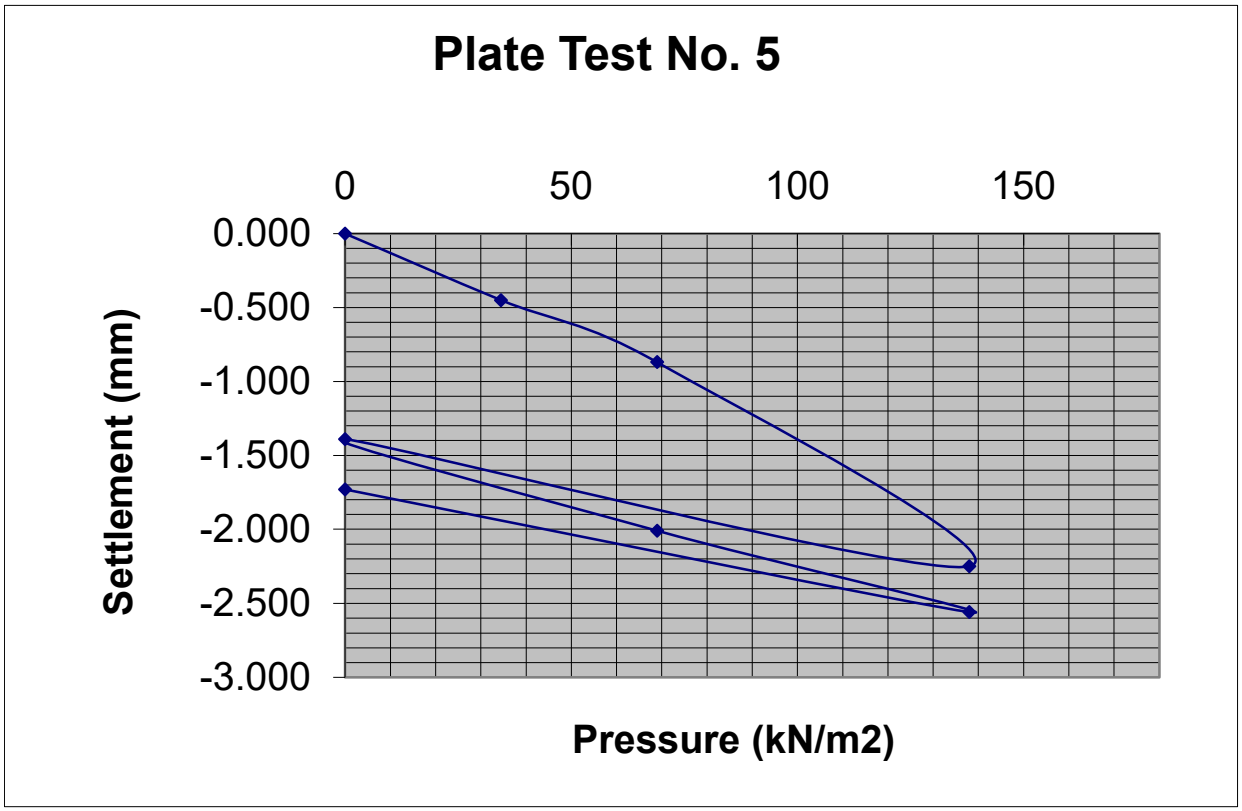
Equivalent CBR(initial)in accordance with HD25/94 volume7 section2 = **1.49 %**

Equivalent CBR(reload)in accordance with HD25/94 volume7 section2 = **10.83 %**

Applied Load	Gauge settlement
0	**0.000**
34.5	-0.45
69	-0.87
138	-2.25
0	-1.39
69	-2.01
138	-2.56
0	-1.73

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

LOCATION	Emmet Road	**MATERIAL**	MADE GROUND: Brown slightly sandy gravelly CLAY with red brick, concrete and tarmac
CONTRACT NO.	9897-08-20		
DATE	16/09/2020		
CLIENT	Dublin City Council	**DEPTH**	0.50m
PLATE DIAMETER	457mm	**NOTES**	
TEST NO.	PT05	**SAMPLES**	



Modulus of subgrade reaction, K (Initial) = **53.59 MN/m2/m**

Modulus of subgrade reaction, K (Reload) = **75.20 MN/m2/m**

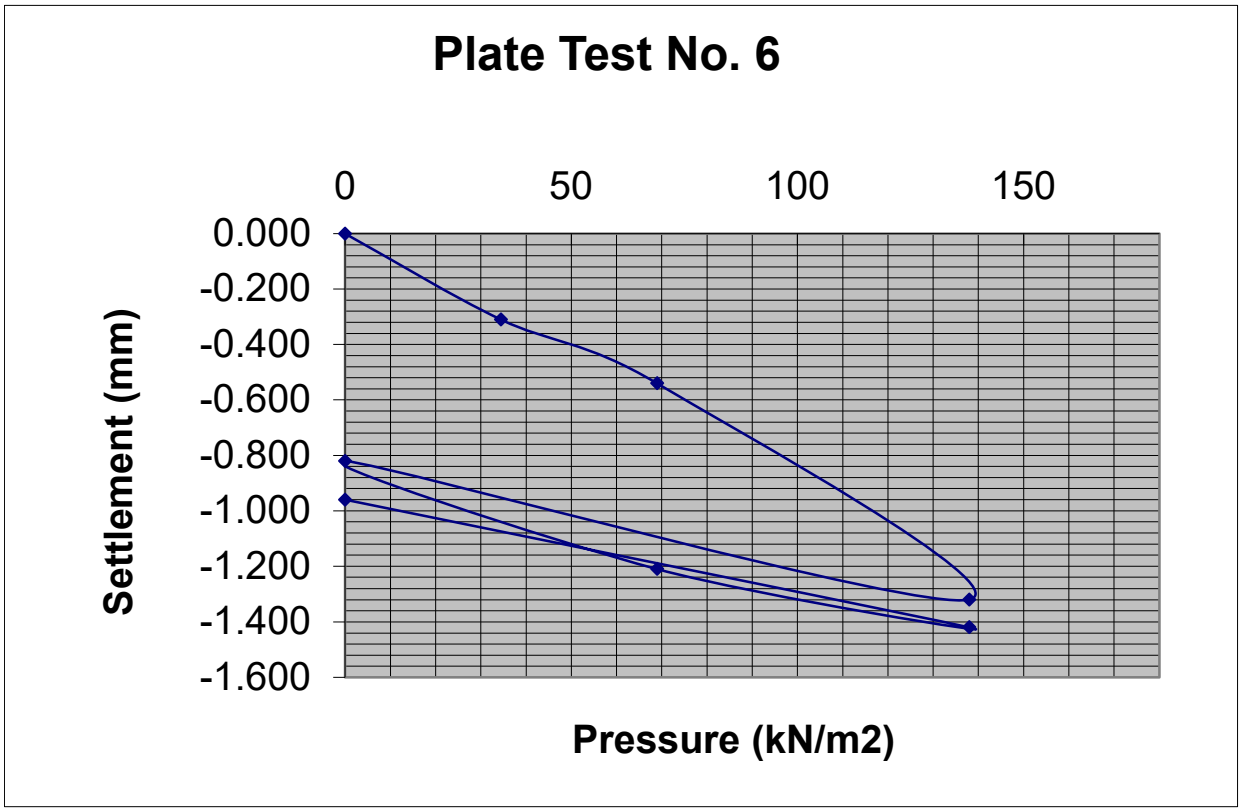
Equivalent CBR(initial)in accordance with HD25/94 volume7 section2 = **9.57 %**

Equivalent CBR(reload)in accordance with HD25/94 volume7 section2 = **17.21 %**

Applied Load	Gauge settlement
0	**0.000**
34.5	-0.31
69	-0.54
138	-1.32
0	-0.82
69	-1.21
138	-1.42
0	-0.96

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

LOCATION	Emmet Road	**MATERIAL**	MADE GROUND: Brown slightly sandy gravelly CLAY with red brick, concrete and tarmac
CONTRACT NO.	9897-08-20		
DATE	16/09/2020		
CLIENT	Dublin City Council	**DEPTH**	0.50m
PLATE DIAMETER	457mm	**NOTES**	
TEST NO.	PT06	**SAMPLES**	



Modulus of subgrade reaction, K (Initial) = **86.34 MN/m2/m**

Modulus of subgrade reaction, K (Reload) = **119.55 MN/m2/m**

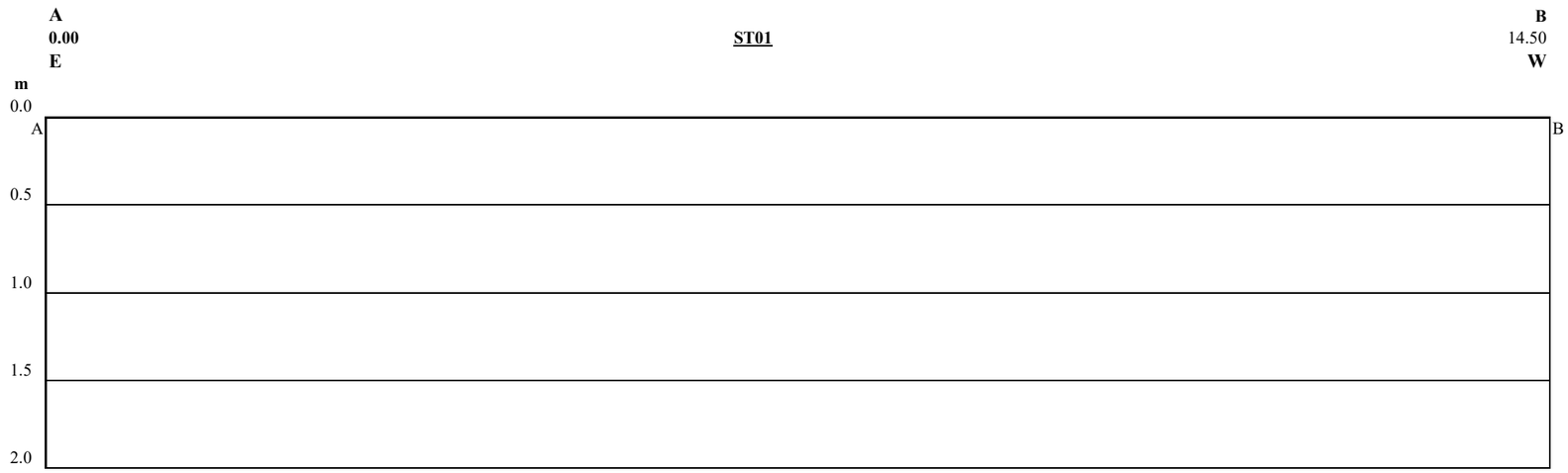
Equivalent CBR(initial)in accordance with HD25/94 volume7 section2 = **21.87 %**

Equivalent CBR(reload)in accordance with HD25/94 volume7 section2 = **38.43 %**

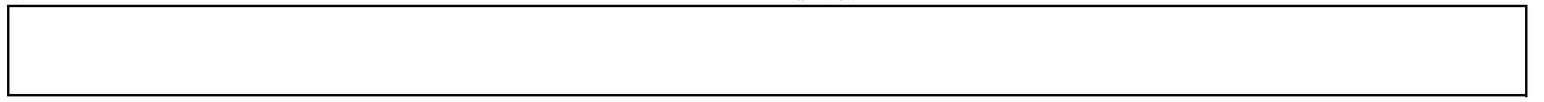
APPENDIX 6 – Slit Trenching Records

SLIT TRENCH RECORD - SLIT TRENCH ST01

Contract No.:	9897-08-20	**Survey Point**	A
Client:	Dublin Ciy Council	E	712039.459
Site Address:	Emmet Road	N	733369.705
Date Commenced:	15/09/2020	Ground Level (m.O.D.)	24.833
Date Completed:	15/09/2020	Logged By	A Browne



W **Plan View** **E**



Trench Profile: **m**

Topsoil	0.00-14.50

m

Zero taken at	A
Start of ST	0.00
End of ST	14.50
ST Length	14.50
Max Depth	1.70
Facing Direction	E-W
Width of ST	0.60

Points	Easting	Northing	Ground Level
A	712039.459	733369.705	24.833
B	712025.639	733367.015	25.064

Pipe No.	ø (mm)	Colour - Material	Utility	Depth	Distance from zero	(m.O.D.)	Easting (E)	Northing (N)
1	200	Yellow PVC	Gas	0.80	2.10	24.09	712037.485	733369.34
2	50	Cast Iron	Gas	1.00	3.70	23.887	712035.959	733369.069
3	100	Cast Iron	Water	1.00	11.00	24.052	712028.885	733367.491

Concrete Profile:

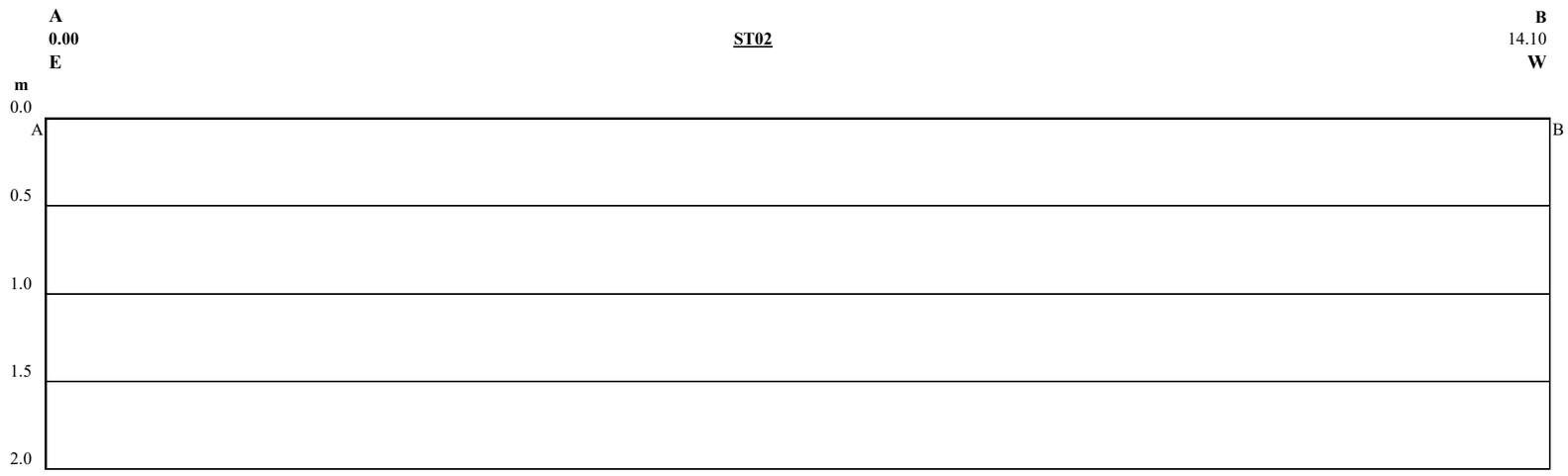
From (m)	To (m)	Description
0	0.40	TOPSOIL
0.40	1.00	MADE GROUND: Dark brown/black slightly sandy slightly gravelly Clay with fragments of red brick, plastic, concrete, glass, rebar and wood
1.00	1.70	MADE GROUND: Brown slightly sandy slightly gravelly CLAY with fragments of red brick, concrete, and metal

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

Tel: 353-1-601-5176
Fax: 353-1-601-5173
Email: info@gii.ie

SLIT TRENCH RECORD - SLIT TRENCH ST02

Contract No.:	9897-08-20	**Survey Point**	A
Client:	Dublin Ciy Council	E	712089.391
Site Address:	Emmet Road	N	733380.328
Date Commenced:	15/09/2020	Ground Level (m.O.D.)	24.448
Date Completed:	15/09/2020	Logged By	A Browne



N **Plan View** **S**

Trench Profile: **m**

Topsoil	0.00-14.10

m

Zero taken at	A
Start of ST	0.00
End of ST	14.10
ST Length	14.10
Max Depth	2.00
Facing Direction	N-S
Width of ST	0.60

Points	Easting	Northing	Ground Level
A	712089.391	733380.328	24.448
B	712090.864	733366.831	24.609
F1	712089.868	733376.279	24.062
Pile	712089.391	733380.328	23.602

Pipe No.	ø (mm)	Colour - Material	Utility	Depth	Distance from zero	(m.O.D.)	Easting (E)	Northing (N)
1	150	Cast iron	Gas	1.20	5.25	23.292	712090.093	733375.151

Concrete Profile:

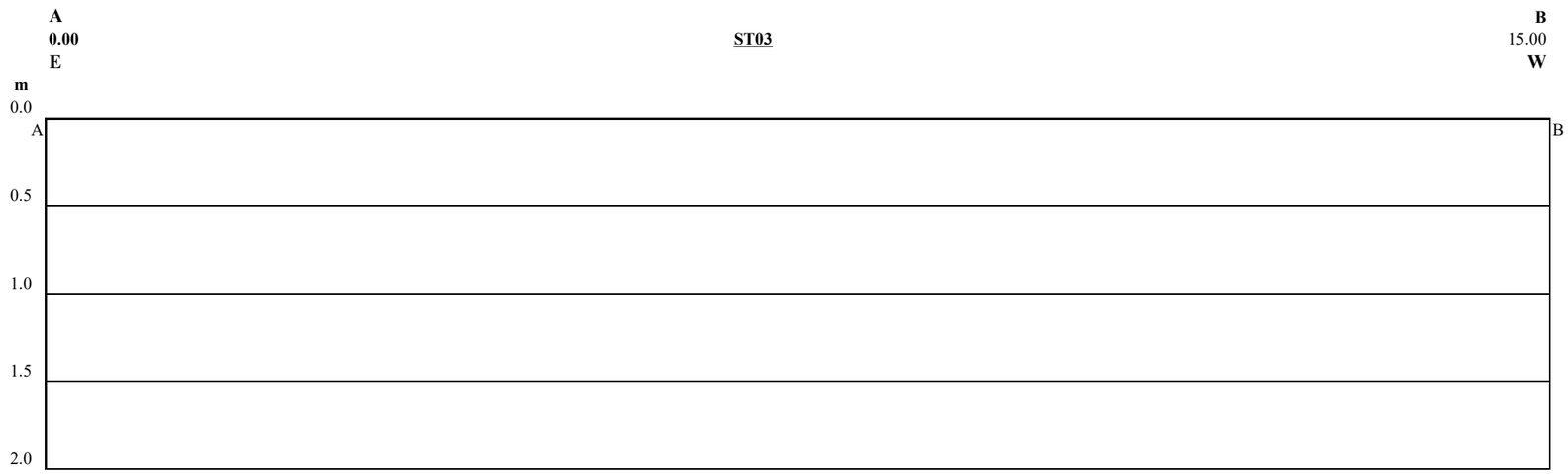
From (m)	To (m)	Description
0	0.25	TOPSOIL
0.25	1.00	MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with fragments of red brick, plastic, concrete, glass, rebar and wood
1.00	2.00	MADE GROUND: Light brown slightly sandy slightly gravelly CLAY with fragments of red brick, concrete, and wood

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Email: info@gii.ie

SLIT TRENCH RECORD - SLIT TRENCH ST03

Contract No.:	9897-08-20	**Survey Point**	A
Client:	Dublin Ciy Council	E	712082.654
Site Address:	Emmet Road	N	733324.343
Date Commenced:	17/09/2020	Ground Level (m.O.D.)	24.933
Date Completed:	17/09/2020	Logged By	A Browne



E **Plan View** **W**

m

Trench Profile: **m**

Topsoil	0.00-15.00

Zero taken at	A
Start of ST	0.00
End of ST	15.00
ST Length	15.00
Max Depth	2.00
Facing Direction	E-W
Width of ST	0.60

Points	Easting	Northing	Ground Level
A	712082.654	733324.343	24.933
B	712068.018	733321.096	25.18
F1	712081.186	733323.729	23.651
F2	712077.271	733322.84	24.559
Pile	712090.864	733366.831	23.945

Pipe No.	ø (mm)	Colour - Material	Utility	Depth	Distance from zero	(m.O.D.)	Easting (E)	Northing (N)

Concrete Profile:

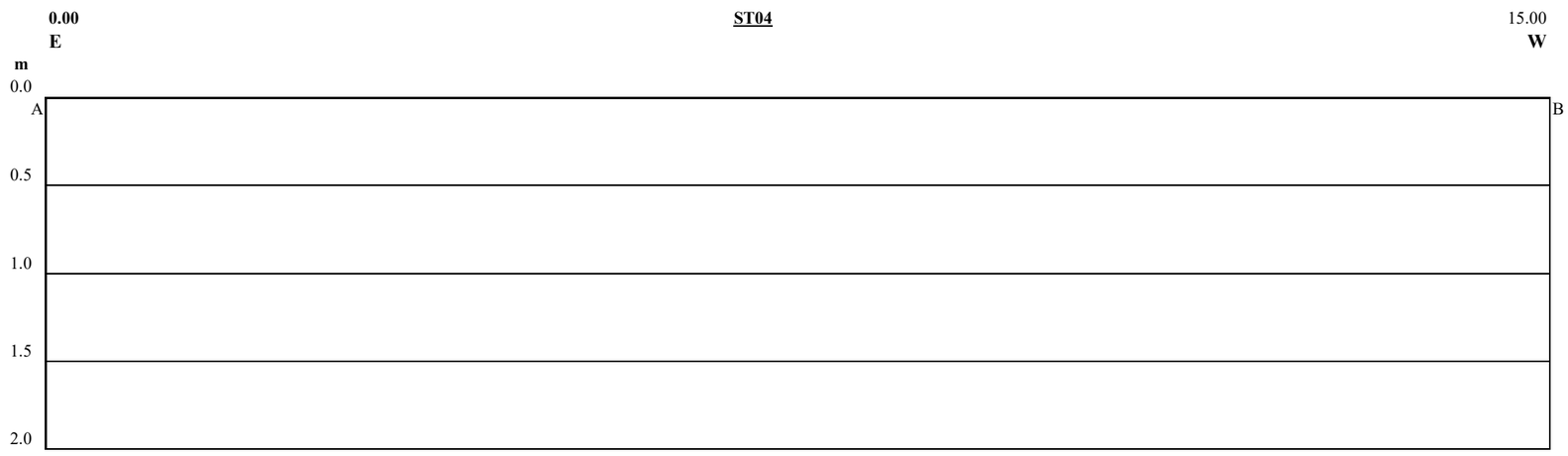
From (m)	To (m)	Description
0	0.30	TOPSOIL
0.30	1.50	MADE GROUND: Dark brown slightly sandy gravelly Clay with fragments of red brick, plastic, concrete, glass, rebar and wood
1.50	1.70	Firm to stiff brown mottled grey slightly sandy gravelly CLAY with many subangular cobbles
1.70	2.00	Stiff dark grey slightly sandy slightly gravelly CLAY with many subangular cobbles

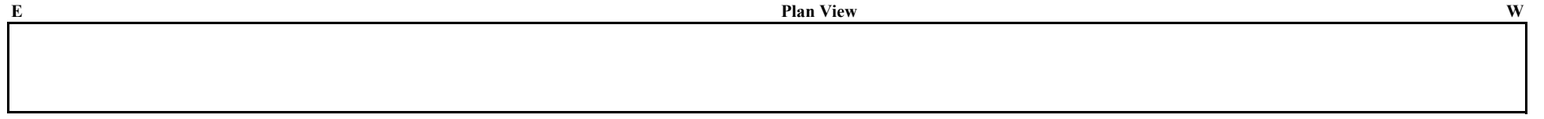
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SLIT TRENCH RECORD - SLIT TRENCH ST04

Contract No.:	9897-08-20	**Survey Point**	A
Client:	Dublin Ciy Council	E	712120.768
Site Address:	Emmet Road	N	733279.661
Date Commenced:	17/09/2020	Ground Level (m.O.D.)	25.152
Date Completed:	17/09/2020	Logged By	A Browne





m

Trench Profile: m

Topsoil	0.00-15.00

Zero taken at	A
Start of ST	0.00
End of ST	15.00
ST Length	15.00
Max Depth	1.70
Facing Direction	E-W
Width of ST	0.60

Points	Easting	Northing	Ground Level
A	712120.768	733279.661	25.152
B	712106.084	733276.799	25.383
F1	712116.708	733278.799	24.372
F2	712115.476	733278.571	24.463
F3	712113.388	733278.165	24.542
F4	712109.394	733277.279	24.45

Pipe No.	ø (mm)	Colour - Material	Utility	Depth	Distance from zero	(m.O.D.)	Easting (E)	Northing (N)
1	-	Under Concrete	Gas/Fuel	0.80	7.80	24.463	712115.476	733278.571
2	100	Cast Iron	Water	1.30	9.70	24.186	712111.193	733277.625

Concrete Profile:

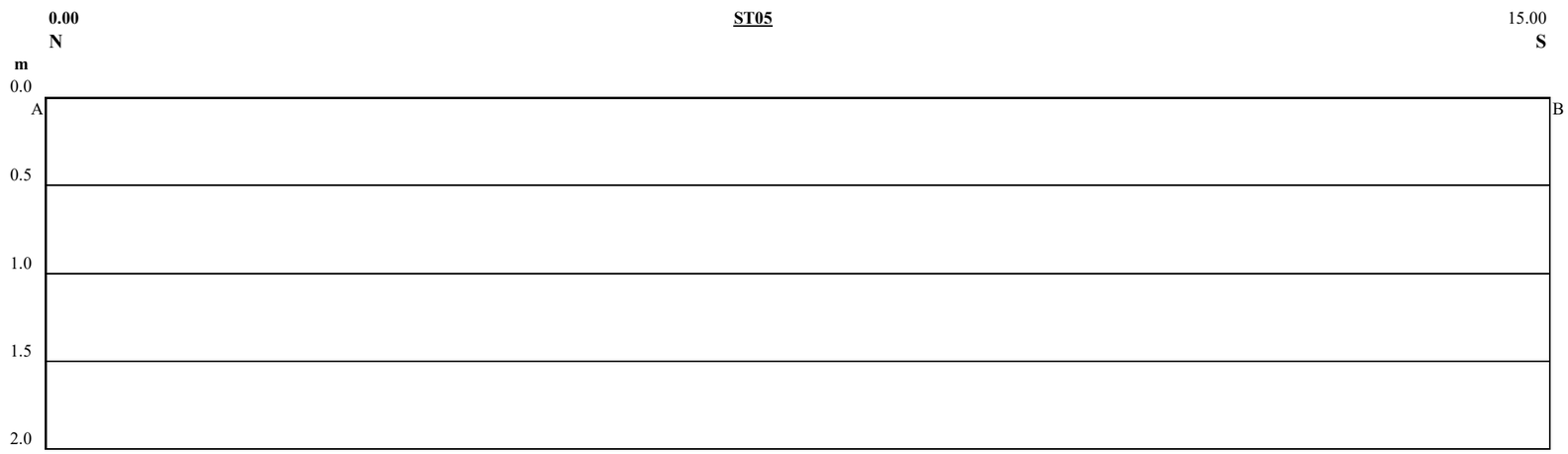
From (m)	To (m)	Description
0	0.30	TOPSOIL
0.30	1.50	MADE GROUND: Brown slightly sandy slightly gravelly Clay with fragments of red brick, concrete, and plastic
1.50	1.70	MADE GROUND: Greyish brown slightly sandy silty Clay with strong hyudrocarbon odour, shell fragments and organic matter

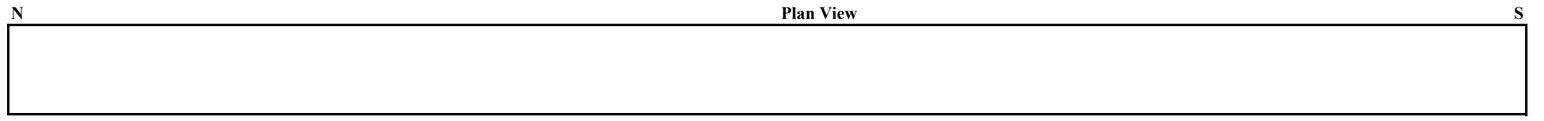
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SLIT TRENCH RECORD - SLIT TRENCH ST05

Contract No.:	9897-08-20	**Survey Point**	A
Client:	Dublin Ciy Council	E	712053.239
Site Address:	Emmet Road	N	733252.898
Date Commenced:	22/09/2020	Ground Level (m.O.D.)	25.666
Date Completed:	22/09/2020	Logged By	A Browne





Trench Profile: m

Topsoil	0.00-15.00

m

Zero taken at	A
Start of ST	0.00
End of ST	15.00
ST Length	15.00
Max Depth	1.90
Facing Direction	N-S
Width of ST	0.60

Points	Easting	Northing	Ground Level
A	712053.239	733252.898	25.666
B	712055.403	733238.041	25.993

Pipe No.	ø (mm)	Colour - Material	Utility	Depth	Distance from zero	(m.O.D.)	Easting (E)	Northing (N)
1	150	Blue PVC	Water	1.00	1.10	24.782	712053.415	733251.647
2	100	Yellow PVC	Gas	0.70	2.00	25.05	712053.548	733250.787
3	100	Black PVC	Communications	0.90	3.50	24.847	712053.799	733249.379
4	400	Cast Iron	Old Water	0.80	5.60	25.115	712054.216	733247.291
5	10	Grey Plastic	Communications	0.80	6.00	24.952	712054.133	733246.994
6	50	Cast Iron	Gas	0.50	13.70	25.574	712055.326	733239.812

Concrete Profile:

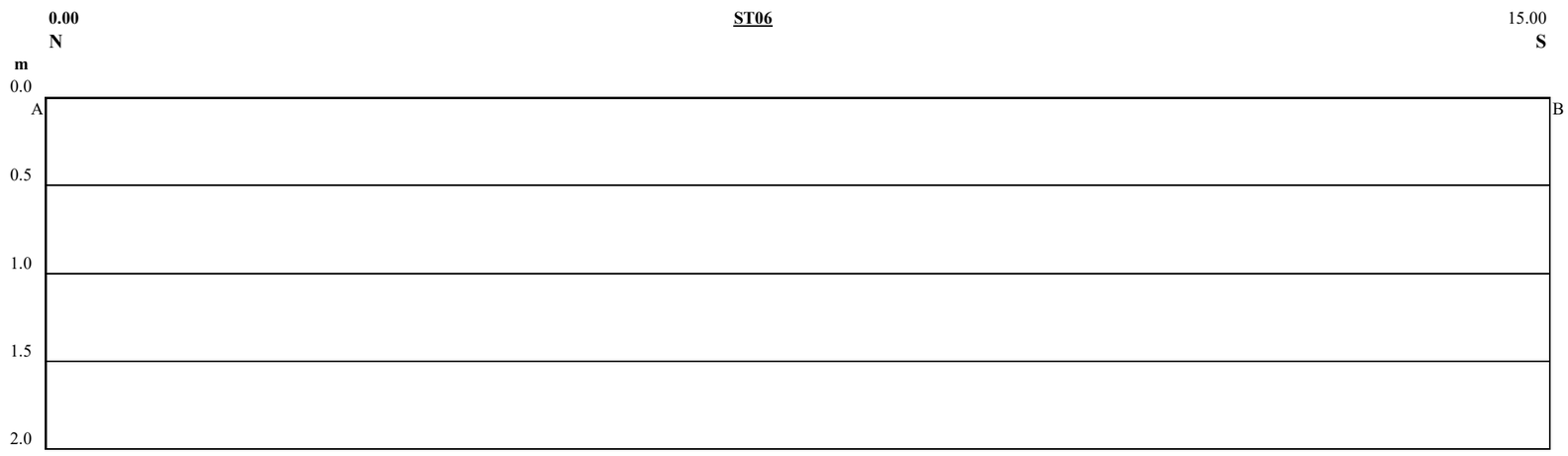
From (m)	To (m)	Description
0	0.20	TOPSOIL
0.20	1.20	MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with fragments of red brick, concrete, and plastic
1.20	1.90	POSSIBLE MADE GROUND: Soft brown slightly sandy gravelly CLAY with some subangular cobbles and boulders

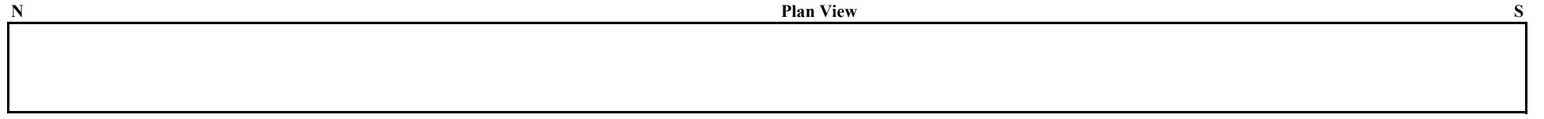
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SLIT TRENCH RECORD - SLIT TRENCH ST06

Contract No.:	9897-08-20	**Survey Point**	A
Client:	Dublin Ciy Council	E	712047.148
Site Address:	Emmet Road	N	733186.067
Date Commenced:	22/09/2020	Ground Level (m.O.D.)	26.542
Date Completed:	22/09/2020	Logged By	A Browne





Trench Profile: m

Topsoil	0.00-15.00

m

Zero taken at	A
Start of ST	0.00
End of ST	15.00
ST Length	15.00
Max Depth	2.00
Facing Direction	N-S
Width of ST	0.60

Points	Easting	Northing	Ground Level
A	712047.148	733186.067	26.542
B	712047.633	733171.129	26.803
F1	712047.455	733178.135	26.136
F2	712047.639	733175.182	25.526

Pipe No.	ø (mm)	Colour - Material	Utility	Depth	Distance from zero	(m.O.D.)	Easting (E)	Northing (N)
1	400	Concrete	Storm	1.30	11.40	25.467	712047.658	733174.704

Concrete Profile:

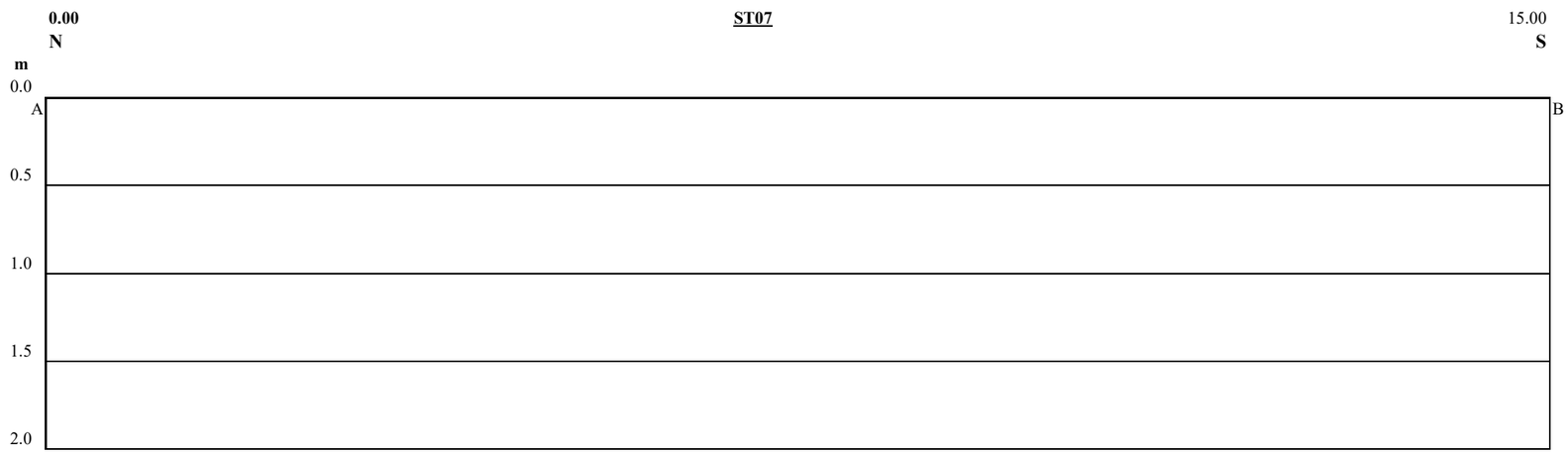
From (m)	To (m)	Description
0	0.20	TOPSOIL
0.20	1.45	MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with fragments of red brick, concrete, and plastic
1.20	2.00	POSSIBLE MADE GROUND: Soft to firm brown mottled black slightly sandy slightly gravelly CLAY with organic matter

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SLIT TRENCH RECORD - SLIT TRENCH ST07

Contract No.:	9897-08-20	**Survey Point**	A
Client:	Dublin Ciy Council	E	712107.737
Site Address:	Emmet Road	N	733196.964
Date Commenced:	23/09/2020	Ground Level (m.O.D.)	25.595
Date Completed:	23/09/2020	Logged By	A Browne



N **Plan View** **S**



Trench Profile: **m**

Topsoil	0.00-15.00

m

Zero taken at	A
Start of ST	0.00
End of ST	15.00
ST Length	15.00
Max Depth	1.50
Facing Direction	N-S
Width of ST	0.60

Points	Easting	Northing	Ground Level
A	712107.737	733196.964	25.595
B	712110.486	733182.499	26.035
F1	712109.297	733190.067	25.519
F2	712110.255	733185.958	24.994
F3	712110.647	733183.489	25.826

Pipe No.	ø (mm)	Colour - Material	Utility	Depth	Distance from zero	(m.O.D.)	Easting (E)	Northing (N)
1	100	Cast Iron	Water	0.60	2.10	25.174	712108.177	733194.968
2	50	Yellow PVC	Gas	0.85	3.80	24.92	712108.635	733193.243
3	100	Black PVC	Communications	1.30	4.70	24.493	712108.844	733192.543
4	50	Yellow PVC	Gas	0.80	10.00	25.176	712109.954	733187.407
5	100	Cast Iron	Water	1.00	11.50	24.901	712110.218	733185.356

Concrete Profile:

From (m)	To (m)	Description
0	0.20	TOPSOIL
0.20	1.50	MADE GROUND: Brown slightly sandy slightly gravelly Clay with fragments of red brick, concrete, and plastic

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Emmet Road Dublin 08
Slit trench Photos
ST01



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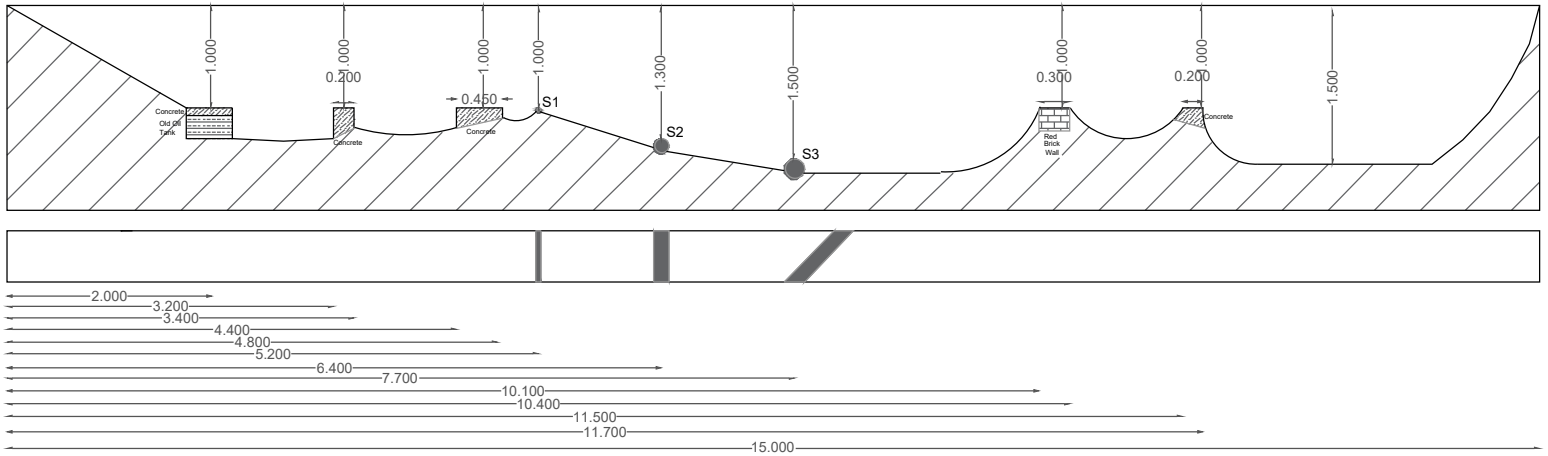


E 712013.020
N 733343.998
Z 25.481

STA

E 712015.809
N 733329.413
Z 25.557

A
N



B
S

DATE OF EXCAVATION : 14/10/2020

From (m)	To (m)	Description
0.00	0.15	Brown slightly gravelly TOPSOIL
0.15	1.10	MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with glass fragments
1.10	1.50	MADE GROUND: Brown mottled black slightly sandy slightly gravelly silty Clay with occasional metal, styrofoam, ceramic and timber fragments

Service No	ø (m)	Colour- Material	Utility	Angle to trench	Co-ordinates	Elevation
S1	0.050	Cast iron	Water	90	712013.664 733338.737	24.684
S2	0.150	Black PVC	Electric	90	712013.803 733337.743	24.34
S3	0.200	Clay	Foul	45	712014.084 733336.471	24.42

Groundwater	Y/N	Depth
	N	

Surface from/to		Surface type
0.00	15.00	Grass

Sample Type	Sample Depth
Bag	0.50
Bag	1.50

GROUND INVESTIGATIONS IRELAND
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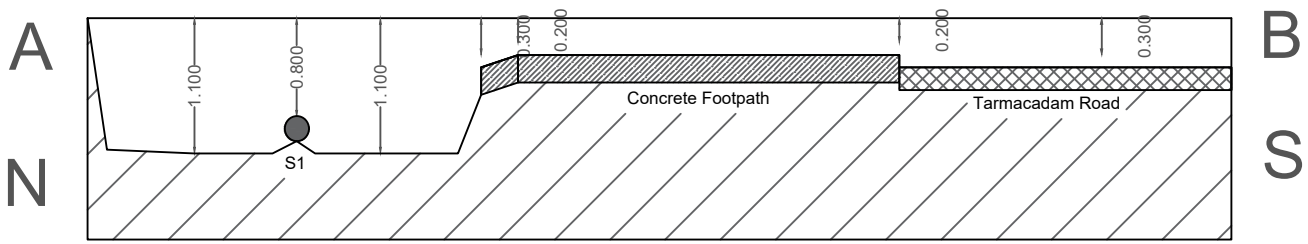
PROJECT:	Emmet Road
DRAWING No.:	9897-08-20 STA
DATE:	October 2020
CLIENT:	DCC
SCALE:	NTS @ A4

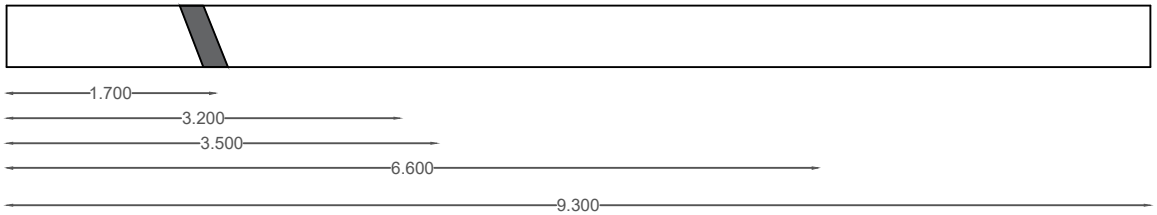
Version:	Date:	Drawn By:	Checked:
No.	Initials	Initials	Initials
	05/11/2020	EB	DML

E 712130.065
N 733229.366
Z 25.520

STB1

E 712129.118
N 733220.169
Z 25.460





From (m)	To (m)	Description
0.00	0.30	Brown slightly sandy slightly gravelly TOPSOIL with some grass rootlets
0.30	1.10	MADE GROUND: Brown slightly sandy slightly gravelly Clay with red brick fragments

Service No	ø (m)	Colour- Material	Utility	Angle to trench	Co-ordinates	Elevation
S1	0.200	Yellow Plastic	Gas	70	712130.167 733227.681	24.69

Sample Type	Sample Depth

Groundwater	Y/N	Depth
	N	

Surface from/to		Surface type
0.00	9.30	Grass

DATE OF EXCAVATION : 14/11/2020

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

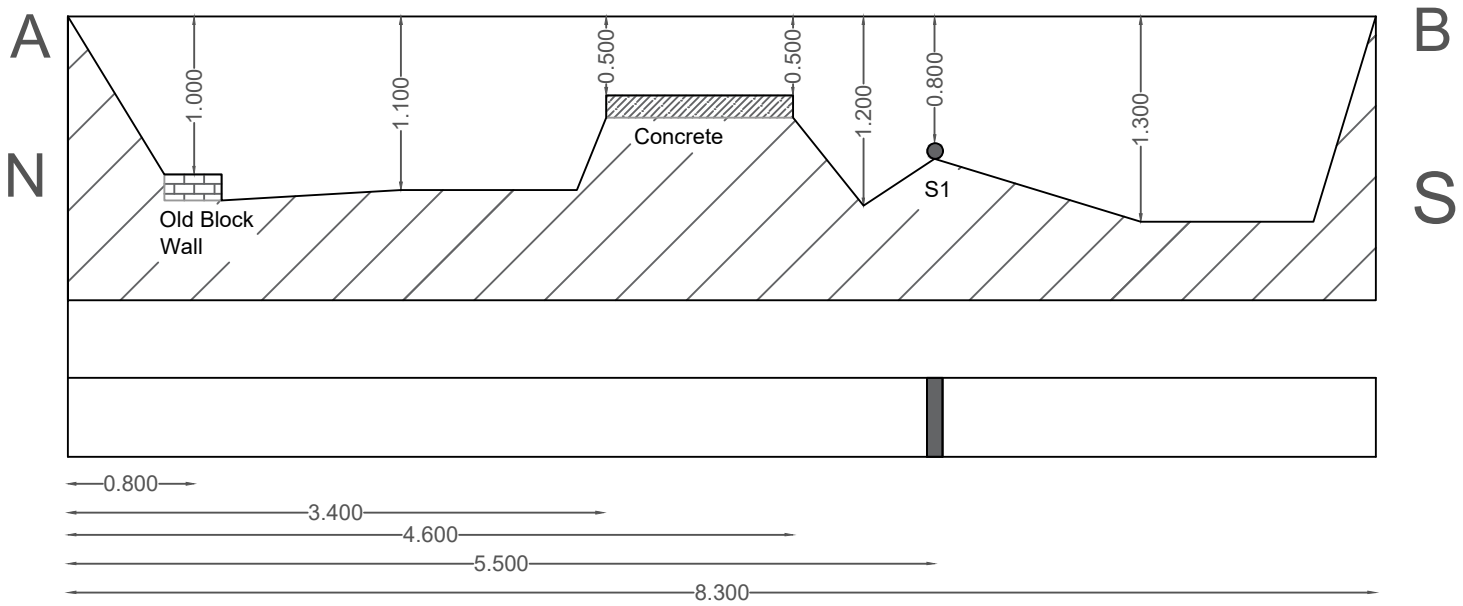
PROJECT:	Emmet Road
DRAWING No.:	9897-08-20 STB1
DATE:	June 2020
CLIENT:	DCC
SCALE:	NTS @ A4

Version:	Date:	Drawn By:	Checked:
No.	Initials	Initials	Initials
	06/11`/2020	AB	DML

E 712127.615
N 733208.470
Z 25.466

STB2

E 712130.083
N 733200.316
Z 25.714



From (m)	To (m)	Description (0.00m to 6.00m)
0.00	0.10	Brown slightly sandy slightly gravelly TOPSOIL with some grass rootlets
0.10	1.20	MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with occasional fragments of concrete and ceramic

Service No	ø (m)	Colour- Material	Utility	Angle to trench	Co-ordinates	Elevation
S1	0.100	Cast Iron	Water	70	712129.116 733203.073	24.881

Sample Type	Sample Depth

Groundwater	Y/N	Depth
	N	

Surface from/to		Surface type
0.00	8.30	Grass

DATE OF EXCAVATION : 14/11/2020

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

PROJECT:	Emmet Road
DRAWING No.:	9897-08-20 STB2
DATE:	June 2020
CLIENT:	DCC
SCALE:	NTS @ A4

Version: No.	Date: Initials	Drawn By: Initials	Checked: Initials
	06/11`/2020	AB	DML

E 712071.083
N 733176.405
Z 26.453

STC

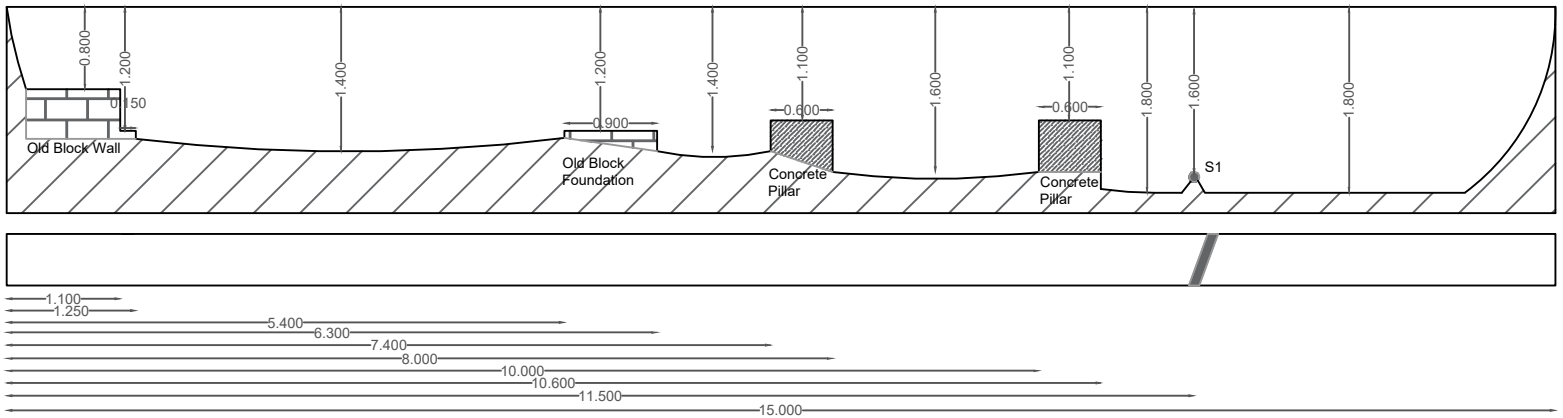
E 712055.946
N 733174.910
Z 26.718

A

B

E

W



From (m)	To (m)	Description
0.00	0.10	Brown slightly sandy slightly gravelly TOPSOIL with some grass rootlets
0.10	1.50	MADE GROUND: Brown slightly sandy slightly gravelly Clay with occasional metal and plastic fragments
1.50	1.80	MADE GROUND: Light grey slightly sandy slightly gravelly silty Clay with occasional concrete and metal fragments

Service No	ø (m)	Colour- Material	Utility	Angle to trench	Co-ordinates	Elevation
S1	0.100	Cast Iron	Water	70	712059.511 733175.081	25.167

Sample Type	Sample Depth

Groundwater	Y/N	Depth
	N	

Surface from/to		Surface type
0.00	15.00	Grass

DATE OF EXCAVATION : 15/10//2020

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

PROJECT:	Emmet Road
DRAWING No.:	9897-08-20 STC
DATE:	October 2020
CLIENT:	DCC
SCALE:	NTS @ A4

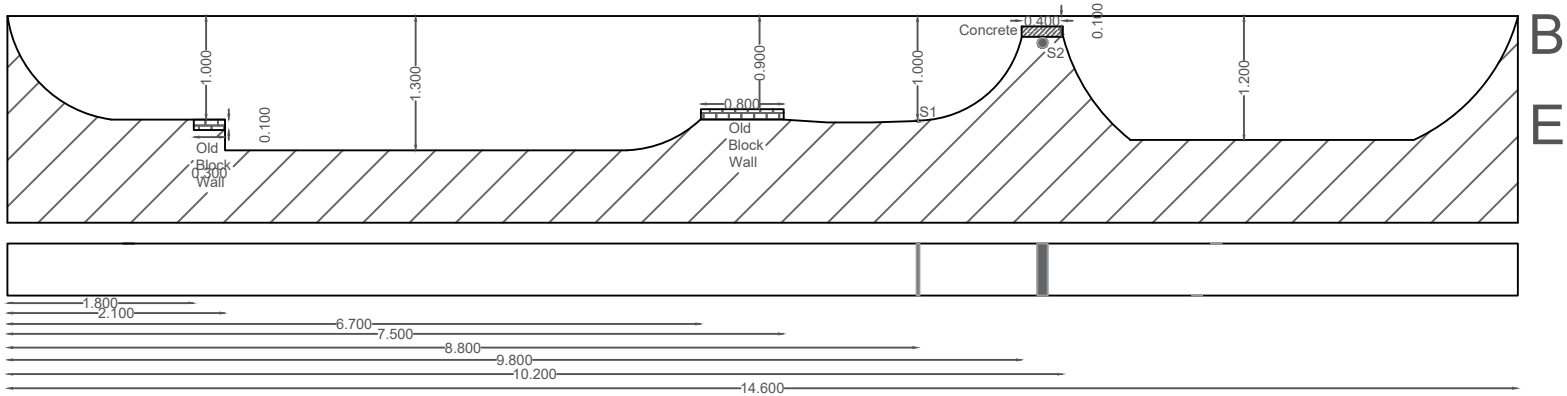
Version:	Date:	Drawn By:	Checked:
No.	Initials	Initials	Initials
	05/11/2020	EB	DML

E 712114.234
N 733336.951
Z 24.600

STD

E 712100.129
N 733333.948
Z 24.594

A W



B E

From (m)	To (m)	Description
0.00	0.10	Brown slightly sandy slightly gravelly TOPSOIL with some grass rootlets
0.10	1.10	MADE GROUND: Dark brown slightly sandy slightly gravelly Clay with occasional plastic and roots
1.10	1.30	MADE GROUND: Dark grey slightly sandy slightly gravelly Clay with hydrocarbon odour

Service No	ø (m)	Colour- Material	Utility	Angle to trench	Co-ordinates	Elevation
S1	0.250	Black Plastic	Fibre	90	712105.603 733334.964	23.437
S1	-	Encased in concrete	ESB	90	712104.448 733334.749	24.298

Sample Type	Sample Depth

Groundwater	Y/N	Depth
	Y	2.60 (1.10) 6.70 (1.00)

Surface from/to		Surface type
0.00	14.60	Grass

DATE OF EXCAVATION : 15/11/2020

GROUND INVESTIGATIONS IRELAND
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PROJECT:	Emmet Road
DRAWING No.:	9897-08-20 STD
DATE:	October 2020
CLIENT:	DCC
SCALE:	NTS @ A4

Version: No.	Date: Initials	Drawn By: Initials	Checked: Initials
	05/11/2020	EB	DML

Emmet Road
Additional Slit Trench photos
STA



STA



STA



STA



STA



STA



STA



STA



STB-1



STB-1



STB-1



STB-2



STB-2



STB-2



STB-2



STB-2



STC



STC



STC



STC



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STC



STD



STD



STD



STD



STD



STD



STD



STD



APPENDIX 7 – Window Sample Records

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS01
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.70m	**Ground Level (mOD)** 24.29	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712005.4 E 733471.6 N	**Dates** 16/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.27	0.02	TARMACADAM		
					(0.18)			
0.20-2.70	B			24.09	0.20	MADE GROUND: Grey angular fine to coarse Gravel (Crushed Rock Fill)		
					(0.15)			
				23.94	0.35	MADE GROUND: Grey slightly clayey slightly sandy angular fine to coarse Gravel		
						MADE GROUND: Grey brown slightly sandy gravelly Clay with occasional fragments of red bricks, concrete and mortar		
					(1.15)			
				22.79	1.50	Stiff brown slightly sandy slightly gravelly CLAY with occasional subrounded cobbles		
					(0.80)			
				21.99	2.30	Stiff dark grey slightly sandy gravelly CLAY		
					(0.40)			
				21.59	2.70	Complete at 2.70m		

Remarks
Refusal at 2.70m BGL
0.00-1.00m BGL - 85% Recovery
1.00-2.00m BGL - 100% Recovery
2.00-2.70m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS01

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Ground Investigations Ireland Ltd
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Site Emmet Road, Inchicore, Dublin 8			**Number** WS02
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.75m	**Ground Level (mOD)** 23.81	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712022.8 E 733485.1 N	**Dates** 16/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				23.72	(0.09) 0.09	TARMACADAM		
				23.61	(0.11) 0.20	MADE GROUND: Grey slightly clayey angular fine to coarse Gravel (Crushed Rock Fill)		
0.20-1.60	B					MADE GROUND: Brown slightly sandy slightly gravelly Clay with fragments of concrete and mortar		
					(1.40)			
				22.21	1.60			
1.60-2.75	B					Stiff brown slightly sandy gravelly CLAY		
					(0.40)			
				21.81	2.00			
						Stiff dark grey slightly sandy gravelly CLAY		
					(0.75)			
				21.06	2.75			
						Complete at 2.75m		

Remarks
Refusal at 2.75m BGL
0.00-1.00m BGL - 85% Recovery
1.00-2.00m BGL - 100% Recovery
2.00-2.75m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS02

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS03
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m 68mm to 3.50m	**Ground Level (mOD)** 23.37	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712051.3 E 733492.9 N	**Dates** 24/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				23.34	0.03	TARMACADAM		
				23.27	(0.07) 0.10			
0.20-1.00	B			23.17	(0.10) 0.20	MADE GROUND: Grey angular fine to coarse Gravel (Crushed Rock Fill)		
						MADE GROUND: Bricks		
						MADE GROUND: Brown grey slightly sandy slightly gravelly Clay with fragments of red bricks, and concrete		
					(0.80)			
1.00-3.50	B			22.37	1.00	Firm to stiff brown slightly sandy gravelly CLAY with occasional subrounded cobbles		
					(1.30)			
				21.07	2.30	Stiff dark grey slightly sandy gravelly CLAY		
					(1.20)			
				19.87	3.50	Complete at 3.50m		

Remarks
0.00-1.00m BGL - 70% Recovery
1.00-2.00m BGL - 100% Recovery
2.00-3.00m BGL - 100% Recovery
3.00-3.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS03

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS04
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 3.60m	**Ground Level (mOD)** 23.56	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712078.6 E 733486.3 N	**Dates** 17/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				23.46	(0.10) 0.10	Brown slightly sandy TOPSOIL		
0.10-3.20	B					MADE GROUND: Brown slightly sandy Clay with occasional fragments of mortar, plastic and glass		
					(3.10)			
			Water strike(1) at 2.70m.			Water seepage at 2.70m BGL		▽1
3.20-3.60	B			20.36	3.20	Firm grey slightly sandy slightly gravelly CLAY		
					(0.40)			
				19.96	3.60	Complete at 3.60m		

Remarks
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 80% Recovery
2.00-3.00m BGL - 60% Recovery
3.00-3.50m BGL- 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS04

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS05
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.90m	**Ground Level (mOD)** 24.25	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 711994.7 E 733449.8 N	**Dates** 16/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.17	(0.08) 0.08	TARMACADAM		
0.20-2.90	B			24.05	(0.12) 0.20	MADE GROUND: Grey angular fine to coarse Gravel (Crushed Rock Fill)		
				23.80	(0.25) 0.45	MADE GROUND: Grey slightly clayey slightly sandy angular fine to coarse Gravel		
						POSSIBLE MADE GROUND: Brown mottled grey slightly sandy slightly gravelly Clay		
				23.25	(0.55) 1.00	Firm to stiff brown slightly sandy gravelly CLAY		
				21.85	(1.40) 2.40	Stiff dark grey slightly sandy gravelly CLAY		
				21.35	(0.50) 2.90	Complete at 2.90m		

Remarks
Refusal at 2.90m BGL
0.00-1.00m BGL - 85% Recovery
1.00-2.00m BGL - 100% Recovery
2.00-2.90m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS05

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS06
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m	**Ground Level (mOD)** 23.49	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712041.3 E 733459.2 N	**Dates** 22/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				23.39	(0.10) 0.10	Brown slightly gravelly sandy TOPSOIL		
0.10-1.40	B					MADE GROUND: Brown grey slightly sandy subangular fine to coarse Gravel with fragments of red bricks, mortar, and concrete		
					(1.30)			
1.40-3.00	B			22.09	1.40	Firm dark grey slightly sandy CLAY 1.00-3.00m BGL - Wet Strata		
					(1.00)			
				21.09	2.40	Grey slightly sandy subangular fine to coarse GRAVEL		
					(0.20)			
				20.89	2.60	Stiff dark grey slightly sandy gravelly CLAY		
					(0.40)			
				20.49	3.00	Complete at 3.00m		

Remarks
Soil Catcher retrieved in Window Sample at ~2.30m
0.00-1.00m BGL - 80% Recovery
1.00-2.00m BGL - 80% Recovery
2.00-3.00m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS06

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS07
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 3.50m	**Ground Level (mOD)** 23.50	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712058.4 E 733473.7 N	**Dates** 22/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
				23.40	(0.10) 0.10	Brown slightly gravelly sandy TOPSOIL			
0.10-1.00	B					MADE GROUND: Brown slightly sandy gravelly Clay with fragments of bricks, mortar, and concrete			
					(0.90)				
1.00-3.50	B			22.50	1.00	Firm brown slightly sandy gravelly CLAY			
					(1.00)				
				21.50	2.00	Stiff dark grey slightly sandy gravelly CLAY			
					(1.50)				
				20.00	3.50	Complete at 3.50m			

Remarks
Soil Catcher retrieved in Window Sample at ~0.35m
0.00-1.00m BGL - 90% Recovery
1.00-2.00m BGL - 100% Recovery
2.00-3.00m BGL - 100% Recovery
3.00-3.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS07

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS08
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m 68mm to 3.50m	**Ground Level (mOD)** 23.42	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712088.3 E 733476 N	**Dates** 22/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.15)	TARMACADAM		
0.15-2.30	B			23.27	0.15	MADE GROUND: Brown slightly sandy gravelly Clay with fragments of bricks, mortar, and concrete		
					(0.45)			
				22.82	0.60	POSSIBLE MADE GROUND: Brown grey slightly sandy gravelly Clay		
					(1.70)			
						2.00-3.50m BGL - Wet Strata		
2.30-3.50	B			21.12	2.30	Soft brown slightly gravelly sandy CLAY		
					(0.70)			
				20.42	3.00	Stiff dark grey slightly sandy gravelly CLAY		
					(0.50)			
				19.92	3.50	Complete at 3.50m		

Remarks
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 100% Recovery
2.00-3.00m BGL - 80% Recovery
3.00-3.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS08

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS09
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 3.30m	**Ground Level (mOD)** 24.51	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712000 E 733422.9 N	**Dates** 16/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.41	(0.10) 0.10	Brown slightly sandy slightly gravelly TOPSOIL		
0.10-1.70	B					MADE GROUND: Dark brown slightly sandy gravelly Clay with fragments of plastic, red bricks, mortar, glass		
					(1.60)			
1.70-3.30	B			22.81	1.70	Stiff brown slightly sandy slightly gravelly CLAY		
					(0.90)			
				21.91	2.60	Stiff dark grey slightly sandy slightly gravelly CLAY		
					(0.70)			
				21.21	3.30	Complete at 3.30m		

Remarks
Refusal at 3.30m BGL
0.00-1.00m BGL - 90% Recovery
1.00-2.00m BGL - 100% Recovery
2.00-3.00m BGL - 100% Recovery
3.00-3.30m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS09

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS10
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 3.40m	**Ground Level (mOD)** 24.28	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712026.4 E 733429.1 N	**Dates** 17/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.19	(0.09) 0.09	TARMACADAM		
				24.03	(0.16) 0.25	MADE GROUND: Grey slightly sandy clayey angular to subangular fine to coarse Gravel		
0.25-2.10	B					MADE GROUND: Brown slightly sandy slightly gravelly Clay with subrounded cobbles		
					(1.85)	Pockets of sandy gravel - Possible service trench		
						1.90-2.10m BGL Wet Strata		
2.10-3.40	B			22.18	2.10	Stiff dark grey slightly sandy gravelly CLAY		
					(1.30)			
				20.88	3.40	Complete at 3.40m		

Remarks
0.00-1.00m BGL - 70% Recovery
1.00-2.00m BGL - 80% Recovery
2.00-3.00m BGL - 100% Recovery
3.00-3.40m BGL- 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS10

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS11
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 3.50m	**Ground Level (mOD)** 23.92	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712055.9 E 733440.3 N	**Dates** 23/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.12)	TARMACADAM		
0.12-2.20	B			23.80	0.12	MADE GROUND: Grey sandy gravelly Clay (Fill)		
					(0.58)			
				23.22	0.70	MADE GROUND: Brown slightly gravelly fine to coarse Sand (Fill)		
				23.12	(0.10) 0.80	MADE GROUND: Grey slightly sandy gravelly Clay		
					(0.50)			
				22.62	1.30	POSSIBLE MADE GROUND: Brown slightly sandy clayey subangular to subrounded fine to medium Gravel		
					(0.90)	1.90m BGL Water present - standing		
2.20-3.50	B			21.72	2.20	Stiff dark grey slightly sandy slightly gravelly CLAY		
					(1.30)			
				20.42	3.50	Complete at 3.50m		

Remarks
0.00-1.00m BGL - 95% Recovery
1.00-2.00m BGL - 65% Recovery
2.00-3.00m BGL - 70% Recovery
3.00-3.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS11

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS12
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 0.35m	**Ground Level (mOD)** 23.73	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712087.8 E 733447.3 N	**Dates** 23/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				23.66	(0.07) 0.07	TARMACADAM		
					(0.28)	MADE GROUND: Grey angular fine to corase Gravel (Crushed Rock Fill)		
				23.38	0.35	Complete at 0.35m		

Remarks
Attempt 1 - Refusal at 0.35m BGL, concrete present
Attempt 2 - Refusal at 0.35m BGL, concrete present
No Photograph due to failed attempts to retrieve material

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS12

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS13
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.30m	**Ground Level (mOD)** 24.83	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 711999.9 E 733400.4 N	**Dates** 17/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.10-2.30	B			24.73	(0.10) 0.10	Brown slightly gravelly sandy TOPSOIL		
						MADE GROUND: Brown grey slightly sandy gravelly Clay with fragments of red bricks, timber, mortar, concrete, plastic, yellow bricks, glass and clay pipes		
					(2.20)			
				22.53	2.30	Complete at 2.30m		

Remarks
Attempt 1 - Refusal at 1.00m BGL due to hard substrate
Attempt 2 - Refusal at 0.80m BGL due to hard substrate, unable to progress
Attempt 3 - Refusal at 2.30m BGL
0.00-1.00m BGL - 85% Recovery
1.00-2.00m BGL - 70% Recovery
2.00-2.30m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS13

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS14
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 3.50m	**Ground Level (mOD)** 24.71	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712032.5 E 733391.1 N	**Dates** 17/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.13)	TARMACADAM		
				24.58	0.13	MADE GROUND: Grey clayey angular fine to coarse Gravel (Crushed Rock Fill)		
					(0.27)			
0.40-2.20	B			24.31	0.40	MADE GROUND: Brown slightly sandy gravelly Clay with some subangular cobbles		
					(1.80)			
2.20-3.50	B			22.51	2.20	Stiff dark grey slightly sandy gravelly CLAY		
					(1.30)			
				21.21	3.50	Complete at 3.50m		

Remarks
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 100% Recovery
2.00-3.00m BGL - 100% Recovery
3.00-3.50m BGL- 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS14

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS15
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 3.60m	**Ground Level (mOD)** 24.41	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712065.6 E 733394.6 N	**Dates** 18/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
				24.37	0.04	TARMACADAM			
					(0.26)	MADE GROUND: Grey clayey angular fine to coarse Gravel (Crushed Rock Fill)			
0.30-2.20	B			24.11	0.30	MADE GROUND: Brown slightly sandy gravelly Clay with fragments of plastic			
					(1.90)				
2.20-3.60	B		Water strike(1) at 2.70m.	22.21	2.20	Stiff dark grey slightly sandy slightly gravelly CLAY		▽1	
					(1.40)				
				20.81	3.60	3.50-3.60m BGL Wet Strata Complete at 3.60m			

Remarks
0.00-1.00m BGL - 95% Recovery
1.00-2.00m BGL - 95% Recovery
2.00-3.00m BGL - 100% Recovery
3.00-3.60m BGL- 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS15

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS16
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 3.00m	**Ground Level (mOD)** 25.03	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712018.3 E 733370.4 N	**Dates** 21/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.10-2.20	B			24.93	(0.10) 0.10	Brown slightly gravelly sandy TOPSOIL		
						MADE GROUND: Brown grey slightly sandy gravelly Clay with fragments of mortar, concrete and red bricks		
2.20-3.00	B				(2.40)			
				22.53	2.50	Stiff dark grey slightly sandy slightly gravelly CLAY		
					(0.50)			
				22.03	3.00	Complete at 3.00m		

Remarks
0.00-1.00m BGL - 80% Recovery
1.00-2.00m BGL - 70% Recovery
2.00-3.00m BGL - 90% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS16

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS17
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 3.50m	**Ground Level (mOD)** 24.73	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712054.1 E 733373.2 N	**Dates** 21/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.63	(0.10) 0.10	Brown slightly gravelly sandy TOPSOIL		
0.10-2.50	B					MADE GROUND: Brown slightly sandy gravelly Clay with fragments of mortar, concrete and red bricks		
					(2.40)			
						2.00-3.50m BGL - Wet Strata		
2.50-3.50	B			22.23	2.50	Stiff dark grey slightly sandy slightly gravelly CLAY		
					(1.00)			
				21.23	3.50	Complete at 3.50m		

Remarks
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 90% Recovery
2.00-3.00m BGL - 90% Recovery
3.00-3.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS17

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS18
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 3.60m	**Ground Level (mOD)** 24.63	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712074.7 E 733377 N	**Dates** 18/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.53	(0.10) 0.10	Brown slightly gravelly sandy TOPSOIL		
0.10-2.40	B					MADE GROUND: Brown slightly sandy gravelly Clay with fragments of mortar and red brick		
					(2.30)			
2.40-3.60	B			22.23	2.40	Stiff dark grey slightly sandy slightly gravelly CLAY		
					(1.20)	3.00-3.60m BGL - Wet Strata		
				21.03	3.60	Complete at 3.60m		

Remarks
1.00-2.00m BGL - 100% Recovery
0.00-1.00m BGL - 100% Recovery
2.00-3.00m BGL - 70% Recovery
3.00-3.60m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS18

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS19
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 1.00m	**Ground Level (mOD)** 24.27	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712109.5 E 733379.6 N	**Dates** 18/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.17	(0.10) 0.10	Brown slightly sandy TOPSOIL		
					(0.90)	MADE GROUND: Brown slightly sandy gravelly Clay with fragments of concrete		
				23.27	1.00	Complete at 1.00m		

Remarks
Attempt 1 - Refusal at 1.00m BGL due to hard substrate, unable to progress
Attempt 2 - Refusal at 1.00m BGL due to hard substrate, unable to progress
Attempt 3 - Refusal at 0.30m BGL due to concrete
Attempt 4 - Refusal at 0.30m BGL due to concrete
No Photograph due to failed attempts to retrieve material

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS19

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS20
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 3.50m	**Ground Level (mOD)** 25.31	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712022.8 E 733347.4 N	**Dates** 21/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				25.21	(0.10) 0.10	Brown slightly gravelly sandy TOPSOIL		
0.10-3.10	B					MADE GROUND: Brown slightly sandy gravelly Clay with fragments of mortar, concrete and red bricks		
					(3.00)			
3.10-3.50	B			22.21	3.10	Firm dark grey slightly sandy slightly gravelly CLAY		
					(0.40)			
				21.81	3.50	Complete at 3.50m		

Remarks
0.00-1.00m BGL - 80% Recovery
1.00-2.00m BGL - 80% Recovery
2.00-3.00m BGL - 40% Recovery
3.00-3.50m BGL - 80% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS20

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS21
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m 68mm to 3.50m	**Ground Level (mOD)** 24.97	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712049.1 E 733350.2 N	**Dates** 21/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.87	(0.10) 0.10	Brown slightly gravelly sandy TOPSOIL		
0.10-2.00	B					MADE GROUND: Brown gravelly fine to coarse Sand with concrete and bricks		
					(0.90)			
				23.97	1.00	POSSIBLE MADE GROUND: Brown slightly sandy gravelly Clay		
					(1.00)			
2.00-3.50	B			22.97	2.00	Stiff dark grey slightly sandy gravelly CLAY		
					(1.50)			
				21.47	3.50	Complete at 3.50m		

Remarks
0.00-1.00m BGL - 75% Recovery
1.00-2.00m BGL - 100% Recovery
2.00-3.00m BGL - 90% Recovery
3.00-3.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS21

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS22
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m 68mm to 3.50m	**Ground Level (mOD)** 24.65	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712068.6 E 733359.4 N	**Dates** 21/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.55	(0.10) 0.10	Brown slightly gravelly sandy TOPSOIL		
0.10-3.00	B					MADE GROUND: Brown slightly sandy gravelly Clay with occasional subangular cobbles and fragments of red bricks, fabric, mortar, concrete, glass and timber		
					(1.30)			
				23.25	1.40	MADE GROUND: Black brown slightly sandy slightly gravelly Clay with fragments of timber and glass		
					(1.60)			
3.00-3.50	B			21.65	3.00	Stiff dark grey slightly sandy gravelly CLAY		
					(0.50)			
				21.15	3.50	Complete at 3.50m		

Remarks
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 50% Recovery
2.00-3.00m BGL - 80% Recovery
3.00-3.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS22

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS23
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m 68mm to 3.50m	**Ground Level (mOD)** 24.51	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712100.4 E 733358.9 N	**Dates** 22/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.41	(0.10) 0.10	Brown slightly sandy TOPSOIL		
0.10-2.00	B					MADE GROUND: Brown slightly sandy gravelly Clay with fragments of bricks, concrete		
					(1.00)			
				23.41	1.10	MADE GROUND: Grey mottled brown slightly sandy gravelly Clay		
					(0.90)			
2.00-3.50	B			22.51	2.00	POSSIBLE MADE GROUND: Grey slightly clayey gravelly fine to coarse Sand 2.00-3.50m BGL - Wet Strata		
					(1.50)			
				21.01	3.50	Complete at 3.50m		

Remarks
0.00-1.00m BGL - 85% Recovery
1.00-2.00m BGL - 55% Recovery
2.00-3.00m BGL - 90% Recovery
3.00-3.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS23

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS24
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m 68mm to 3.50m	**Ground Level (mOD)** 25.42	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712025.6 E 733325.6 N	**Dates** 24/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.10-1.40	B			25.32	(0.10) 0.10	Brown slightly sandy TOPSOIL		
						MADE GROUND: Brown grey slightly sandy gravelly Clay with fragments of red bricks, and mortar		
					(1.30)			
1.40-3.50	B			24.02	1.40	Firm to stiff brown slightly sandy gravelly CLAY		
					(0.90)			
				23.12	2.30	Stiff black slightly sandy gravelly CLAY		
					(1.20)			
				21.92	3.50	Complete at 3.50m		

Remarks
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 90% Recovery
2.00-3.00m BGL - 85% Recovery
3.00-3.20m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS24

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS25
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 3.20m	**Ground Level (mOD)** 25.25	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712050.7 E 733326.6 N	**Dates** 23/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				25.15	(0.10) 0.10	Brown slightly sandy TOPSOIL		
0.10-2.00	B					MADE GROUND: Brown slightly sandy gravelly Clay with occasional subangular cobbles and fragments of red and yellow bricks, and concrete		
					(1.90)			
2.00-3.20	B			23.25	2.00	Stiff dark grey slightly sandy gravelly CLAY		
					(1.20)			
				22.05	3.20	Complete at 3.20m		

Remarks
Attempt 1 - Refusal at 0.65m BGL, concrete
Attempt 2 - Refusal at 3.20m BGL
0.00-1.00m BGL - 95% Recovery
1.00-2.00m BGL - 90% Recovery
2.00-3.00m BGL - 100% Recovery
3.00-3.20m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS25

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS26
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 2.80m	**Ground Level (mOD)** 24.83	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712075.2 E 733331.7 N	**Dates** 23/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				24.73	(0.10) 0.10	Brown slightly sandy TOPSOIL		
0.10-1.50	B					MADE GROUND: Grey slightly sandy gravelly Clay with fragments of red bricks, concrete		
					(0.90)			
				23.83	1.00	POSSIBLE MADE GROUND: Brown slightly sandy gravelly Clay		
					(0.50)			
1.50-2.80	B			23.33	1.50	Stiff dark grey slightly sandy slightly gravelly CLAY 1.40-2.80m BGL - Wet Strata		
					(1.30)			
				22.03	2.80	Complete at 2.80m		

Remarks
Refusal at 2.80m BGL, 25 blows over 100mm
0.00-1.00m BGL - 75% Recovery
1.00-2.00m BGL - 75% Recovery
2.00-2.80m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS26

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS27
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.30m	**Ground Level (mOD)** 24.57	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712101.6 E 733336.6 N	**Dates** 23/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.10-2.30	B			24.47	(0.10) 0.10	Brown slightly sandy TOPSOIL		
						MADE GROUND: Grey slightly sandy gravelly Clay with fragments of red bricks, concrete, mortar,		
					(2.20)	Hydrocarbon sheen on recovery		
				22.27	2.30	Complete at 2.30m		

Remarks
Refusal at 2.30m BGL, 25 blows over 100mm
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 60% Recovery
2.00-2.30m BGL - 0% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS27

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS28
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 1.20m	**Ground Level (mOD)** 25.71	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712026.6 E 733299.4 N	**Dates** 24/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.10-1.20	B			25.61	(0.10) 0.10	Brown slightly sandy TOPSOIL		
						MADE GROUND: Brown grey slightly sandy gravelly Clay with occasional subangular cobbles and fragments of red bricks, and mortar, and nails		
					(1.10)			
				24.51	1.20	Complete at 1.20m		

Remarks
Attempt 1 - Refusal at 0.60m BGL, concrete
Attempt 2 - Refusal at 1.20m BGL, bricks
0.00-1.00m BGL - 100% Recovery
1.00-1.20m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS28

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS29
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m 68mm to 3.50m	**Ground Level (mOD)** 25.45	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712055 E 733298.4 N	**Dates** 24/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.10-3.20	B			25.35	(0.10) 0.10	Brown slightly sandy TOPSOIL		
						MADE GROUND: Brown slightly sandy gravelly Clay with occasional subangular cobbles and fragments of concrete		
					(3.10)			
3.20-3.50	B			22.25	3.20	Stiff dark grey slightly sandy gravelly CLAY		
					(0.30)			
				21.95	3.50	Complete at 3.50m		

Remarks
0.00-1.00m BGL - 65% Recovery
1.00-2.00m BGL - 60% Recovery
2.00-3.00m BGL - 25% Recovery
3.00-3.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS29

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS30
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m 68mm to 3.50m	**Ground Level (mOD)** 25.17	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712084.8 E 733305.6 N	**Dates** 24/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				25.07	(0.10) 0.10	Brown slightly sandy TOPSOIL		
0.10-3.00	B					MADE GROUND: Brown slightly sandy gravelly Clay with fragments of concrete, and red bricks		
					(1.10)			
				23.97	1.20	MADE GROUND: Grey slightly sandy gravlly Clay with occasional subangular cobbles and yellow bricks		
					(1.80)			
3.00-3.50	B			22.17	3.00	Stiff dark grey slightly sandy slightly gravelly CLAY		
					(0.50)			
				21.67	3.50	Complete at 3.50m		

Remarks
Soil Catcher retrieved in Window Sample at ~1.50m
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 75% Recovery
2.00-3.00m BGL - 55% Recovery
3.00-3.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS30

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS31
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.30m	**Ground Level (mOD)** 24.78	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712106.9 E 733305.1 N	**Dates** 25/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.10-2.30	B			24.68	(0.10) 0.10	Brown slightly sandy TOPSOIL		
					(0.30)	MADE GROUND: Brown grey slightly sandy clayey angular fine to coarse Gravel		
				24.38	0.40	MADE GROUND: Brown slightly sandy slightly gravelly Clay with fragment of cast iron		
					(0.60)			
				23.78	1.00	MADE GROUND: Grey slightly sandy gravelly Clay with occasional subangular to subrounded cobble		
					(1.30)			
				22.48	2.30	Complete at 2.30m		

Remarks
Refusal at 2.30m BGL
0.00-1.00m BGL - 80% Recovery
1.00-2.00m BGL - 65% Recovery
2.00-2.30m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS31

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS32
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m	**Ground Level (mOD)** 25.69	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712034.8 E 733269.9 N	**Dates** 25/09/2020-28/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				25.59	(0.10) 0.10	Brown slightly sandy TOPSOIL		
0.10-2.20	B					MADE GROUND: Brown slightly sandy gravelly Clay with occasional subangular cobbles and fragments of concrete, and red bricks		
					(2.10)			
2.20-3.00	B			23.49	2.20	Stiff dark grey slightly sandy gravelly CLAY		
					(0.80)			
				22.69	3.00	Complete at 3.00m		

Remarks
0.00-1.00m BGL - 85% Recovery
1.00-2.00m BGL - 85% Recovery
2.00-3.00m BGL - 80% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS32

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS33
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions**	**Ground Level (mOD)** 25.57	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712062.4 E 733270.3 N	**Dates** 25/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				25.47	(0.10) 0.10	Brown slightly sandy TOPSOIL		
						MADE GROUND: Brown sandy gravelly Clay with fragments of concrete		
					(0.80)			
				24.67	0.90	Complete at 0.90m		

Remarks
Attempt 1 - Refusal at 0.20m BGL, concrete
Attempt 2 - Refusal at 0.90m BGL, concrete
No Photograph due to failed attempts to retrieve material

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS33

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS34
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m 68mm to 3.50m	**Ground Level (mOD)** 25.53	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712091.5 E 733275.7 N	**Dates** 25/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
				25.43	(0.10) 0.10	Brown slightly sandy TOPSOIL			
0.10-2.20	B			25.23	(0.20) 0.30	MADE GROUND: Brown slightly sandy gravelly Clay with fragments of red bricks			
				25.03	(0.20) 0.50	MADE GROUND: Brown slightly clayey gravelly fine to coarse Sand with fragments of concrete			
					(0.50)	MADE GROUND: brown slightly sandy gravelly Clay with fragments of bricks			
				24.53	1.00	POSSIBLE MADE GROUND: Grey mottled brown slightly sandy slightly gravelly Clay Hydrocarbon odour from 1.00m BGL			
					(1.20)				
2.20-3.50	B			23.33	2.20	Soft dark grey slightly gravelly sandy CLAY			
					(1.30)				
				22.03	3.50	Complete at 3.50m			

Remarks
0.00-1.00m BGL - 85% Recovery
1.00-2.00m BGL - 85% Recovery
2.00-3.00m BGL - 100% Recovery
3.00-3.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS34

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS35
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions**	**Ground Level (mOD)** 25.33	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712109.4 E 733280 N	**Dates** 25/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				25.23	(0.10) 0.10	Brown slightly sandy TOPSOIL		
						MADE GROUND: Brown slightly sandy gravelly Clay with fragments of concrete and mortar		
					(0.40)			
				24.83	0.50	Complete at 0.50m		

Remarks
Attempt 1 - Refusal at 0.50m BGL, possible concrete
Attempt 2 - Refusal at 0.50m BGL, possible concrete
No Photograph due to failed attempts to retrieve material

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS35

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS36
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.50m	**Ground Level (mOD)** 26.03	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712039.3 E 733241.2 N	**Dates** 28/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				25.93	(0.10) 0.10	Brown slightly sandy TOPSOIL		
0.10-2.10	B				(0.30)	MADE GROUND: Brown slightly sandy gravelly Clay with fragments of concrete, red bricks, plastic and glass		
				25.63	0.40	MADE GROUND: Grey sandy gravelly Clay with fragments of concrete		
					(0.50)			
				25.13	0.90	MADE GROUND: Brown slightly sandy gravelly Clay with fragments of concrete		
					(1.20)			
2.10-2.50	B			23.93	2.10	Soft to firm brown grey slightly sandy CLAY		
					(0.40)			
				23.53	2.50	Complete at 2.50m		

Remarks
Soil Catcher retrieved in Window Sample at ~1.60m
Refusal at 2.50m BGL 25 blows over 100mm
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 80% Recovery
2.00-2.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS36

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS37
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 1.20m	**Ground Level (mOD)** 25.95	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712062 E 733240.6 N	**Dates** 28/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.10-1.20	B			25.85	(0.10) 0.10	Brown slightly sandy TOPSOIL		
						MADE GROUND: Brown grey slightly sandy gravelly Clay with fragments of concrete, chipboard, and red bricks		
					(1.10)			
				24.75	1.20	Complete at 1.20m		

Remarks
Refusal at 1.200m BGL, concrete
0.00-1.00m BGL - 100% Recovery
1.00-1.20m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS37

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS38
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 3.50m	**Ground Level (mOD)** 25.79	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712084.4 E 733247.9 N	**Dates** 28/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.10-3.50	B			25.69	(0.10) 0.10	Brown slightly sandy TOPSOIL		
						MADE GROUND: Grey slightly sandy gravelly Clay with fragments of concrete, mortar, and red bricks		
					(2.00)			
						2.00-3.50m BGL - Wet Strata		
				23.69	2.10	MADE GROUND: Brown slightly clayey gravelly fine to coarse Sand with occasional cobbles and fragments of metal		
					(1.40)			
				22.29	3.50	Complete at 3.50m		

Remarks
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 30% Recovery
2.00-3.00m BGL - 70% Recovery
3.00-3.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS38

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS39
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m 68mm to 3.25m	**Ground Level (mOD)** 25.36	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712117.4 E 733258.9 N	**Dates** 28/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly sandy TOPSOIL		
0.30-2.70	B			25.06	0.30	MADE GROUND: Grey slightly sandy gravelly Clay with fragments of concrete		
					(1.25)			
				23.81	1.55	POSSIBLE MADE GROUND: Grey brown slightly gravelly sandy Clay		
					(1.15)			
2.70-3.25	B			22.66	2.70	Soft to firm grey slightly sandy slightly gravelly CLAY		
					(0.55)			
				22.11	3.25	Complete at 3.25m		

Remarks
Attempt 1 - Refusal at 0.50m BGL, concrete
Attempt 2 - 3.25m BGL
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 30% Recovery
2.00-3.00m BGL - 70% Recovery
3.00-3.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS39

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS40
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 2.40m	**Ground Level (mOD)** 26.23	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712040.1 E 733222.4 N	**Dates** 29/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				26.13	(0.10) 0.10	Brown slightly sandy TOPSOIL		
0.20-2.40	B					MADE GROUND: Brown slightly sandy gravelly Clay with occasional subangular cobbles and fragments of concrete and gypsum bricks		
					(1.70)			
				24.43	1.80	Soft brown grey slightly gravelly sandy CLAY		
					(0.60)			
				23.83	2.40	Complete at 2.40m		

Remarks
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 100% Recovery
2.00-2.5m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS40

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS41
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 2.50m	**Ground Level (mOD)** 26.09	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712072.1 E 733226.6 N	**Dates** 29/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				25.99	(0.10) 0.10	Brown slightly sandy TOPSOIL		
0.20-2.00	B					MADE GROUND: Brown slightly sandy gravelly Clay with fragments of concrete		
					(2.00)			
2.00-2.50	B			23.99	2.10	Firm to stiff dark grey slightly sandy CLAY		
					(0.40)			
				23.59	2.50	Complete at 2.50m		

Remarks
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 50% Recovery
2.00-2.5m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS41

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS42
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.50m	**Ground Level (mOD)** 25.58	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712101.8 E 733230.7 N	**Dates** 29/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				25.48	(0.10) 0.10	Brown slightly sandy TOPSOIL		
0.10-2.10	B					MADE GROUND: Brown slightly sandy gravelly Clay with fragments of concrete and red bricks		
					(2.00)			
2.10-2.50	B			23.48	2.10	Firm dark grey slightly sandy slightly gravelly CLAY		
					(0.40)			
				23.08	2.50	Complete at 2.50m		

Remarks
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 85% Recovery
2.00-2.5m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS42

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS43
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.50m	**Ground Level (mOD)** 25.56	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712127.7 E 733226.2 N	**Dates** 29/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
0.10-2.50	B			25.46	(0.10) 0.10	Brown slightly sandy TOPSOIL			
						MADE GROUND: Brown sandy gravelly Clay with fragments of concrete and mortar			
					(0.60)				
				24.86	0.70	MADE GROUND: Brown fine to coarse Sand			
					(0.40)				
				24.46	1.10	MADE GROUND: Grey slightly sandy gravelly Clay with fragments of plastic			
					(1.40)				
				23.06	2.50	Complete at 2.50m			

Remarks
Attempt 1 - Refusal at 0.50m BGL, concrete
Attempt 2 - 2.50m BGL
0.00-1.00m BGL - 90% Recovery
1.00-2.00m BGL - 90% Recovery
2.00-2.5m BGL - 90% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS43

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS44
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m 68mm to 3.50m	**Ground Level (mOD)** 26.70	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712034.1 E 733190.8 N	**Dates** 29/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
					(0.30)	Brown slightly sandy TOPSOIL			
0.30-3.50	B			26.40	0.30	MADE GROUND: Brown slightly sandy gravelly Clay			
					(0.25)				
				26.15	0.55	MADE GROUND: Grey sandy angular fine to coarse Gravel comprising of concrete			
					(0.15)				
				26.00	0.70	MADE GROUND: Greyish brown slightly sandy slightly gravelly Clay with red bricks and concrete			
					(0.20)				
				25.80	0.90	MADE GROUND: Brown grey slightly sandy gravelly Clay			
					(1.10)				
				24.70	2.00	POSSIBLE MADE GROUND: Brown mottled grey slightly sandy slightly gravelly Clay (Possibly Reworked)			
					(1.50)				
				23.20	3.50	Complete at 3.50m			

Remarks
0.00-1.00m BGL - 100% Recovery
1.00-2.00m BGL - 100% Recovery
2.00-3.00m BGL - 90% Recovery
3.00-3.50m BGL - 100% Recovery

Scale (approx)	Logged By
1:25	MMC

Figure No. 9897-08-20.WS44

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS45
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m 68mm to 3.50m	**Ground Level (mOD)** 26.27	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712063.8 E 733195.1 N	**Dates** 30/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.00-3.20	B				(0.30)	TOPSOIL: Brown sandy gravelly Clay with grass and rootlets. Gravel is angular to subrounded fine to coarse.		
				25.97	0.30			
					(0.20)	MADE GROUND: Grey sandy slightly clayey angular to subrounded fine to coarse Gravel.		
				25.77	0.50			
					(2.20)	MADE GROUND: Brown clayey gravelly fine to medium Sand with fragments of red brick and morter. Gravel is angular to subrounded fine to coarse.		
				23.57	2.70			
					(0.50)	POSSIBLE MADE GROUND: Dark grey/brown slightly clayey gravelly fine to medium Sand. Gravel is angular to subrounded fine to coarse.		
3.20-3.50	B			23.07	3.20			
					(0.30)	Dark grey sandy gravelly CLAY. Gravel is angular to subrounded fine to coarse.		
				22.77	3.50			
						Complete at 3.50m		

Remarks
0.00m to 1.00m - 90% Recovery
1.00m to 2.00m - 75& Recovery
2.00m to 3.00m - 90% Recovery
3.00m to 3.50m - 80% Recovery

Scale (approx)	Logged By
1:25	MS

Figure No. 9897-08-20.WS45

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS46
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m 68mm to 2.50m	**Ground Level (mOD)** 25.87	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location (dGPS) 712084.9 E 733200.7 N	**Dates** 30/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.00-1.50	B				(0.20)	TOPSOIL: Brown slightly sandy gravelly Clay with grass and rootlets. Gravel is angular to subrounded fine to coarse.		
				25.67	0.20	MADE GROUND: Brown sandy gravelly Clay with occasional concrete, mortor and red brick fragments. Gravel is subangular to rounded fine to coarse.		
					(0.30)			
				25.37	0.50	MADE GROUND: Light brown gravelly fine to medium Sand. Gravel is subangular to rounded fine to coarse.		
					(0.20)			
				25.17	0.70	MADE GROUND: Brown clayey gravelly fine to medium Sand. Gravel is angular to subrounded fine to coarse.		
					(0.70)			
				24.47	1.40	MADE GROUND: Dark grey clayey sandy angular to subangular Gravel.		
					(0.10)			
1.50-2.50	B			24.37	1.50	Firm brown/dark brown sandy gravelly CLAY. Gravel is angular to subrounded fine to coarse.		
					(0.50)			
				23.87	2.00	Firm dark brown sandy gravelly CLAY. Gravel is subangular to subrounded fine to coarse.		
					(0.30)			
				23.57	2.30	Stiff dark grey slightly sandy gravelly CLAY. Gravel is angular to subangular fine to coarse.		
					(0.20)			
				23.37	2.50	Complete at 2.50m		

Remarks
0.00m to 1.00m - 100% Recovery.
Attempt 1 - Refusal at 0.50m BGL due to hard substrate.
1.00m to 2.00m - 70% Recovery.
2.00m to 2.50m - 100% Recovery.
Attempt 2 - Refusal at 2.50m BGL.

Scale (approx)	Logged By
1:25	MS

Figure No. 9897-08-20.WS46

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS47
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 1.85m	**Ground Level (mOD)** 25.63	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location (dGPS) 712113.8 E 733202.6 N	**Dates** 30/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.00-1.10	B				(0.30)	TOPSOIL: Brown sandy gravelly Clay with grass and rootlets. Gravel is subangular to subrounded fine to coarse.		
				25.33	0.30			
					(0.20)	MADE GROUND: Light brown/grey fine to coarse Sand with concrete and mortor fragments. Gravel is angular to subrounded fine to coarse.		
				25.13	0.50			
					(0.60)	MADE GROUND: Dark brown clayey gravelly fine to medium Sand with red brick, polostyrene and glass fragments. Gravel is angular to subrounded fine to coarse.		
1.10-1.85	B			24.53	1.10			
					(0.30)	Firm brown slightly sandy gravelly CLAY. Gravel is angular to subrounded fine to coarse.		
				24.23	1.40			
					(0.45)	Stiff dark grey/brown slightly sandy gravelly CLAY with rare subangular cobbles. Gravel is subangular to subrounded fine to coarse.		
				23.78	1.85	Complete at 1.85m		

Remarks
0.00m to 1.00m - 70% Recovery.
1.00m to 1.85m - 100% Recovery.
Attempt 1 - Refusal at 1.10m BGL due to hard substrate.
Atempt 2 - Refusal at 1.85m BGL.

Scale (approx)	Logged By
1:25	MS

Figure No. 9897-08-20.WS47A

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS48
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 3.00m	**Ground Level (mOD)** 26.76	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location (dGPS) 712050.8 E 733169.1 N	**Dates** 01/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.00-2.10	B				(0.30)	TOPSOIL: Brown sandy gravelly Clay with grass and rootlets. Gravel is angular to subrounded fine to coarse.		
				26.46	0.30	MADE GROUND: Brown sandy gravelly Clay with crushed rock fill and mortor fragments. Gravel is angular to subrounded fine to coarse.		
					(0.60)			
				25.86	0.90	MADE GROUND: Brown slightly clayey gravelly fine to medium Sand with crushed rock fill, mortor and old red brick fragments.		
					(1.20)			
2.10-2.85	B			24.66	2.10	POSSIBLE MADE GROUND: Brown slightly clayey gravelly fine to medium Sand with rare subangular cobbles. Gravel is angular to subangular fine to coarse.		
					(0.75)			
				23.91	2.85	Stiff dark brown slightly sandy gravelly CLAY. Gravel is angular to subrounded fine to coarse.		
					(0.15)			
				23.76	3.00	Complete at 3.00m		

Remarks
0.00m to 1.00m - 100% Recovery.
1.00m to 2.00m - 80% Recovery.
2.00m to 3.00m - 70% Recovery.

Scale (approx)	Logged By
1:25	MS

Figure No. 9897-08-20.WS48

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS49
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 0.90m	**Ground Level (mOD)** 26.43	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location (dGPS) 712075.7 E 733173.8 N	**Dates** 01/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.00-0.90	B				(0.30)	TOPSOIL: Brown sandy gravelly Clay with grass and rootlets. Gravel is subangular to rounded fine to coarse.		
				26.13	0.30			
					(0.25)	MADE GROUND: Brown mottled grey sandy gravelly Clay with red brick, concrete, glass and orange brick fragments. Gravel is angular to subrounded fine to coarse.		
				25.88	0.55			
					(0.15)	MADE GROUND: Grey Concrete		
				25.73	0.70			
					(0.20)	MADE GROUND: Dark brown mottled grey sandy gravelly Clay with mortor, red brick, glass and concrete fragments. Gravel is angular to subrounded fine to coarse.		
				25.53	0.90	Complete at 0.90m		

Remarks
0.00m to 0.90m - 100% Recovery.
Attempt 1 - Refusal at 0.50m BGL due to hard substrate.
Attempt 2 - Refusal at 0.90m BGL.

Scale (approx)	Logged By
1:25	MS

Figure No. 9897-08-20.WS49

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS50
Machine : GECTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 88mm to 2.00m	**Ground Level (mOD)** 26.20	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712096.5 E 733173.6 N	**Dates** 01/11/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
0.00-2.00	B				(0.40)	TOPSOIL: Brown mottled grey sandy gravelly Clay with grass and rootlets. Gravel is subangular to subrounded fine to coarse.			
				25.80	0.40				
					(0.25)	MADE GROUND: Brown mottled grey sandy gravelly Clay with red brick and mortor fragments.			
				25.55	0.65				
					(0.35)	MADE GROUND: Brown mottled grey sandy gravelly Clay with concrete, mortor, red brick and charcol fragments. Gravel is angular to subrounded fine to coarse.			
				25.20	1.00				
					(1.00)	MADE GROUND: Brown mottled grey sandy gravelly Clay with mortor, red brick, and charcol fragments. Gravel is angular to subangular fine to coarse.			
				24.20	2.00	Complete at 2.00m			

Remarks
0.00m to 1.00m - 100% Recovery
1.00m to 2.00m - 100% Recovery
Attempt 1 - Refusal at 0.50m BGL due to hard substrate.
Attempt 2 - Refusal at 2.00m BGL.
Attempt 3 - Refusal at 1.40m BGL due to hard substrate.

Scale (approx)	Logged By
1:25	MS

Figure No. 9897-08-20.WS50

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Site Emmet Road, Inchicore, Dublin 8			**Number** WS51
Machine : GEOTEC10 **Method :** Drive-in Windowless Sampler	**Dimensions** 0.12mm to Attempt 1 - Refusal at 1.50m BGL 0.13mm to Attempt 2 - Refusal at 1.70m BGL due to hard substrate.	**Ground Level (mOD)** 26.09	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location (dGPS) 712123.3 E 733179.3 N	**Dates** 01/09/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.20)	TOPSOIL: Brown sandy gravelly Clay with grass and rootlets. Gravel is subangular to subrounded fine to medium.		
				25.89	0.20			
					(0.20)	MADE GROUND: Light brown gravelly fine to medium Sand. Gravel is angular to subangular fine to coarse.		
				25.69	0.40			
					(0.20)	MADE GROUND: Brown sandy gravelly Clay. Gravel is angular to subangular fine to coarse.		
				25.49	0.60			
					(0.20)	MADE GROUND: Grey angular to subangular fine to coarse Gravel.		
				25.29	0.80			
					(0.30)	POSSIBLE MADE GROUND: Brown slightly sandy gravelly Clay. Gravel is angular to subrounded fine to coarse.		
				24.99	1.10			
					(0.60)	Firm to stiff brown slightly sandy gravelly CLAY. Gravel is angular to subrounded fine to coarse.		
				24.39	1.70			
						Complete at 1.70m		

Remarks
0.00m to 1.00m - 100% Recovery.
1.00m to 1.70m - 100% Recovery.
Attempt 1 - Refusal at 1.50m BGL.
Attempt 2 - Refusal at 1.70m BGL due to hard substrate.

Scale (approx)	Logged By
1:25	MS

Figure No. 9897-08-20.WS51

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Emmet Road, Inchicore, Dublin 8 – Window Sample Photographs

WS01



WS02



WS03


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS3
Box No: 1/2 of 2
Job Ref: 9897-08-20
Date: 24/9/2020
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS04


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD, DUBLIN 8
Borehole ref: WS 4
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 17/9/20
Depth: From 0.00 to 3.60
CM 10 20 30 40 50 60 70 80 90 100

WS05


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Colour Chart #14
Grey Scale #14
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD, DUBLIN 8
Borehole ref: WS05
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 16/9/20
Depth: From 0.075 to 2.90

WS06


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Colour Chart #14
Grey Scale #14
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS06
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 22/9/20
Depth: From 0.00 to 3.00
CM 10 20 30 40 50 60 70 80 90 100

WS07


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS07
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 22/9/20
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS08


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS08
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 22/9/20
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS09


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Colour Chart #14
Grey Scale #14
Client: DUBLIN CITY COUNCIL
Job Ref: 9897-08-20
Site: EMMETT ROAD, DUBLIN 8
Date: 16/9/20
Borehole ref: WS09
Depth: From 0.00 to 3.00
Box No: 1 of 2

WS10


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Colour Chart #14
Grey Scale #14
Client: DUBLIN CITY COUNCIL
Job Ref: 9897-08-20
Site: EMMETT ROAD, DUBLIN 8
Date: 17/9/20
Borehole ref: WS10
Depth: From 0.00 to 3.40
Box No: 1 of 2
CM 10 20 30 40 50 60 70 80 90 100

WS11


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS11
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 23/9/20
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS13


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD, DUBLIN 8
Borehole ref: WS13
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 16/9/20
Depth: From 0.00 to 2.300
CM 10 20 30 40 50 60 70 80 90 100

WS14


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD, DUBLIN 8
Borehole ref: WS14
Box No: 1 of 2
Job Ref: 9897-08-20
Date: 17/9/20
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS15


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD, DUBLIN 8
Borehole ref: WS15
Box No: 1 of 2
Job Ref: 9897-08-20
Date: 18/9/20
Depth: From 0.00 to 3.60
CM 10 20 30 40 50 60 70 80 90 100

WS16


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS16
Box No: 1 of 2
Job Ref: 9897-08-20
Date: 21/9/20
Depth: From 0.00 to 3.00
CM 10 20 30 40 50 60 70 80 90 100

WS17


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD, DUBLIN 8
Borehole ref: WS17
Box No: 1 of 2
Job Ref: 9897-08-20
Date: 18/9/20
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS18


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD, DUBLIN 8
Borehole ref: WS18
Box No: 1 of 2
Job Ref: 9897-08-20
Date: 18/9/20
Depth: From 0.00 to 3.60
CM 10 20 30 40 50 60 70 80 90 100

WS20


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS20
Box No: 1 of 2
Job Ref: 9897-08-20
Date: 21/9/20
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS21


GII
GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD, DUBLIN 8
Borehole ref: WS21
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 21/9/20
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS22


GII
GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD, DUBLIN 8
Borehole ref: WS22
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 21/9/20
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS23


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS23
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 22/9/20
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS24


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS24
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 24/9/20
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS25


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS25
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 23/9/20
Depth: From 0.00 to 3.20
CM 10 20 30 40 50 60 70 80 90 100

WS26


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS26
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 23/9/20
Depth: From 0.00 to 2.80
CM 10 20 30 40 50 60 70 80 90 100

WS27


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS27
Box No: 1 of 1
Job Ref: 9897-08-20
Date: 23/9/20
Depth: From 0.00 to 2.00
CM 10 20 30 40 50 60 70 80 90 100

WS28


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS28
Box No: 1 of 1
Job Ref: 9897-08-20
Date: 24/9/2020
Depth: From 0.00 to 1.20
CM 10 20 30 40 50 60 70 80 90 100

WS29


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS29
Box No: 1/2 of 2
Job Ref: 9897-08 20
Date: 24/9/2020
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS30


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS30
Box No: 1/2 of 2
Job Ref: 9897-08 20
Date: 24/9/2020
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS31


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Colour Chart #14
Grey Scale #14
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS31
Box No: 1/2 of 2
Job Ref: 9897-08-20
Date: 25/9/2020
Depth: From 0.00 to 3.30
CM 10 20 30 40 50 60 70 80 90 100

WS32


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Colour Chart #14
Grey Scale #14
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS32
Box No: 1/2 of 2
Job Ref: 9897-08-20
Date: 25/9/2020
Depth: From 0.00 to 3.0
CM 10 20 30 40 50 60 70 80 90 100

WS34


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS34
Box No: 1 of 2
Job Ref: 9897-08-20
Date: 25/9/2020
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS36


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD, DUBLIN 8
Borehole ref: WS36
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 28/9/2020
Depth: From 0.00 to 2.50
CM 10 20 30 40 50 60 70 80 90 100

WS37


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Colour Chart #14
Grey Scale #14
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD, DUBLIN 8
Borehole ref: WS37
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 28/9/2020
Depth: From 0.00 to 1.20
CM 10 20 30 40 50 60 70 80 90 100

WS38


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Colour Chart #14
Grey Scale #14
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD, DUBLIN 8
Borehole ref: WS38
Box No: 1+2 of 2
Job Ref: 9897-08-20
Date: 28/9/2020
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS39


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS39
Box No: 1 of 2
Job Ref: 9897-08-20
Date: 28/9/2020
Depth: From 0.00 to 3.25
CM 10 20 30 40 50 60 70 80 90 100

WS40


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS40
Box No: 1 of 2
Job Ref: 9897-08-20
Date: 29/9/2020
Depth: From 0.00 to 2.40
CM 10 20 30 40 50 60 70 80 90 100

WS41


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS 41
Box No: 1 of 2
Job Ref: 9897-08-20
Date: 29/9/2020
Depth: From 0.00 to 2.50
CM 10 20 30 40 50 60 70 80 90 100

WS42


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS 42
Box No: 1 of 2
Job Ref: 9897-08-20
Date: 29/9/2020
Depth: From 0.00 to 2.50
CM 10 20 30 40 50 60 70 80 90 100

WS43


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS43
Box No: 1 of 2
Job Ref: 9897-08-20
Date: 29/9/2020
Depth: From 0.00 to 2.50
CM 10 20 30 40 50 60 70 80 90 100

WS44


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS44
Box No: 1 of 2
Job Ref: 9897-08-20
Date: 29/9/2020
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS45


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS45
Box No: 1 of 12
Job Ref: 9897-08-20
Date: 30/9/2020
Depth: From 0.00 to 3.50
CM 10 20 30 40 50 60 70 80 90 100

WS46A


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS46A
Box No: 1 of 12
Job Ref: 9897-08-20
Date: 30/9/2020
Depth: From 0.00 to 2.50
CM 10 20 30 40 50 60 70 80 90 100

WS47A


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Colour Chart #14
Grey Scale #14
Client: DUBLIN CITY COUNCIL
Site: [illegible] EMMETT ROAD DUBLIN 8
Borehole ref: WS47A
Box No: 1 of 12
Job Ref: 9897-08-20
Date: 30/9/2020
Depth: From 0.00 to
CM 10 20 30 40 50 60 70 80 90 100

WS48


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Colour Chart #14
Grey Scale #14
Client: DUBLIN CITY COUNCIL
Site: [illegible] EMMETT ROAD DUBLIN 8
Borehole ref: WS48
Box No: 2 of 12
Job Ref: 9897-08-20
Date: 01/10/2020
Depth: From 0.00 to 3.00
CM 10 20 30 40 50 60 70 80 90 100

WS49


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS49
Box No: 1 of 1
Job Ref: 9897-08-20
Date: 01/10/2020
Depth: From 0.00 to 0.90
CM 10 20 30 40 50 60 70 80 90 100

WS50A


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS50
Box No: 1 of 1
Job Ref: 9897-08-20
Date: 01/10/2020
Depth: From 0.00 to 2.00
CM 10 20 30 40 50 60 70 80 90 100

WS51


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS51
Box No: 1 of 1
Job Ref: 9897-08-20
Date: 01/10/2020
Depth: From 0.00 to
CM 10 20 30 40 50 60 70 80 90 100

WS51A


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: DUBLIN CITY COUNCIL
Site: EMMETT ROAD DUBLIN 8
Borehole ref: WS51A
Box No: 1 of 1
Job Ref: 9897-08-20
Date: 01/10/2020
Depth: From 0.00 to 1.70
CM 10 20 30 40 50 60 70 80 90 100

APPENDIX 8 – Rotary Core Records

Ground Investigations Ireland Ltd
www.gii.ie

Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH02
Machine : Comacchio GEO405 **Flush :** Water **Core Dia :** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 14.50m	**Ground Level (mOD)** 23.45	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712086.8 E 733472.8 N	**Dates** 15/09/2020	**Engineer** OCSC	**Sheet** 1/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
						23.40	0.05	TARMACADAM			
						23.25	(0.15) 0.20				
						23.10	(0.15) 0.35	MADE GROUND: Grey subangular to subrounded fine to coarse Gravel with timber fragments			
								CONCRETE			
	26						(2.15)	Poor Recovery: Recovery consists of brown slightly sandy gravelly Clay. Driller notes Boulder Clay with clay washed out			
2.50 2.50-2.95 2.50-2.80	43				1,0/0,1,2,1 SPT(C) N=4 T	20.95	2.50	Poor Recovery: Recovery consists of brown slightly sandy gravelly Clay. Driller notes Boulder Clay with clay washed out (Soft)			
						20.50	(0.45) 2.95	Poor Recovery: Recovery consists of Grey slightly sandy very clayey fine to coarse angular to subrounded Gravel with some cobbles and boulders. Driller notes Boulder Clay with clay washed out (Soft)			
4.00 4.00-4.45	47				5,7/7,6,9,7 SPT(C) N=29	19.45	(1.05) 4.00	Poor Recovery: Recovery consists of Grey slightly sandy very clayey fine to coarse angular to subrounded Gravel with some cobbles and boulders. Driller notes Boulder Clay with clay washed out (Stiff)			
						19.15	(0.30) 4.30	Very stiff dark grey slightly sandy gravelly CLAY with occasional cobbles			
5.50 5.50-5.95	100				9,9/11,10,9,13 SPT(C) N=43		(2.70)				
7.00 7.00-7.38 7.00-7.30	87				6,8/11,13,26 SPT(C) 50/225 T	16.45	7.00	Very stiff dark grey slightly sandy gravelly CLAY with many cobbles and boulders			
							(2.05)				
8.50 8.50-8.80	100				6,7/9,41 SPT(C) 50/150	14.40	9.05	WEATHERED ROCK: Recovered as dense dark grey clayey gravelly BOULDERS of Limestone with many cobbles of Limestone			
10.00											

Remarks
Complete at 14.50m BGL
50mm Standpipe installed in borehole upon completion, slotted from 14.50m BGL to 2.00m BGL, plain from 2.00m BGL to ground level, with bentonite seal and flush cover.

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH02

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Ground Investigations Ireland Ltd
www.gii.ie

Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH02
Machine : Comacchio GEO405 **Flush :** Water **Core Dia :** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 14.50m	**Ground Level (mOD)** 23.45	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712086.8 E 733472.8 N	**Dates** 15/09/2020	**Engineer** OCSC	**Sheet** 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
10.00-10.00					50/50 SPT(C) 50*/0 50/0						
	90						(3.40)				
11.50											
	83	17									
						11.00	12.45	Medium strong thinly laminated black fine grained calcareous MUDSTONE with occasional calcite veins			
12.45			23				(0.55)				
13.00						10.45	13.00	Strong thinly laminated grey fine grained argillaceous LIMESTONE			
							(0.35)				
						10.10	13.35	Medium strong thinly laminated black fine grained calcareous MUDSTONE with occasional calcite veins and pytire lenses 12.45m-14.50m BGL: Two fracture sets. F1: Very close to medium spaced, 0-20 degree, planar to undulating smooth with clay smearing. F2: Very close to medium spaced, 30-50 degree, planar rough to planar smooth with clay smearing			
	97	88	87	8			(0.70)				
						9.40	14.05	Strong thinly laminated grey fine grained argillaceous LIMESTONE			
							(0.45)				
14.50						8.95	14.50	Complete at 14.50m			

Remarks

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH02

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH03
Machine : Comacchio GEO405 **Flush :** Water **Core Dia :** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 13.00m	**Ground Level (mOD)** 24.13	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712007.5 E 733441.9 N	**Dates** 07/10/2020	**Engineer** OCSC	**Sheet** 1/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						23.93	(0.20) 0.20	CONCRETE		
						23.92	(0.14) 0.34	GEOTEXTILE		
	64					23.78	0.35	FILL: Grey angular fine to coarse Gravel (Crushed Rock Fill)		
0.80-1.00					EN		(0.85)	MADE GROUND: Brown slightly sandy graveelly Clay with mortar fragments		
1.20						22.93	1.20			
1.20-1.65	52				3,4/7,7,9,11 SPT(C) N=34	22.58	(0.35) 1.55	Grey rounded to subangular fine to coarse Gravel. Driller notes Boulder Clay with clay washed out (Very Stiff)		
							(0.95)	Very stiff brown slightly sandy gravelly CLAY		
2.50						21.63	2.50			
2.50-2.95					9,9/14,13,15,8 SPT(C) N=50			Very stiff dark grey slightly sandy gravelly CLAY		
3.00-3.40	100				EN		(1.50)			
3.50-4.00					T					
4.00						20.13	4.00			
4.00-4.45	100				7,9/13,13,15,9 SPT(C) N=50		(1.50)	Very stiff grey slightly sandy gravelly CLAY		
5.50						18.63	5.50			
5.50-5.95	100				5,6/8,10,12,15 SPT(C) N=45		(2.35)	Very stiff dark grey slighly sandy gravelly CLAY with cobbles and boulders		
7.00										
7.00-7.45	100				7,8/10,13,13,14 SPT(C) N=50	16.28	7.85	Dense grey slightly clayey fine to coarse angular to subangular GRAVEL with cobbles and boulders		
							(0.65)			
8.50						15.63	8.50			
	100	20					(1.20)	Very stiff dark grey slightly sandy gravelly CLAY with cobbles and boulders		
9.70			50			14.43	9.70	Medium strong to strong thinly laminated grey fine grained argillaceous LIMESTONE with calcite veining		
10.00										

Remarks
Complete at 13.00m BGL

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH03

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH03
Machine : Comacchio GEO405 **Flush :** Water **Core Dia:** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 13.00m	**Ground Level (mOD)** 24.13	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712007.5 E 733441.9 N	**Dates** 07/10/2020	**Engineer** OCSC	**Sheet** 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				16			(1.80)	9.70m-13.00m BGL: Two fracture sets. F1: Medium to widely spaced, 30-50 degree, planar smooth. F2: Close to medium spaced, 70-85 degree, planar smooth.		
10.70	100	88	88							
11.50				8		12.63	11.50	Medium strong to strong thinyl laminated dark grey fine grained MUDSTONE with calcite veining		
	100	67	55				(0.95)			
						11.68	12.45			
							(0.25)	Medium strong to strong thinly laminated gray fine grained LIMESTONE with calcite veins, pyrite laminations and blebs		
						11.43	12.70			
							(0.30)	Medium strong to strong thinyl laminated dark grey fine grained MUDSTONE with calcite veining		
13.00						11.13	13.00			
								Complete at 13.00m		

Remarks

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH03

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH04
Machine : Comacchio GEO405 **Flush :** Water **Core Dia :** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 14.50m	**Ground Level (mOD)** 23.73	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712082.8 E 733445.5 N	**Dates** 07/10/2020	**Engineer** OCSC	**Sheet** 1/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						23.66	0.07	TARMACADAM		
							(0.48)	FILL: Grey angular fine to coarse Gravel (Crushed Rock Fill)		
						23.18	0.55	CONCRETE		
							(0.23)			
						22.95	0.78	Poor recovery: Recovery consists of MADE GROUND: Brown slightly sandy gravelly Clay with mortar fragments. Driller notes Fill onto Boulder Clay		
	34						(1.72)			
2.50 2.50-2.80 2.50					7,9/19,31 SPT(C) 50/150 T	21.23	2.50	Very stiff dark grey slightly sandy gravelly CLAY with occasional cobbles		
3.40	100				EN		(1.50)			
4.00 4.00-4.38	100				9,12/15,17,18 SPT(C) 50/225	19.73	4.00	Very stiff dark grey slightly sandy gravelly CLAY with some cobbles and boulders		
5.50	100						(4.50)			
7.00 7.00-7.23	100				10,13/50 SPT(C) 50/75					
8.50	100					15.23	8.50	Very stiff dark grey slightly sandy gravelly CLAY with many cobbles and boulders		
10.00										

Remarks
Complete at 14.50m BGL

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH04

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH04
Machine : Comacchio GEO405 **Flush :** Water **Core Dia :** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 14.50m	**Ground Level (mOD)** 23.73	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712082.8 E 733445.5 N	**Dates** 07/10/2020	**Engineer** OCSC	**Sheet** 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
10.00-10.00	100				50/50 SPT(C) 50*/0 50/0		(4.10)			
11.50 11.50-11.80	100	23			11,13/15,35 SPT(C) 50/150					
12.60			83	5		11.13	12.60	Strong thinly laminated grey fine grained argillaceous LIMESTONE with occasional vugs and calcite veins interbedded with medium strong thinly laminated black fine grained calcareous MUDSTONE with pyrite lamination. 12.60m-13.90m BGL: One fracture set: Very close to closely spaced, 0-25 degree, planar rough with occasional clay staining.		
13.00	81	74	74				(1.90)			
14.50						9.23	14.50	13.90m-14.50m BGL: Two fracture sets. F1: Very close to closely spaced, 0-25 degree, planar rough with occasional clay staining. F2: Closely spaced, 70-85 degree, planar to undulating rough with occasional clay staining Complete at 14.50m		

Remarks

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH04

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH05
Machine : Comacchio GEO405 **Flush :** Water **Core Dia :** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 11.50m	**Ground Level (mOD)** 24.64	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712013.9 E 733405.5 N	**Dates** 08/10/2020	**Engineer** OCSC	**Sheet** 1/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						24.57	0.07	TARMACADAM		
						24.43	(0.14) 0.21			
							(0.19)	FILL: Grey coarse angular Gravel (Crushed Rock Fill)		
						24.24	0.40	CONCRETE		
	18						(2.10)	Poor Recovery: Recovery consists of MADE GROUND: Brown slightly sandy gravelly Clay with plastic fragments. Driller notes Fill		
2.50 2.50-2.95	90				4,3/9,8,7,6 SPT(C) N=30	22.14	2.50	Very stiff grey slightly sandy gravelly CLAY with occasional cobbles		
							(1.50)			
4.00 4.00-4.45	100				8,9/11,12,14,13 SPT(C) N=50	20.64	4.00	Very stiff dark grey slightly sandy gravelly CLAY with some cobbles and boulders		
5.50 5.50-5.95	100				9,11/13,17,19,1 SPT(C) N=50		(4.50)			
7.00 7.00-7.45	100				8,11/14,18,14,4 SPT(C) N=50					
8.50	100	91	91	2		16.14	8.50	Very strong grey thinly laminated grey fine grained argillaceous LIMESTONE with some calcite veining		
							(0.65)			
9.50						15.49	9.15	Medium strong thinly laminated black fine grained calcareous MUDSTONE		
							(0.65)			
10.00						14.84	9.80	Very strong thinly laminated grey fine grained argillaceous		

Remarks
Complete at 11.50m BGL

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH05

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH05
Machine : Comacchio GEO405 **Flush :** Water **Core Dia:** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 11.50m	**Ground Level (mOD)** 24.64	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712013.9 E 733405.5 N	**Dates** 08/10/2020	**Engineer** OCSC	**Sheet** 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
				6				LIMESTONE with occasional calcite veins and clay bands		
10.50	93	80	80	2			(1.70)	8.50m-11.50m BGL: Three fracture sets. F1: Very close to medium spaced, 0-30 degree, planar rough. F2: Closely spaced, 70-85 degree, planar smooth. F3: Closely spaced, 35-50 degree, planar rough. 10.68m-10.74m BGL: Clay band		
11.50						13.14	11.50	Complete at 11.50m		

Remarks

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH05

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH06
Machine : Comacchio GEO405 **Flush :** Water **Core Dia :** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 11.00m	**Ground Level (mOD)** 24.59	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712084.6 E 733372.3 N	**Dates** 09/10/2020	**Engineer** OCSC	**Sheet** 1/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.20-0.60	40				T	24.39	(0.20) 0.20	FILL: Grey/brown coarse angular Gravel (Crushed Rock Fill)		
								Poor Recovery: Recovery consists of MADE GROUND: Brown slightly sandy gravelly Clay with fragments of red brick and concrete. Driller notes Fill onto Boulder Clay		
2.50 2.50-2.95	40				2,3/5,5,7,9 SPT(C) N=26	22.09	(2.30) 2.50	Stiff brown slightly sandy gravelly Clay with some cobbles and boulders		
4.00 4.00-4.45	93				3,3/6,8,9,9 SPT(C) N=32	21.59	(0.50) 3.00	Stiff dark grey slightly sandy gravelly CLAY with some cobbles and boulders		
5.50 5.50-5.50	97	7			50/50 SPT(C) 50*/0 50/0	19.64	(1.95) 4.95	WEATHERED ROCK: Recovered as dense sandy very clayey fine to coarse angular to subangular Gravel of Limestone with many cobbles and boulders		
6.60			0			17.99	(1.65) 6.60	Strong thinly laminated grey fine grained argillaceous LIMESTONE with occasional calcite veining interbedded with weak thinly laminated black fine grained calcareous MUDSTONE with occasional calcite veining		
7.00 7.60	100	92	74	9				6.60m-10.00m BGL: Two fracture sets. F1: Very close to medium spaced, 0-25 degree, planar rough. F2: Very close to close, 30-50 degree, planar rough.		
8.50	100	87	50	7			(4.40)			
10.00								10.00m-11.00m BGL: Three fracture sets. F1: Very close to medium spaced, 0-25 degree, planar rough. F2: Very close to close, 30-50 degree, planar rough. F3: Close to medium spaced, 70-85 degree, planar		

Remarks
Complete at 11.00m BGL

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH06

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH06
Machine : Comacchio GEO405 **Flush :** Water **Core Dia:** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 11.00m	**Ground Level (mOD)** 24.59	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712084.6 E 733372.3 N	**Dates** 09/10/2020	**Engineer** OCSC	**Sheet** 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
	100	39	39	12				smooth.		
11.00						13.59	11.00	Complete at 11.00m		

Remarks

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH06

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH07
Machine : Comacchio GEO405 **Flush :** Water **Core Dia:** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 10.40m	**Ground Level (mOD)** 25.44	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712014.8 E 733355.4 N	**Dates** 08/10/2020	**Engineer** OCSC	**Sheet** 1/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
						25.29	(0.15) 0.15	Brown slightly sandy slightly gravelly TOPSOIL with grass rootlets			
	20						(2.35)	Poor Recovery: Recovery consists of brown sandy gravelly Clay with occasional subangular cobbles. Driller notes Fill onto Boulder Clay			
2.50 2.50-2.95 2.50					2,4/4,4,4,6,5 SPT(C) N=19 T	22.94	2.50 (0.40)	Poor Recovery: Recovery consists of brown sandy gravelly Clay with occasional subangular cobbles. Driller notes Boulder Clay (Stiff)			
3.00-3.40 3.00-3.40	66				EN T	22.54	2.90 (1.10)	Stiff dark grey slightly sandy gravelly CLAY with many subangular cobbles and occasional boulders. Gravel is fine to coarse, angular to subangular			
4.00 4.00-4.45	93				4,4/10,12,16,12 SPT(C) N=50	21.44	4.00	Very stiff dark grey slightly sandy gravelly CLAY with many subangular cobbles and occasional boulders. Gravel is fine to coarse, angular to subangular			
5.50 5.50-5.95	100				4,5/7,9,9,11 SPT(C) N=36		(3.00)				
7.00 7.00-7.45	100				6,6/9,11,10,12 SPT(C) N=42	18.44	7.00	WEATHERED ROCK: Recovered as dense dark grey clayey gravelly BOULDERS of Limestone with many cobbles of Limestone 7.00m-9.60m BGL: Mostly non intact			
8.50	80	13					(2.60)				
9.60			38			15.84	9.60	Medium strong to strong thinly laminated dark grey fine grained argillaceous LIMESTONE with occasional clay bands and partial weathering			
10.00											

Remarks
Complete at 10.40m BGL
50mm Standpipe installed in borehole upon completion, slotted from 10.40m BGL to 2.00m BGL, plain from 2.00m BGL to ground level, with bentonite seal and flush cover.

Scale (approx)	Logged By
1:50	AB

Figure No. 9897-08-20.BH07

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Site Emmet Road, Inchicore, Dublin 8				**Borehole Number** BH07
Machine : Comacchio GEO405 **Flush :** Water **Core Dia:** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 10.40m	**Ground Level (mOD)** 25.44	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712014.8 E 733355.4 N	**Dates** 08/10/2020	**Engineer** OCSC	**Sheet** 2/2

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
	100	63	63	11			(0.80)	9.60m-10.40m BGL: Two fracture sets. F1: Very close to closely spaced, 10-30 degree, undulating rough with clay staining. F2: Closely spaced, 60-80 degree, undulating rough with clay staining			
10.40						15.04	10.40	Complete at 10.40m			

Remarks

Scale (approx)	Logged By
1:50	AB

Figure No. 9897-08-20.BH07

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH08
Machine : Comacchio GEO405 **Flush :** Water **Core Dia :** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 7.00m	**Ground Level (mOD)** 24.90	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712107.3 E 733299.6 N	**Dates** 12/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
						24.70	(0.20) 0.20	Brown slightly sandy slightly gravelly TOPSOIL with grass rootlets			
1.00-2.00	32				EN		(2.30)	Poor Recovery: Recovered as MADE GROUND: brown/grey sandy clayey fine to coarse angular to subangular Gravel with some subangular cobbles and occasional fragments of red brick. Driller notes Fill onto Boulder Clay			
2.50 2.50-2.95					3,0/3,3,3,2 SPT(C) N=11	22.40	2.50	Dark grey slightly clayey sandy fine to coarse angular to subangular Gravel. Driller notes Boulder Clay with clay washed out (Soft to firm)			
3.00-3.40	60				EN						
4.00 4.00-4.45	93	13			2,1/0,2,3,2 SPT(C) N=7		(2.80)				
5.30			100			19.60	5.30	Weak to mediium strong thinly laminated dark grey fine grained calcareous MUDSTONE with rare clay bands and partial to distinct weathering			
5.50 5.50-5.50	100	66	7	25	50/50 SPT(C) 50*/0 50/0		(1.70)	5.30m-7.00m BGL: Two fracture sets. F1: Very close to closely spaced, 10-30 degree, planar smooth with clay smearing. F2: Very close to closely spaced, 40-60 degree, planar smooth with clay staining.			
7.00						17.90	7.00	Complete at 7.00m			

Remarks
Complete at 7.00m BGL
50mm Standpipe installed in borehole upon completion, slotted from 5.30, BGL to 1.30m BGL, plain from 130m BGL to ground level, with bentonite seal and flush cover.

Scale (approx)	Logged By
1:50	AB

Figure No. 9897-08-20.BH08

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH09
Machine : Comacchio GEO405 **Flush :** Water **Core Dia:** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 7.00m	**Ground Level (mOD)** 25.48	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712039.5 E 733300.2 N	**Dates** 12/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						25.23	(0.25) 0.25	Brown slightly gravelly TOPSOIL		
0.50-0.80					T	24.68	(0.55) 0.80	MADE GROUND: Brown slightly sandy gravelly Clay with fragments of wire and mortar		
	54						(1.70)	Firm brown slightly sandy gravelly CLAY with occasional cobbles		
2.20-2.50					T					
2.50 2.50-2.95	57				3,3/4,3,4,5 SPT(C) N=16	22.98	2.50 (1.80)	Poor Recovery: Recovery consists of dense dark grey slightly sandy very clayey fine to coarse subangular to subrounded Gravel with occasional cobbles and boulders. Driller notes Boulder Clay		
4.00 4.00-4.45					5,7/7,9,12,22 SPT(C) N=50					
4.30	83	13	16	17		21.18	4.30 (0.85)	Weak thinly laminated black fine grained calcareous MUDSTONE with occasional calcite veins		
5.30						20.33	5.15	Strong thinly laminayed grey fine grained argillaceous LIMESTONE with occasional calcite veins and Mudstone laminations 4.30m-7.00m BGL: Three fracture sets. F1: Very close to closely spaced, 0-25 degree, planar rough. F2: Very close to closely spaced, 30-50 degree, planar rough. F3: Close to medium spaced, 70-85 degree, planar rough		
5.50	97	67	46	15		19.23	(1.10) 6.25	Weal to medium strong thinly laminated black fine grained calcareous MUDSTONE		
7.00						18.48	(0.75) 7.00	Complete at 7.00m		

Remarks
Complete at 7.00m BGL

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH09

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH10
Machine : Comacchio GEO405 **Flush :** Water **Core Dia :** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 9.00m	**Ground Level (mOD)** 25.35	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712109.3 E 733261.1 N	**Dates** 12/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						25.15	(0.20) 0.20	Brown slightly gravelly TOPSOIL		
						24.85	(0.30) 0.50	MADE GROUND: Brown slightly sandy slightly gravelly Clay with occasional red brick fragments		
						24.55	(0.30) 0.80	MADE GROUND: Grey subangular to subrounded fine to coarse Gravel with metal fragments		
	32							Poor Recovery: Recovery consists of brown slightly sandy slightly gravelly Clay. Driller notes Sand onto Boulder Clay (Loose)		
2.50 2.50-2.95	30				2,1/2,2,3,2 SPT(C) N=9		(3.40)			
4.00 4.00-4.45	100				5,7/7,5,9,9 SPT(C) N=30	21.15	4.20	Stiff dark grey slightly sandy gravelly CLAY with some cobbles and boulders		
5.50	100	29	29	11		19.85	(1.30) 5.50	Medium strong thinly laminated black fine grained calcareous MUDSTONE with occasional calcite veining		
6.60 7.00	88	83	77	4		18.75	(1.10) 6.60	Strong thinly laminated grey fine grained argillaceous LIMESTONE with many coarse calcite veins 5.50m-9.00m BGL: Three fracure sets. F1: Very close to medium spaced, 30-50 degree, undulating smooth. F2: Close to medium spaced, 0-25 degree, planar rough. F3: Close to medium spaced, 70-85 degree, planar rough.		
8.30	100	98	98			16.35	(2.40) 9.00	Complete at 9.00m		
9.00										

Remarks
Complete at 9.00m BGL

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH10

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH11
Machine : Comacchio GEO405 **Flush :** Water **Core Dia :** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 6.00m	**Ground Level (mOD)** 25.62	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712044.6 E 733261.9 N	**Dates** 13/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						25.42	(0.20) 0.20	Brown slightly gravelly TOPSOIL		
						25.27	(0.15) 0.35	FILL: Grey/brown fine to coarse angular Gravel (Crushed Rock Fill)		
0.35-1.05					T		(0.70)	Brown slightly sandy gravelly CLAY with occasional cobbles and boulders		
	54					24.57	1.05	Poor Recovery: Recovery consists of grey slightly clayey slightly sandy fine to coarse angular Gravel with cobbles and boulders. Driller notes Boulder Clay with clay washed out		
							(1.45)			
2.50 2.50-2.95					3,3/1,0,2,3 SPT(C) N=6	23.12	2.50	Poor Recovery: Recovery consists of grey slightly clayey slightly sandy fine to coarse angular Gravel with cobbles and boulders. Driller notes Boulder Clay with clay washed out (Soft)		
3.05	87	23	37	14		22.57	(0.55) 3.05	Very strong thinly laminated grey fine grained argillaceous LIMESTONE with occasional calcite veins 3.45m BGL: Clay band		
							(0.95)			
4.00 4.00-4.00					50/50 SPT(C) 50*/0 50/0	21.62	4.00	Weak to medium strong thinly laminated dark grey fine grained calcareous MUDSTONE		
4.45	100	51	33	8		21.17	(0.45) 4.45	Very strong thinly laminated grey fine grained argillaceous LIMESTONE with occasional calcite veins and occasional bands of Mudstone 3.05-m-6.00m BGL: Three fracture sets. F1: Very close to medium spaced, 0-20 degree, planar smooth. F2: Very close to medium spaced, 30-50 degree, planar rough. F3: Widely spaced, 70-85 degree, undulating smooth		
							(0.65)			
5.20	100	15	0	13		20.52	5.10	Weak to medium strong thinly laminated dark grey fine grained calcareous MUDSTONE with occasional calcite veins and pyrite lamination 5.80m BGL: Pyrite lamination		
							(0.90)			
6.00						19.62	6.00	Complete at 6.00m		

Remarks
Complete at 6.00m BGL

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH11

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH12
Machine : Comacchio GEO405 **Flush :** Water **Core Dia :** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 7.00m	**Ground Level (mOD)** 25.71	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712122.3 E 733203.9 N	**Dates** 14/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
						25.66	0.05 (0.25)	Brown slightly sandy bslightly gravelly TOPSOIL with grass rootlets			
						25.41	0.30 (0.30)	CONCRETE			
						25.11	0.60	MADE GROUND: Brown slightly sandy gravelly Clay. Driller notes Fill			
	30						(1.90)	Poor Recovery: Recovery consists of: Brown slightly sandy slightly gravelly Clay with occasional cobbles and boulders. Driller notes Boulder Clay			
1.85-3.00					EN						
2.50						23.21	2.50				
2.50-2.95					7,9/11,11,13,12 SPT(C) N=47			WEATHERED ROCK: Recovered as dense black sandy very clayey fine to coarse angular to subangular Gravel of Mudstone and Limestone with cobbles and boulders			
3.00-3.40	100	27			EN		(0.85)				
3.35			18			22.36	3.35	Strong thinly laminated grey fine grained argillaceous LIMESTONE with occasional calcite veins interbedded with weak to medium strong thinly laminated black fine grained calcareous MUDSTONE with pyrite lamination			
4.00	100	44	41	14			(3.65)	3.35m-7.00m BGL: Three fracture sets. F1: Very close to closely spaced, 0-20 degree, planar smooth. F2: Very close to closely spaced, 30-50 degree, undulating rough. F3: Close to widely spaced, 70-85 degree, planar rough.			
5.50											
5.80	100	55	51	8				6.20m: Pyrite band			
7.00						18.71	7.00	Complete at 7.00m			

Remarks
Complete at 7.00m BGL
50mm Standpipe installed in borehole upon completion, slotted from 7.00m BGL to 2.00m BGL, plain from 2.00m BGL to ground level, with bentonite seal and flush cover.

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH12

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Site Emmet Road, Inchicore, Dublin 8			**Borehole Number** BH13
Machine : Comacchio GEO405 **Flush :** Water **Core Dia :** 146 mm **Method :** Rotary Cored	**Casing Diameter** 102mm cased to 5.50m	**Ground Level (mOD)** 26.45	**Client** Dublin City Council	**Job Number** 9897-08-20
	Location 712048.3 E 733198.5 N	**Dates** 14/10/2020	**Engineer** OCSC	**Sheet** 1/1

Depth (m)	TCR (%)	SCR (%)	RQD (%)	FI	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						26.15	(0.30) 0.30	Brown gravelly TOPSOIL with grass rootlets		
						25.80	(0.35) 0.65	FILL: Grey/brown slightly clayey fine to coarse angular to subangular gravel (Crushed Rock Fill)		
						25.55	(0.25) 0.90	CONCRETE		
	52						(1.60)	Poor Recovery: Recovery consists of grey/brown slightly clayey slightly sandy fine to coarse angular to subrounded Gravel with some cobbles and boulders. Driller notes Boulder Clay with clay washed out		
2.50 2.50-2.50					50/50 SPT(C) 50*/0 50/0	23.95	2.50 (0.25)	Poor Recovery: Recovery consists of grey/brown slightly clayey slightly sandy fine to coarse angular to subrounded Gravel with some cobbles and boulders. Driller notes Boulder Clay with clay washed out (Very Stiff)		
3.30	73	0	0	17		23.70 23.15	2.75 (0.55) 3.30	WEATHERED ROCK: Reovered as dark grey very clayey angular fine to coarse Gravel of Limestone 2.50m-3.30m BGL: Mostly non intact		
4.00	93	40	37	12		22.45	(0.70) 4.00	Weak thinly laminated black fine grained calcareous MUDSTONE with occasional pyrite laminations 3.30m-4.00m BGL: Three fracture sets. F1: Very close to closely spaced, 0-20 degree, planar smooth. F2: Very close to closely spaced, 30-50 degree, planar smooth. F3: Medium spaced, 70-85 degree, planar smooth.		
							(1.50)	Strong thinly laminated grey fine grained argillaceous LIMESTONE with many quartz veins and occasional vugs 4.00m-5.50m BGL: Three fracture sets. F1: Closely spaced, 0-20 degree, undulating rough. F2: Close to medium spaced, 30-50 degree, undulating rough. F3: Medium spaced, 70-85 degree, planar rough.		
5.50						20.95	5.50	Complete at 5.50m		

Remarks
Complete at 5.50m BGL

Scale (approx)	Logged By
1:50	EB

Figure No. 9897-08-20.BH13

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Emmet Road
RC Photos
BH02



BH02



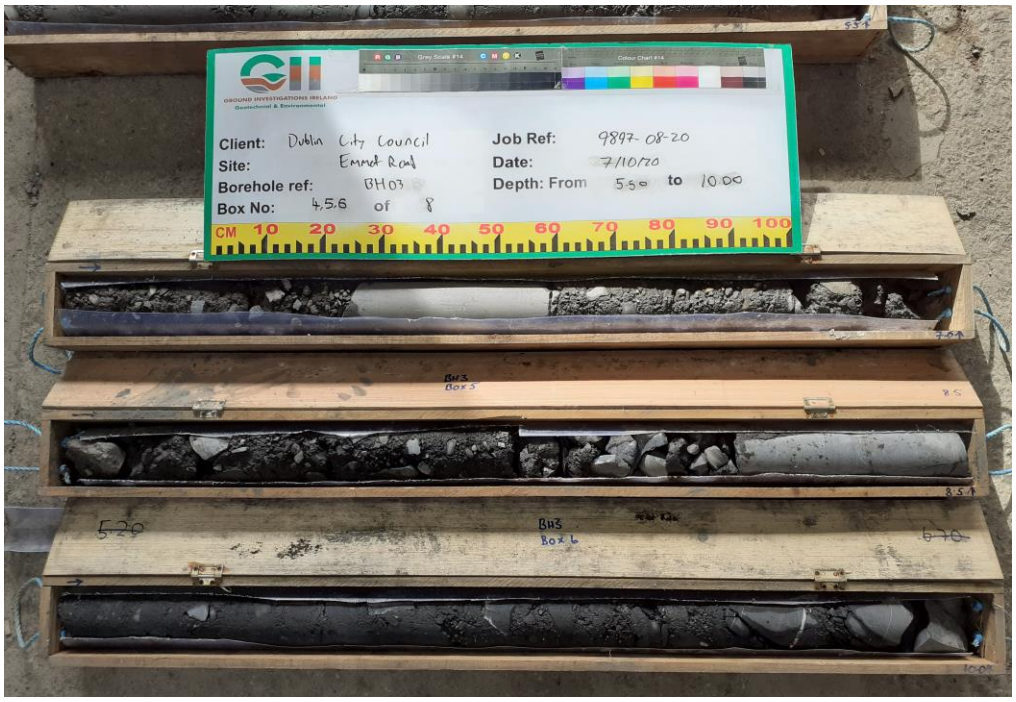
BH02


GII
GROUND INVESTIGATIONS IRELAND
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH02
Box No: 7 8 9 of 9
Job Ref: 9897-08-20
Date: 15/09/20
Depth: From 10.00 to 14.50
CM 10 20 30 40 50 60 70 80 90 100
BH2
Box 9

BH03


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH03
Box No: 1,2,3 of 8
Job Ref: 9897-08-20
Date: 7/10/20
Depth: From 0.00 to 5.50
CM 10 20 30 40 50 60 70 80 90 100
BH3
Box 2

BH03


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH03
Box No: 4,5,6 of 8
Job Ref: 9897-08-20
Date: 7/10/20
Depth: From 5.50 to 10.00
CM 10 20 30 40 50 60 70 80 90 100
BH3
Box 5
BH3
Box 6

BH03


GII
GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH03
Box No: 7 8 of 8
Job Ref: 9897-08-20
Date: 7/10/20
Depth: From 10.00 to 13.00
CM 10 20 30 40 50 60 70 80 90 100
BH3
Box 8
13.54
13.04

BH04


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH04
Box No: 1,2,3 of 9
Job Ref: 9897-08-20
Date: 7/10/20
Depth: From 0.00 to 5.50
CM 10 20 30 40 50 60 70 80 90 100
BH4 Box2
BH4 Box3

BH04


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH04
Box No: 4,5,6 of 9
Job Ref: 9897-08-20
Date: 7/10/20
Depth: From 5.50 to 10.00
CM 10 20 30 40 50 60 80 90 100

BH04


GII
GROUND INVESTIGATIONS IRELAND
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH04
Box No: 7 8 9 of 9
Job Ref: 9897-08-20
Date:
Depth: From 10 to 14.50
CM 10 20 30 40 50 60 70 80 90 100
BH4 Box 8
BH 8 Box 9

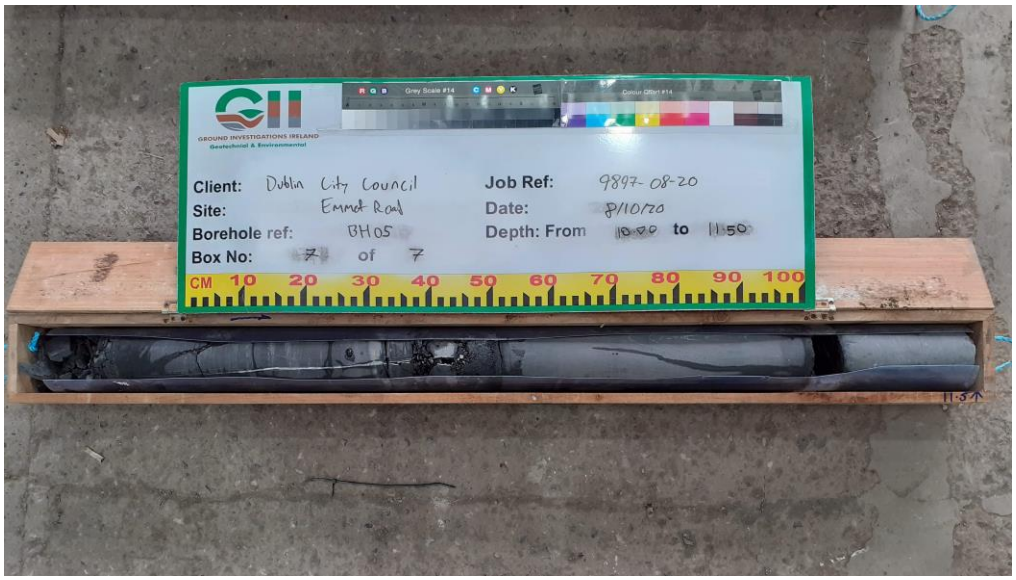
BH05


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH05
Box No: 2 of 7
Job Ref: 9897-08-20
Date: 8/10/20
Depth: From 0.00 to 5.50
CM 10 20 30 40 50 60 70 80 90 100
BH5 Box2
BH5 Box 3

BH05


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH05
Box No: 4 of 7
Job Ref: 9897-08-20
Date: 8/10/20
Depth: From 5.50 to 10.00
CM 10 20 30 40 50 60 70 80 90 100
BH5 Box 5
BH5 Box 6

BH05


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH05
Box No: 7 of 7
Job Ref: 9897-08-20
Date: 8/10/20
Depth: From 10.00 to 11.50
CM 10 20 30 40 50 60 70 80 90 100

BH06


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH06
Box No: 1,2,3 of 7
Job Ref: 9897-08-20
Date: 09/10/20
Depth: From 0.00 to 5.50
CM 10 20 30 40 50 60 70 80 90 100
BH6
Box 3

BH06


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH06
Box No: 4,5,6 of 7
Job Ref: 9897-08-20
Date: 09/10/20
Depth: From 5.50 to 10.00
CM 10 20 30 40 50 60 70 80 90 100
BH6
Box 5

BH06


GII
GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH06
Box No: 7 of 7
Job Ref: 08-20
Date: 09/10/20
Depth: From 10.00 to 11.00
CM 10 20 30 40 50 60 70 80 90 100

BH07


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH07
Box No: 1 of 7
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 0.0 to 2.5
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH07
Box No: 2 of 7
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 2.5 to 4.0
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH07
Box No: 3 of 7
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 4.0 to 5.5
EMMET RD
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH07
Box No: 4 of 7
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 5.5 to 7.0

BH07


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH07
Box No: 5 of 7
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 7.0 to 8.5
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH07
Box No: 6 of 7
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 8.5 to 10.0
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH07
Box No: 7 of 7
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 10.0 to 10.4

BH08


GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH08
Box No: 1 of 4
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 0.0 to 2.5
CM 10 20 30 40 50 60 70 80 90 100
GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH08
Box No: 2 of 4
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 2.5 to 4.0
CM 10 20 30 40 50 60 70 80 90 100
GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH08
Box No: 3 of 4
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 4.0 to 5.5
CM 10 20 30 40 50 60 70 80 90 100
GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH08
Box No: 4 of 4
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 5.5 to 7.0
CM 10 20 30 40 50 60 70 80 90 100

BH09


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH09
Box No: 1,2,3,4 of 4
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 0.00 to 7.60
CM 10 20 30 40 50 60 70 80 90 100
EMMET RD
BH9
BOX 4

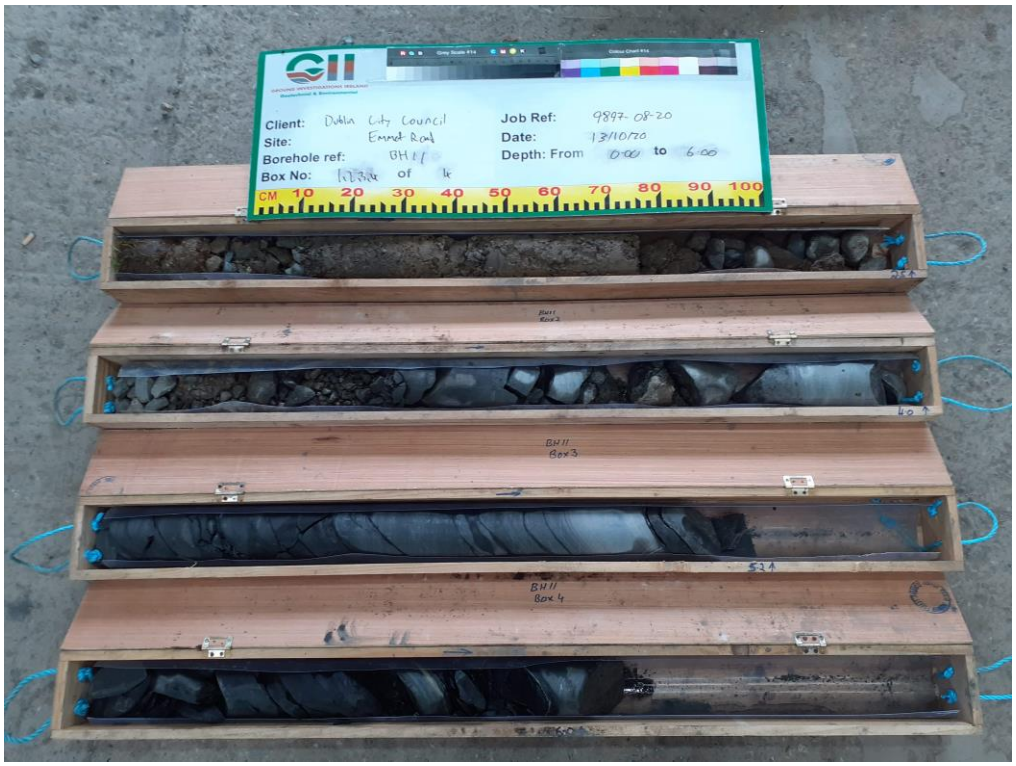
BH10


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH 10
Box No: 1,2,3 of 6
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 0.00 to 5.50
CM 10 20 30 40 50 60 70 80 90 100

BH10


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH 10
Box No: 4,5,6 of 6
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 5.50 to 9.00
CM 10 20 30 40 50 60 70 80 90 100

BH11


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH11
Box No: 1 of 4
Job Ref: 9897-08-20
Date: 13/10/20
Depth: From 0.00 to 6.00
CM 10 20 30 40 50 60 70 80 90 100
BH11 Box 3
BH11 Box 4

BH12


Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH12
Box No: 4 of 4
Job Ref: 9897-08-20
Date: 12/10/20
Depth: From 0.00 to 7.00
CM 10 20 30 40 50 60 70 80 90 100
BH12
Box 4

BH13


GII
GROUND INVESTIGATIONS IRELAND
Client: Dublin City Council
Site: Emmet Road
Borehole ref: BH13
Box No: 0:00 of 5:50
Job Ref: 9897-08-20
Date: 14/10/20
Depth: From 0:00 to 5:50
CM 10 20 30 40 50 60 70 80 90 100
BH13
Box 2
5:50

APPENDIX 6 – Laboratory Test Results

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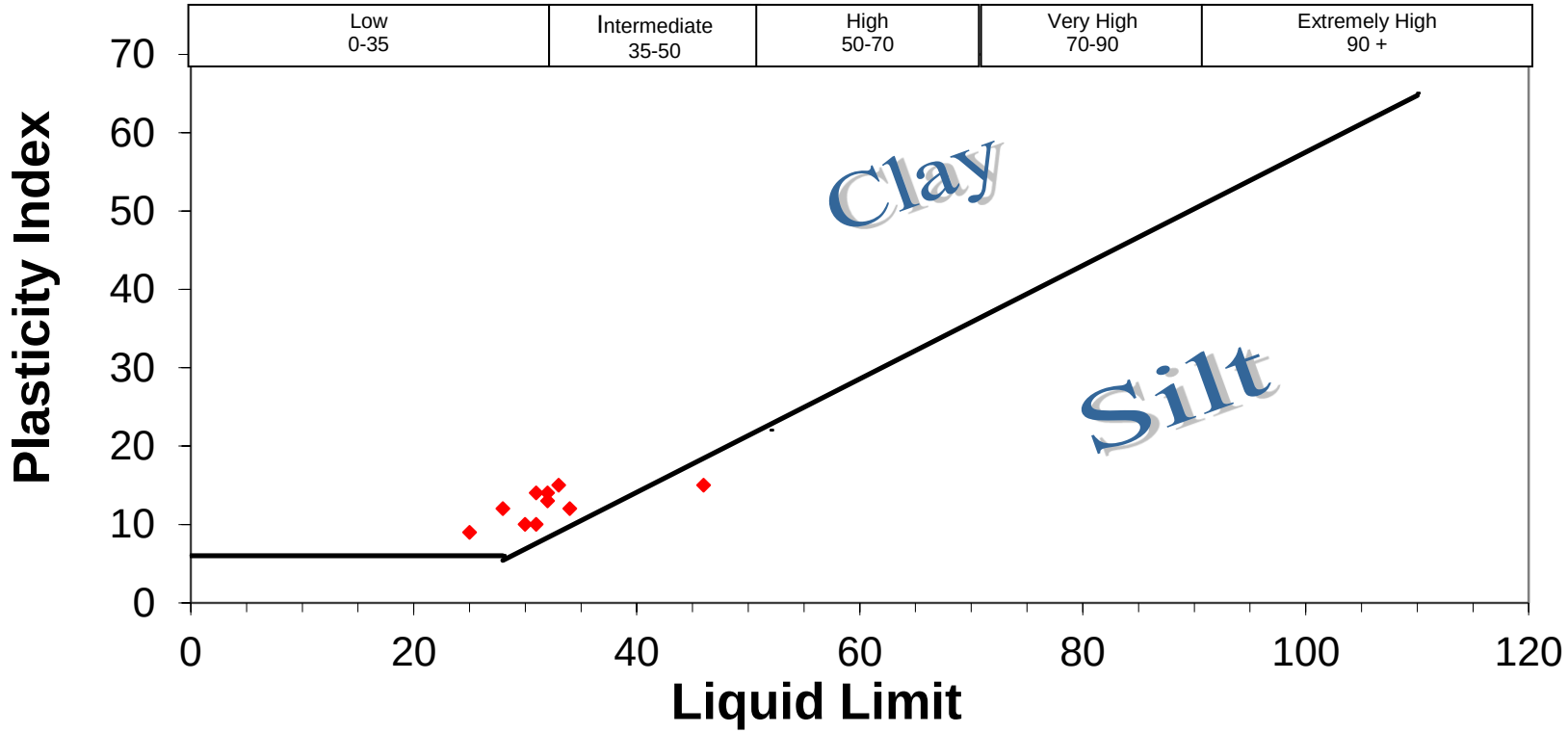
National Materials Testing Laboratory Ltd.

SUMMARY OF TEST RESULTS

				Particle			Index Properties		Bulk	Cell	Undrained Triaxial Tests		Lab	
BH/TP	Depth	sample	Moisture	Density	<425um	LL	PL	PI	Density	Presssure	Compressive	Strain at	Vane	Remarks
No	m	No.	%	Mg/m3	%	%	%	%	Mg/m3	kPa	Stress kPa	Failure %	kPa	
BH02	2.5-2.8	B	15.2		46.8	32	18	14						
BH02	7.0-7.3	B	9.0		41.4	31	17	14						
BH03	3.5-4.0	B	6.7		43.5	28	16	12						
BH04	2.50	B	13.9		59.5	33	18	15						
BH06	0.2-0.6	B	13.1		23.7	31	21	10						
BH07	2.50	B	14.1		32.3	30	20	10						
BH07	5.0-5.5	B	9.1		45.4	25	18	9						
BH09	0.5-0.8	B	26.6		46.9	46	31	15						
BH09	2.2-2.5	B	15.0		43.3	32	19	13						
BH11	0.35-1.05	B	11.8		28.5	34	22	12						
NMTL		Notes :									Job ref No.	NMTL 3313	GII Project ID:	9897-08-20
		1. All BS tests carried out using preferred (definitive) method unless otherwise stated.									Location	Emmet Road		

NMTL LTD
Unit 18c, Tullow Industrial Estate
Tullow
County Carlow
Tel: 00353 59 9180822
Mob: 00353 872575508
billa@nmtl.ie

Contract:	**Emmet Road**
Client:	**Ground Investigations Ireland Ltd**
Engineer:	**Diarmaid Maglochlainn**
GII Project ID	**9897-08-20**
Date:	**25/11/2020**
Tested By:	**Sb/Tch/Ms** **Checked:** **Bc**
Job ref No.	**NMTL 3313**



NMTL Ltd

Determination of Particle Size Distribution

BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5

Sieve Size mm	% Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	95.5
37.500	85.4
28.000	80.5
20.000	75.1
14.000	72.9
10.000	70.2
6.300	66.2
5.000	63.0
3.350	60.8
2.000	56.6
1.180	53.0
0.600	48.7
0.425	46.8
0.300	44.8
0.212	42.8
0.150	40.9
0.063	35.9



Percentage Particle Size

Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulder
		Silt			Sand			Gravel			
		35.9			20.7			43.4		0.0	0.0

Sample Description	Dark brown slightly sandy gravelly silty CLAY.					Project No.	NMTL 3313
						BH/TP No.	BH02
Project	Emmet Road			GII Project ID-9897-08-20		Sample No.	B
Operator	Tzr	Checked	Nc	Approved	Bc	Date sample tested	21/11/2020	Depth	2.5-2.80m

NM TL Ltd

NMTL Ltd

Determination of Particle Size Distribution

BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5

Sieve Size mm	% Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	83.1
37.500	80.4
28.000	80.4
20.000	73.8
14.000	68.5
10.000	62.9
6.300	58.5
5.000	56.3
3.350	54.3
2.000	50.9
1.180	47.6
0.600	43.5
0.425	41.4
0.300	39.2
0.212	36.8
0.150	34.3
0.063	28.6



Percentage Particle Size

Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulder
		Silt			Sand			Gravel			
		28.6			22.3			49.1		0.0	0.0

Sample Description	Dark grey slightly sandy gravelly silty CLAY					Project No.	NMTL 3313
						BH/TP No.	BH02
Project	Emmet Road			GII Project ID-9897-08-20		Sample No.	B
Operator	Tzr	Checked	Nc	Approved	Bc	Date sample tested	20/11/2020	Depth	7.0-7.30m

NM TL Ltd

NMTL Ltd

Determination of Particle Size Distribution

BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5

Sieve Size mm	% Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	100.0
37.500	92.9
28.000	88.1
20.000	81.8
14.000	75.4
10.000	72.1
6.300	68.0
5.000	64.2
3.350	60.2
2.000	54.6
1.180	50.1
0.600	45.6
0.425	43.5
0.300	41.4
0.212	39.3
0.150	37.3
0.063	33.1



Percentage Particle Size

Clay	Fine Silt	Medium Silt	Coarse Silt	Fine Sand	Medium Sand	Coarse Sand	Fine Gravel	Medium Gravel	Coarse Gravel	Cobbles	Boulder
		33.1			21.5			45.4		0.0	0.0

Sample Description	Dark grey slightly sandy gravelly silty CLAY					Project No.	NMTL 3313
						BH/TP No.	BH03
Project	Emmet Road			GII Project ID-9897-08-20		Sample No.	B
Operator	Tzr	Checked	Nc	Approved	Bc	Date sample tested	20/11/2020	Depth	3.5-4.0m

NMTL Ltd

NMTL Ltd

Determination of Particle Size Distribution

BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5

Sieve Size mm	% Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	100.0
37.500	95.0
28.000	94.5
20.000	90.0
14.000	86.9
10.000	84.2
6.300	80.1
5.000	76.6
3.350	74.6
2.000	70.5
1.180	66.4
0.600	61.9
0.425	59.5
0.300	56.8
0.212	54.0
0.150	51.0
0.063	43.2



Percentage Particle Size

Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulder
		Silt			Sand			Gravel			
		43.2			27.2			29.5		0.0	0.0

Sample Description	Dark grey slightly sandy slightly gravelly silty CLAY					Project No.	NMTL 3313
						BH/TP No.	BH04
Project	Emmet Road			GII Project ID-9897-08-20		Sample No.	B
Operator	Tzr	Checked	Nc	Approved	Bc	Date sample tested	21/11/2020	Depth	2.50m

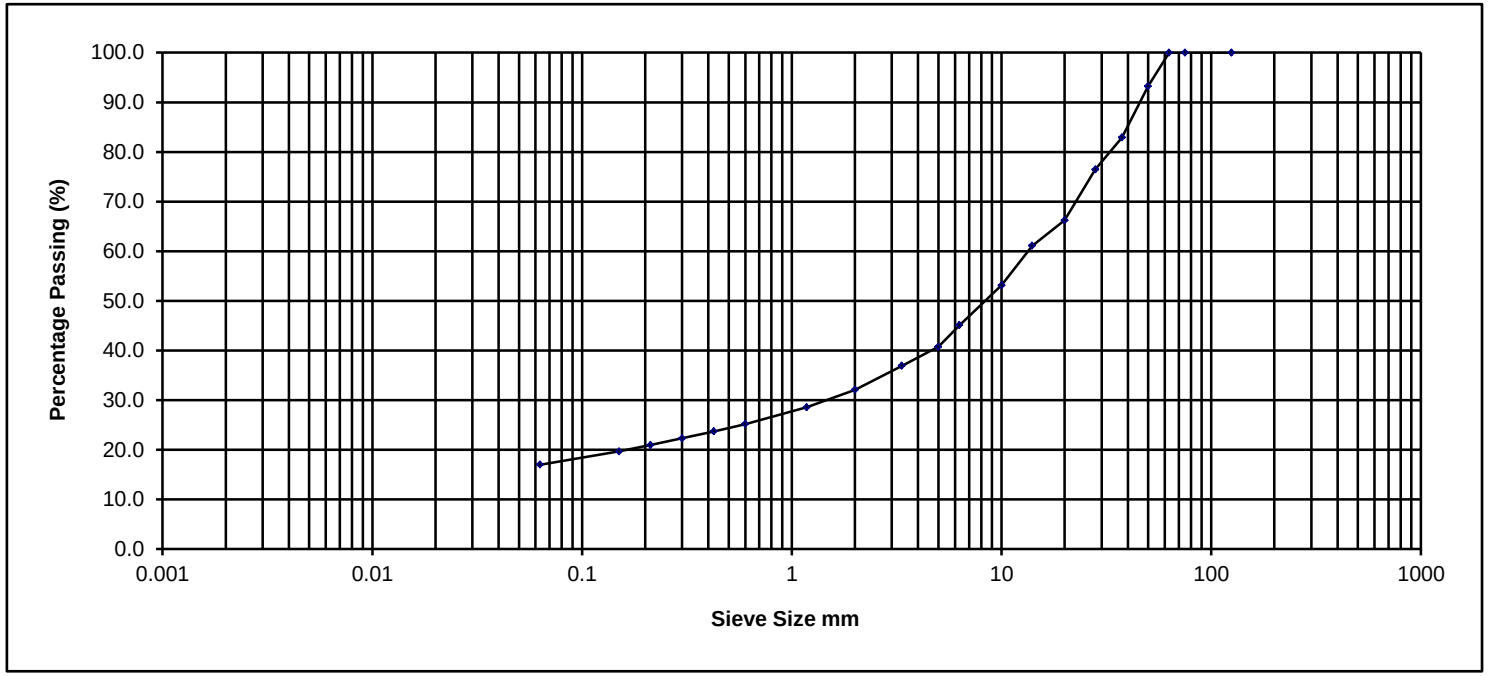
NM TL Ltd

NMTL Ltd

Determination of Particle Size Distribution

BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5

Sieve Size mm	% Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	93.2
37.500	82.9
28.000	76.5
20.000	66.2
14.000	61.1
10.000	53.1
6.300	45.1
5.000	40.8
3.350	36.9
2.000	32.1
1.180	28.6
0.600	25.2
0.425	23.7
0.300	22.3
0.212	20.9
0.150	19.7
0.063	17.0



Percentage Particle Size

Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulder
		Silt			Sand			Gravel			
		17.0			15.1			67.9		0.0	0.0

Sample Description	Dark brown sandy clayey silty GRAVEL.					Project No.	NMTL 3313
						BH/TP No.	BH06
Project	Emmet Road			GII Project ID-9897-08-20		Sample No.	B
Operator	Tzr	Checked	Nc	Approved	Bc	Date sample tested	21/11/2020	Depth	0.20-0.60m

NM TL Ltd

NMTL Ltd

Determination of Particle Size Distribution

BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5

Sieve Size mm	% Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	81.4
37.500	73.7
28.000	73.7
20.000	65.3
14.000	60.1
10.000	54.8
6.300	48.3
5.000	46.4
3.350	44.5
2.000	41.4
1.180	38.1
0.600	34.2
0.425	32.3
0.300	30.3
0.212	28.2
0.150	26.0
0.063	20.6



Percentage Particle Size

Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulder
		Silt			Sand			Gravel			
		20.6			20.8			58.6		0.0	0.0

Sample Description	Dark brown slightly sandy gravelly silty CLAY.					Project No.	NMTL 3313
						BH/TP No.	BH07
Project	Emmet Road			GII Project ID-9897-08-20		Sample No.	B
Operator	Tzr	Checked	Nc	Approved	Bc	Date sample tested	21/11/2020	Depth	2.50m

NM TL Ltd

NMTL Ltd

Determination of Particle Size Distribution

BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5

Sieve Size mm	% Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	100.0
37.500	100.0
28.000	96.2
20.000	89.7
14.000	86.4
10.000	82.7
6.300	75.0
5.000	70.3
3.350	65.5
2.000	59.1
1.180	53.7
0.600	48.1
0.425	45.4
0.300	42.8
0.212	40.0
0.150	37.2
0.063	29.9



Percentage Particle Size

Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulder
		Silt			Sand			Gravel			
		29.9			29.2			40.9		0.0	0.0

Sample Description	Dark grey slightly sandy gravelly silty CLAY.					Project No.	NMTL 3313
						BH/TP No.	BH07
Project	Emmet Road			GII Project ID-9897-08-20		Sample No.	B
Operator	Tzr	Checked	Nc	Approved	Bc	Date sample tested	20/11/2020	Depth	5.0-5.50m

NM TL Ltd

NMTL Ltd

Determination of Particle Size Distribution

BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5

Sieve Size mm	% Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	100.0
37.500	92.5
28.000	82.2
20.000	77.0
14.000	71.3
10.000	69.0
6.300	64.9
5.000	62.9
3.350	60.7
2.000	57.3
1.180	53.7
0.600	49.2
0.425	46.9
0.300	44.4
0.212	41.7
0.150	39.0
0.063	31.6



Percentage Particle Size

Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulder
		Silt			Sand			Gravel			
		31.6			25.7			42.7		0.0	0.0

Sample Description	Dark brown slightly sandy gravelly clayey SILT.			Project No.	NMTL 3313
				BH/TP No.	BH09
Project	Emmet Road		GII Project ID-9897-08-20	Sample No.	B
Operator Tzr	Checked Nc	Approved Bc	Date sample tested 21/11/2020	Depth	0.50-0.80m

NM TL Ltd

NMTL Ltd

Determination of Particle Size Distribution

BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5

Sieve Size mm	% Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	93.8
37.500	76.8
28.000	71.6
20.000	68.0
14.000	65.6
10.000	62.4
6.300	58.9
5.000	57.5
3.350	55.0
2.000	52.1
1.180	48.9
0.600	45.2
0.425	43.4
0.300	41.4
0.212	39.4
0.150	37.5
0.063	32.1



Percentage Particle Size

Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulder
		Silt			Sand			Gravel			
		32.1			20.0			47.9		0.0	0.0

Sample Description	Brown slightly sandy gravelly silty CLAY.					Project No.	NMTL 3313
						BH/TP No.	BH09
Project	Emmet Road			GII Project ID-9897-08-20		Sample No.	B
Operator	Tzr	Checked	Nc	Approved	Bc	Date sample tested	21/11/2020	Depth	2.2-2.50m

NM TL Ltd

NMTL Ltd

Determination of Particle Size Distribution

BS 1377 : 1990 : Part 2 : Clauses 9.2 & 9.5

Sieve Size mm	% Passing
125.000	100.0
75.000	100.0
63.000	100.0
50.000	94.4
37.500	88.5
28.000	80.9
20.000	73.9
14.000	66.3
10.000	62.6
6.300	55.8
5.000	49.1
3.350	41.5
2.000	37.3
1.180	33.7
0.600	30.0
0.425	28.5
0.300	27.2
0.212	26.0
0.150	25.1
0.063	23.6



Percentage Particle Size

Clay	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	Cobbles	Boulder
		Silt			Sand			Gravel			
		23.6			13.8			62.7		0.0	0.0

Sample Description	Brown slightly sandy very gravelly silty CLAY.					Project No.	NMTL 3313
						BH/TP No.	BH11
Project	Emmet Road			GII Project ID-9897-08-20		Sample No.	B
Operator	Tzr	Checked	Nc	Approved	Bc	Date sample tested	20/11/2020	Depth	0.35-1.05m

NM TL Ltd

James Fisher Testing Services
Materials Laboratory, Unit D
Zone 5, Clonminam Business Park
Portlaoise, Co. Laois

James Fisher Testing Services

Laboratory Test Report
Point Load Strength Index

Project :	Emmet Road 9897-08-20	**Job Number**	N/A
Client :	Ground Investigations Ireland	**Lab Ref No**	ST 98288 D
	Catherinestown House, Hazelhatch Road	**Date Received**	11/11/2020
	Newcastle, Co. Dublin	**Date Tested**	20/11/2020
Originator	Conor Finnerty	**Date Reported**	23/11/2020

Point Load Strength Index

Sample No:-	Depth (m)	Description	Type	Orientation	W (mm)	D (mm)	P (kN)	De² (mm²)	De (mm)	I_s	F	$I_{s(50)}$MN/m²
BH09	4.20-4.30	2	D	⊥	180.0	102.0	29.00	10404	102.0	2.787	1.38	3.84
BH10	7.10-7.24	2	D	⊥	300.0	102.0	39.00	10404	102.0	3.749	1.38	5.17
BH10	8.30-8.63	2	D	⊥	400.0	102.0	38.00	10404	102.0	3.652	1.38	5.03
BH11	3.84-4.00	2	D	⊥	290.0	102.0	41.00	10404	102.0	3.941	1.38	5.43

Description 1 : Black Rock
Description 2 : Dark Grey Rock
Description 3 :

$I_{s(50)}$MN/m² for	Description 1	Description 2	Description 3
Min		3.84	
Mean		4.87	
Max		5.43	

Test
A = axial
D = diametrical

Relationship to planes of weakness
IL = irregular lump
II = parallel
⊥ = perpendicular

	$I_{s(50)}$MN/m²	U.C.S. MN/m²
Extremely Weak	<0.05	0.6-1.0
Very Weak	0.05-0.20	1.0-5.0
Weak	0.20-0.50	5.0-25.0
Medium Strong	0.50-2.00	25-50
Strong	2.00-4.50	50-100
Very Strong	4.50-9.00	100-250
Extremely Strong	9.00 +	>250

The stated result only relates to the item/location tested, this report shall not be reproduced except in full.

Approved Signature
James Fisher Testing Services Ireland

☐ **James Ward, Operations Manager**

James Fisher Testing Services

SUMMARY OF TEST RESULTS

		Initial			Initial	Final
Hall Effect Gauge length	mm	n/a	Bulk Density	Mg/m3	2.46	2.46
Specimen Length	mm	209.00	Dry Density	Mg/m3	2.32	2.32
Specimen Diameter	mm	101.97	Moisture	%	6.05	6.39
Area	mm2	8166.48	Saturation	%	98.34	103.80
Volume	cc	1706.79	Sg(Assumed)	2.70		
Initial Voids ratio	e	0.1661				

Saturation Stage

Test Stage	Cell Pressure (kPa)	Pore Pressure Parameter 'B' Base
0	0	0
1	50	0.20
2	100	0.50
3	150	0.89
4	200	0.94
5	300	0.96
6	390	0.98

Isotropic Consolidation Stage

		Stage 1
Cell Pressure	kPa	390
Pore Pressure	kPa	375.5
Back Pressure	kPa	300
Drainage Method		One End & Radial Boundary
t100 (min)		51.8
Coef. Of Consolidation Cv	m2/year	4.051
Coef. Of Compressibility Mv	m2/MN	0.103
Permeability k	m/sec	1.294E-10

		Stage 1
Deviator Stress (kPa)		1016.2
External Axial Strain (%)		11.72
Shear Stress (kPa)		508.1
Peak Stress Ratio		4.68
Pore Water Pressure (kPa)		-237.4
Radial Effective Stress (kPa)		327.4
Axial Effective Stress (kPa)		1343.6
Effective angle of friction (Degrees)		37.5
Cohesion c' (kPa)	Assumed	0
Rate of strain mm/min		0.0067
Sample Description		**Very Stiff dark grey slightly sandy slightly gravelly silty CLAY**
		Plastic Failure

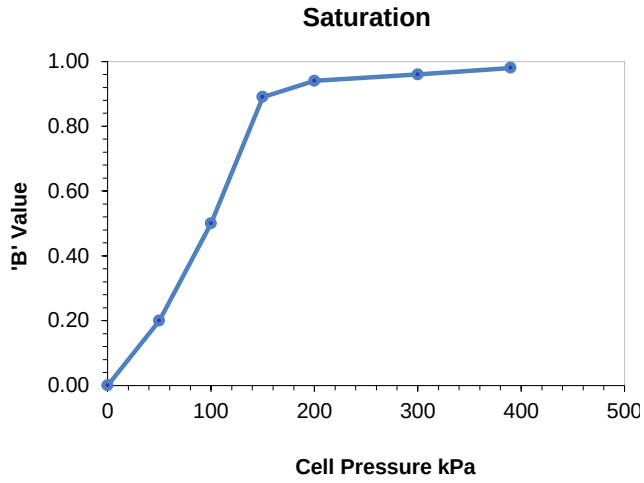
NM TL Ltd

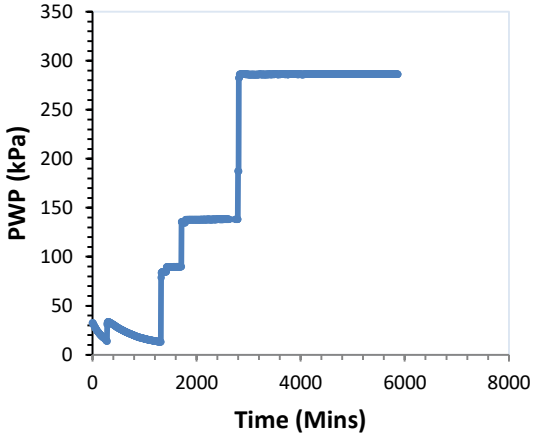
Consolidated Undrained SingleTriaxial test with PWP measurement.Testesd in accordance with BS:EN ISO 17892-9-2018

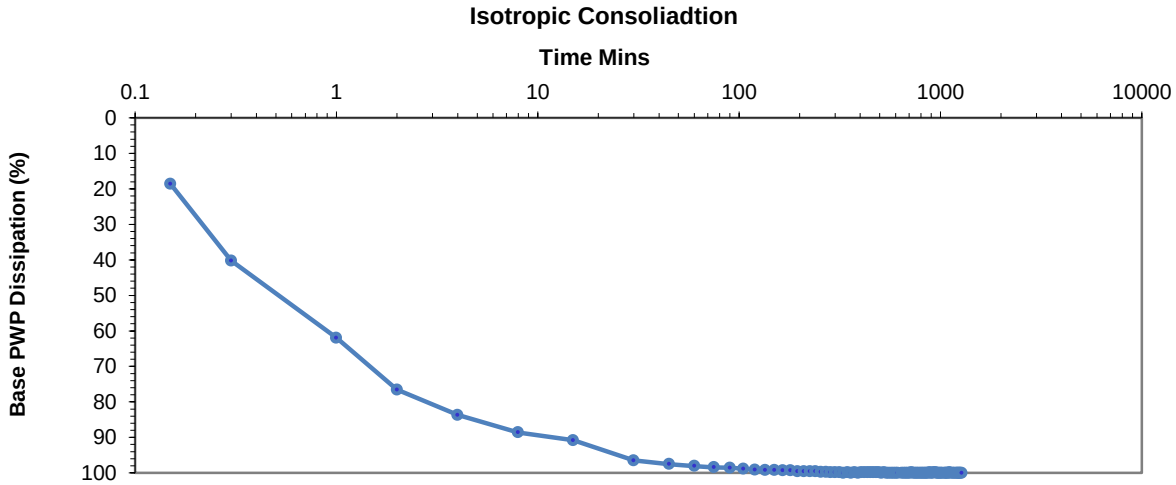
Project: Emmet Road

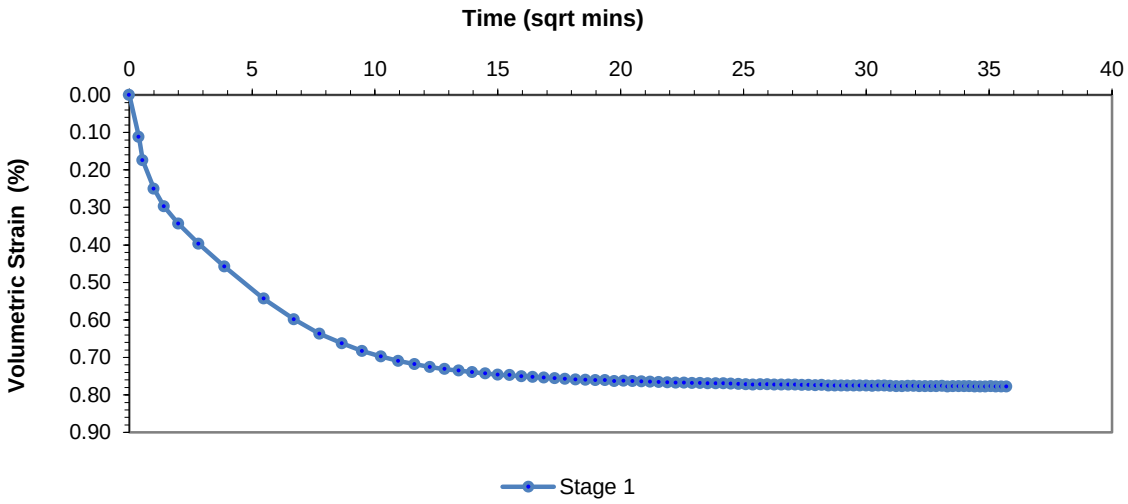
Project No.	NMTL-3313
Borehole No.	BH04
Sample No.	Core
Depth.	4.10-4.50m

30/11/2020



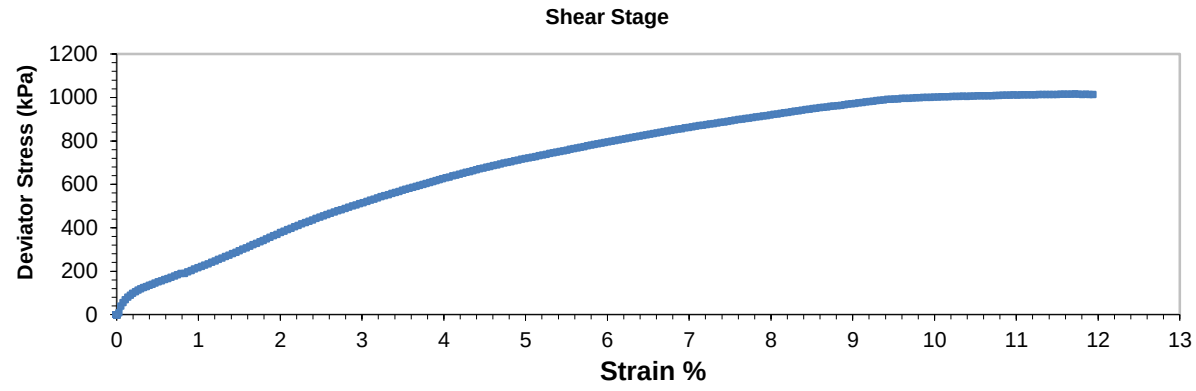


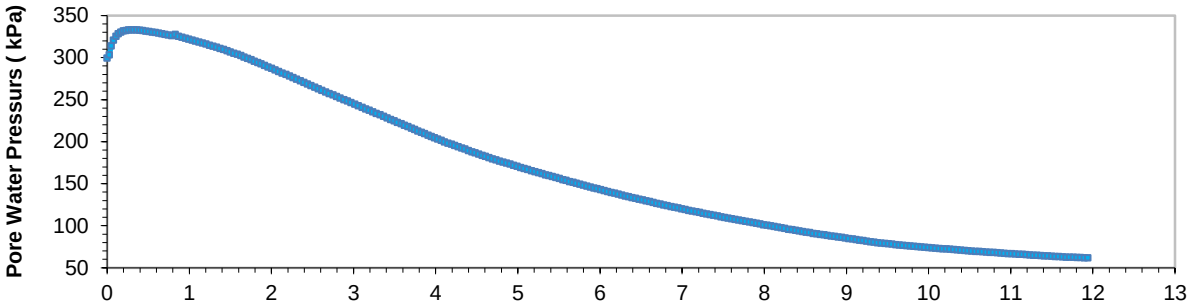


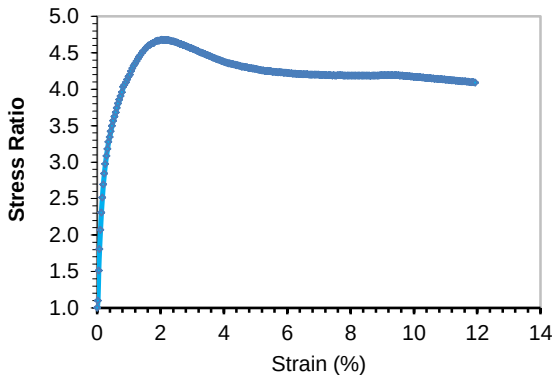


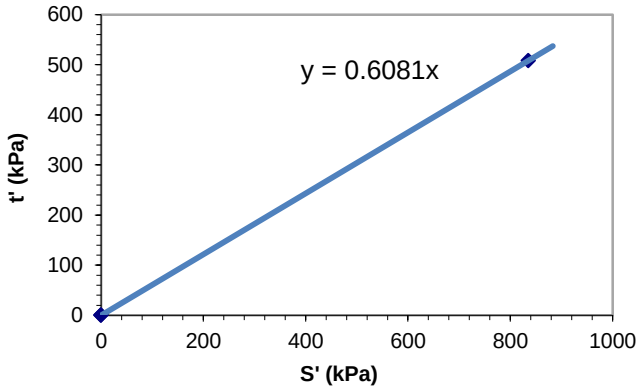
NM TL Ltd	**Consolidated Undrained SingleTriaxial test with PWP measurement.Testesd in accordance with BS:EN ISO 17892-9-2018**	Project No. NMTL-3313
		Borehole No BH04
	Project: Emmet Road	Sample No. Core
		Depth. 4.10-4.50m

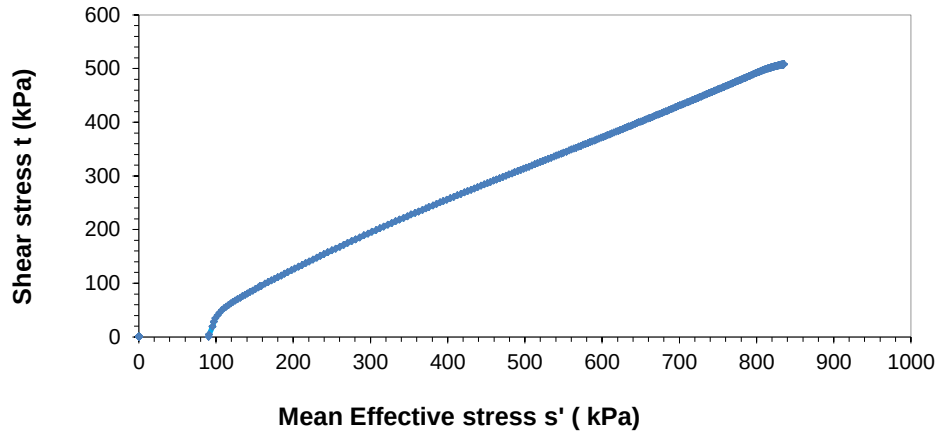
30/11/2020







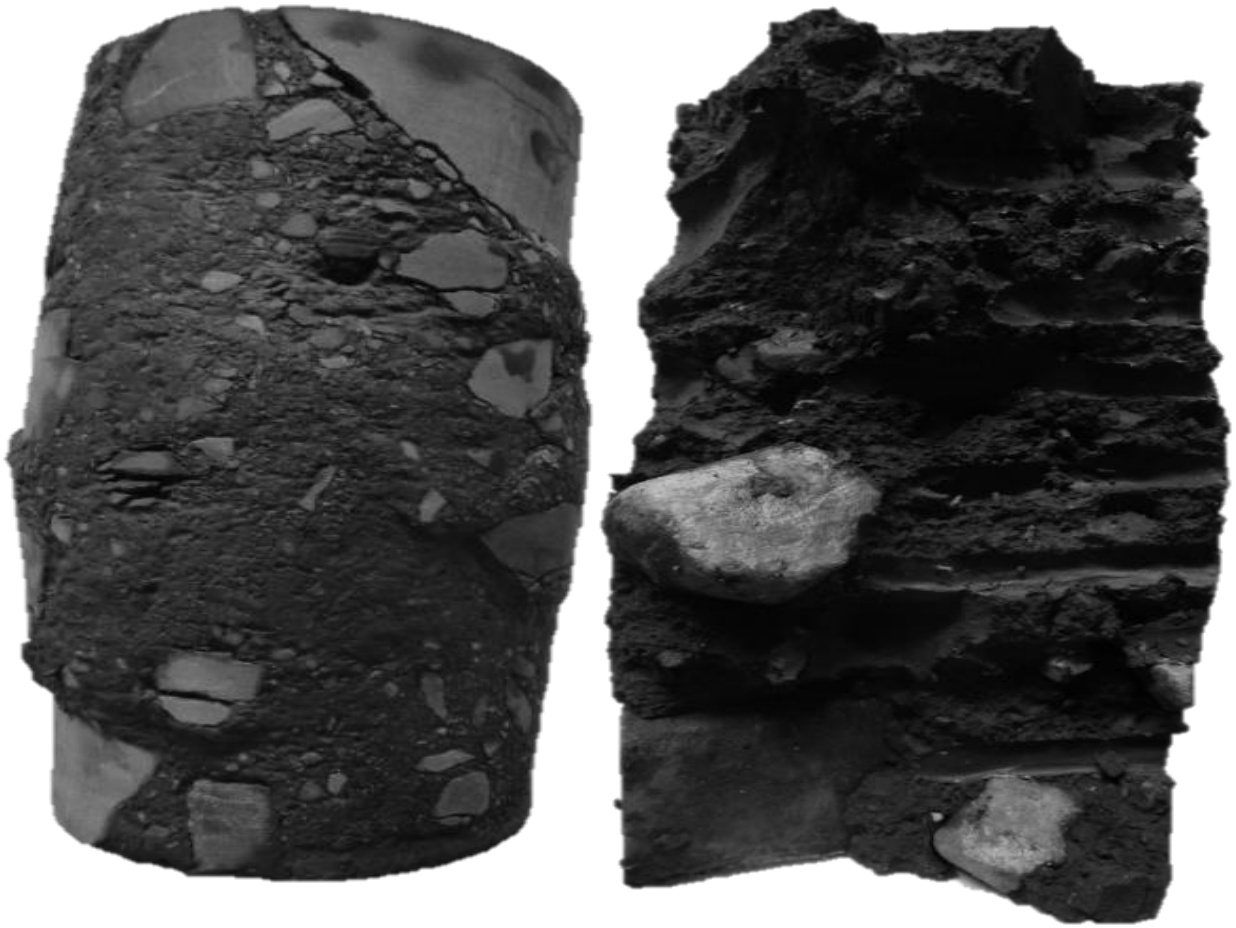




NM TL Ltd	**Consolidated Undrained SingleTriaxial test with PWP measurement.Testesd in accordance with BS:EN ISO 17892-9-2018**	Project No. NMTL-3313
		Borehole No. BH04
	Project: Emmet Road	Sample No. Core
		Depth. 4.10-4.50m

30/11/2020

SPECIMEN AFTER TEST



Soil Description **Very Stiff dark grey slightly sandy slightly gravelly silty CLAY**

NM TL Ltd	**Consolidated Undrained SingleTriaxial test with PWP measurement.Testesd in accordance with BS:EN ISO 17892-9-2018**	Project No.	NMTL-3313
		Borehole No.	BH04
	Project: Emmet Road	Sample No.	Core
		Depth.	4.10-4.50m

30/11/2020

National Materials Testing Laboratory Ltd
Unit 18C Tullow Industrial Estate
Tel.: 059 9180822

Certificate of Test

Determination of the Undrained Shear Strength in Triaxial Compression

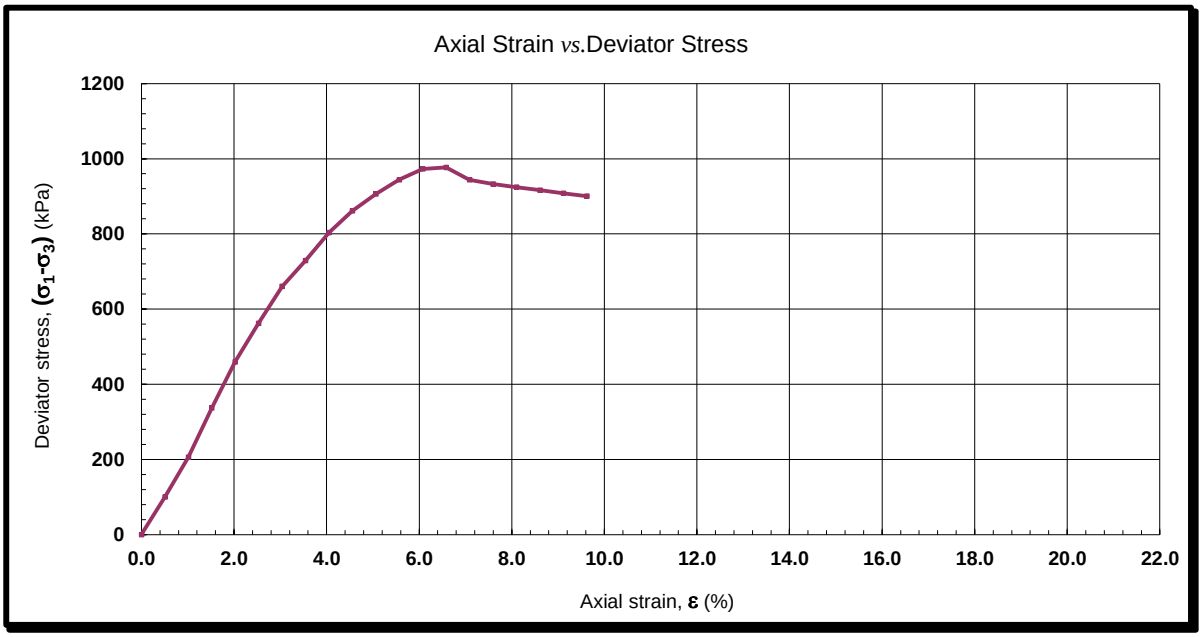
BS 1377 : Part 7 : 1990 Clause 8

Client Name:	**Ground Investigations Ireland Ltd**	Contract:	**Emmet Road**
Address:	**Catherinestown House Hazelhatch Newcastle, Co. Dublin**	Site Address:	**N/A**

Sample No.:	**BH02**	Depth:	**6.1-6.40m**	File Reference:	**NMTL 3313**

Sample Description:	**Extremely stiff dark grey slightly gravelly slightly sandy SILT/CLAY**		
Location:	**Emmet Road**	Date Sampled:	**N/A**
Sample Type:	**Core Sample**	Sampled by:	**Ground Investigations Ireland Ltd**
Client Sample Ref.:	**BH02-Core-6.1-6.40m**	Sampling Cert. Recd.:	**No**
Source / Supplier:	**GII**	Date Received:	**12 November 2020**
Specification:	**BS 1377: Part 7: 1990 Clause 8**	Date Tested:	**18 November 2020**

Specimen						**Test**		
Length:	**197.5**	mm	Diameter:	**101.7**	mm	Membrane type:	**Latex**	
Area:	**8116.4**	mm^2	Volume:	**1603.0**	cm^3	Membrane thickness:	**0.3**	mm
Mass:	**3645.0**	g				Membrane correction:	**0.92**	
Moisture content:	**9.0**	%				Sample state:	**Disturbed**	
Bulk density:	**2.27**	$Mg\ m^{-3}$				Number of stages:	**Single**	
Dry density:	**2.09**	$Mg\ m^{-3}$				Rate of strain:	**1.0**	$\%\ min^{-1}$
Preparation Method:	**BS 1377: Part 1: 1990 Clause 8 .3.1**					Cell pressure: σ_3	**130**	kPa



Maximum Corrected Deviator Stress at Failure:	$(\sigma_1-\sigma_3)_f$	**976.7**	**kPa**
Strain at Failure:	ε	**6.58**	**%**
Maximum Cohesion / Shear Strength:	C_u	**488.3**	**kPa**
Type of Failure:		**Brittle**	

Signed

For NMTL Ltd

Authorised Signatories
☐ N Chana
☐ B Chana

20 November 2020

Remarks: Specimen end trimmed with high speed Diamond cutting wheel

Original to: **Client Rep.**
Copy 1 to: **File copy**

National Materials Testing Laboratory Ltd
Unit 18C Tullow Industrial Estate
Tel.: 059 9180822

Certificate of Test

Determination of the Undrained Shear Strength in Triaxial Compression

BS 1377 : Part 7 : 1990 Clause 8

Client Name:	**Ground Investigations Ireland Ltd**	Contract:	**Emmet Road**
Address:	**Catherinestown House Hazelhatch Newcastle, Co. Dublin**	Site Address:	**N/A**

Sample No.:	**BH03**	Depth:	**2.50-2.80m**	File Reference:	**NMTL 3313**

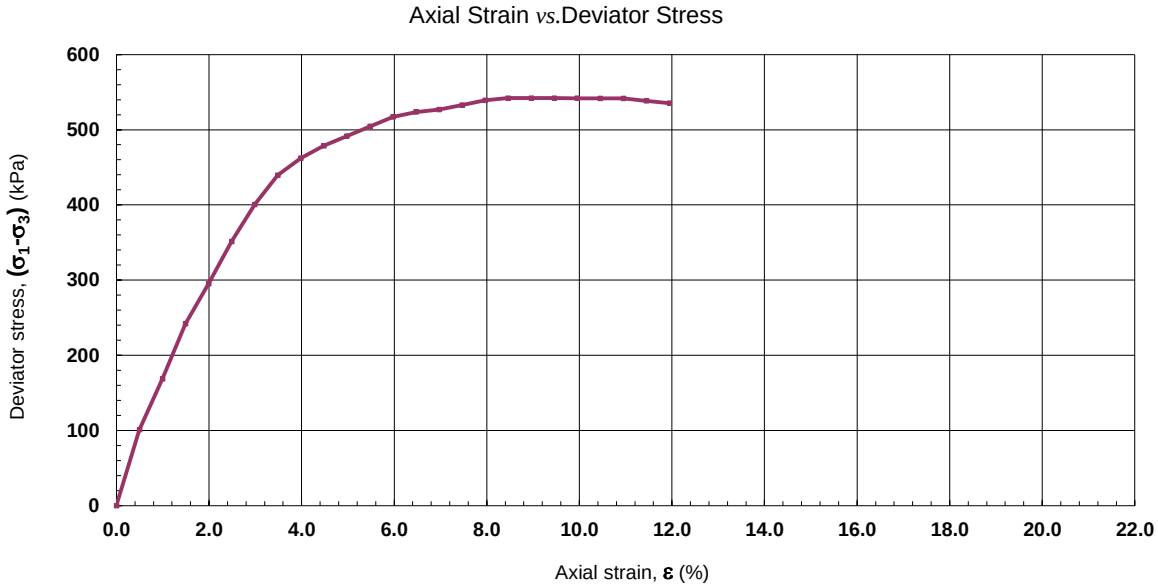
Sample Description:	**Very Stiff dark grey slightly gravelly slightly sandy SILT/CLAY**		
Location:	**Emmet Road**	Date Sampled:	**N/A**
Sample Type:	**Core Sample**	Sampled by:	**Ground Investigations Ireland Ltd**
Client Sample Ref.:	**BH03-Core-2.50-2.80m**	Sampling Cert. Recd.:	**No**
Source / Supplier:	**GII**	Date Received:	**12 November 2020**
Specification:	**BS 1377: Part 7: 1990 Clause 8**	Date Tested:	**18 November 2020**

Specimen

Length:	**200.9**	mm	Diameter:	**101.4**	mm
Area:	**8069.1**	mm^2	Volume:	**1621.1**	cm^3
Mass:	**3637.0**	g			
Moisture content:	**9.8**	%			
Bulk density:	**2.24**	Mg m^{-3}			
Dry density:	**2.04**	Mg m^{-3}			
Preparation Method:	**BS 1377: Part 1: 1990 Clause 8 .3.1**				

Test

Membrane type:	**Latex**	
Membrane thickness:	**0.3**	mm
Membrane correction:	**1.18**	
Sample state:	**Disturbed**	
Number of stages:	**Single**	
Rate of strain:	**1.0**	% min^{-1}
Cell pressure: σ_3	**56**	kPa



Maximum Corrected Deviator Stress at Failure:	$(\sigma_1-\sigma_3)_f$	**542.1**	**kPa**
Strain at Failure:	ε	**8.46**	**%**
Maximum Cohesion / Shear Strength:	C_u	**271.1**	**kPa**
Type of Failure:		**Brittle**	

Signed

For NMTL Ltd

Authorised Signatories
☐ N Chana
☐ B Chana

20 November 2020

Remarks: Specimen end trimmed with high speed Diamond cutting wheel

Original to: **Client Rep.**
Copy 1 to: **File copy**

National Materials Testing Laboratory Ltd
Unit 18C Tullow Industrial Estate
Tel.: 059 9180822

Certificate of Test

Determination of the Undrained Shear Strength in Triaxial Compression

BS 1377 : Part 7 : 1990 Clause 8

Client Name:	**Ground Investigations Ireland Ltd**	Contract:	**Emmet Road**
Address:	**Catherinestown House Hazelhatch Newcastle, Co. Dublin**	Site Address:	**N/A**

Sample No.:	**BH03**	Depth:	**4.1-4.50m**	File Reference:	**NMTL 3313**

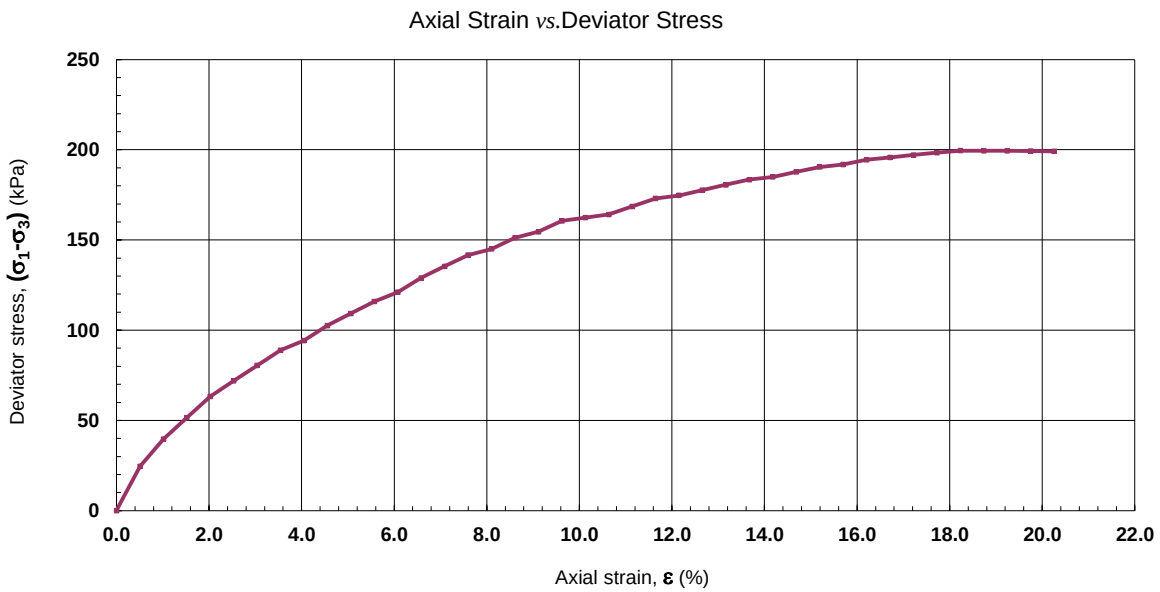
Sample Description:	**Firm to stiff dark grey slightly gravelly slightly sandy SILT/CLAY**		
Location:	**Emmet Road**	Date Sampled:	**N/A**
Sample Type:	**Core Sample**	Sampled by:	**Ground Investigations Ireland Ltd**
Client Sample Ref.:	**BH03-Core-4.10-4.50m**	Sampling Cert. Recd.:	**No**
Source / Supplier:	**GII**	Date Received:	**12 November 2020**
Specification:	**BS 1377: Part 7: 1990 Clause 8**	Date Tested:	**18 November 2020**

Specimen

Length:	**197.5**	mm	Diameter:	**104.4**	mm
Area:	**8565.0**	mm^2	Volume:	**1691.6**	cm^3
Mass:	**3922.0**	g			
Moisture content:	**11.6**	%			
Bulk density:	**2.32**	Mg m^{-3}			
Dry density:	**2.08**	Mg m^{-3}			
Preparation Method:	**BS 1377: Part 1: 1990 Clause 8 .3.1**				

Test

Membrane type:	**Latex**	
Membrane thickness:	**0.3**	mm
Membrane correction:	**2.55**	
Sample state:	**Disturbed**	
Number of stages:	**Single**	
Rate of strain:	**1.0**	% min^{-1}
Cell pressure: σ_3	**90**	kPa



Maximum Corrected Deviator Stress at Failure:	$(\sigma_1-\sigma_3)_f$	**199.5**	**kPa**
Strain at Failure:	ε	**18.23**	**%**
Maximum Cohesion / Shear Strength:	C_u	**99.8**	**kPa**
Type of Failure:		**Plastic**	

Signed

For NMTL Ltd

Authorised Signatories
☐ N Chana
☐ B Chana

20 November 2020

Remarks: Specimen end trimmed with high speed Diamond cutting wheel

Original to: **Client Rep.**
Copy 1 to: **File copy**

National Materials Testing Laboratory Ltd
Unit 18C Tullow Industrial Estate
Tel.: 059 9180822

Certificate of Test

Determination of the Undrained Shear Strength in Triaxial Compression

BS 1377 : Part 7 : 1990 Clause 8

Client Name:	**Ground Investigations Ireland Ltd**	Contract:	**Emmet Road**
Address:	**Catherinestown House Hazelhatch Newcastle, Co. Dublin**	Site Address:	**N/A**

Sample No.:	**BH05**	Depth:	**2.6-3.0m**	File Reference:	**NMTL 3313**

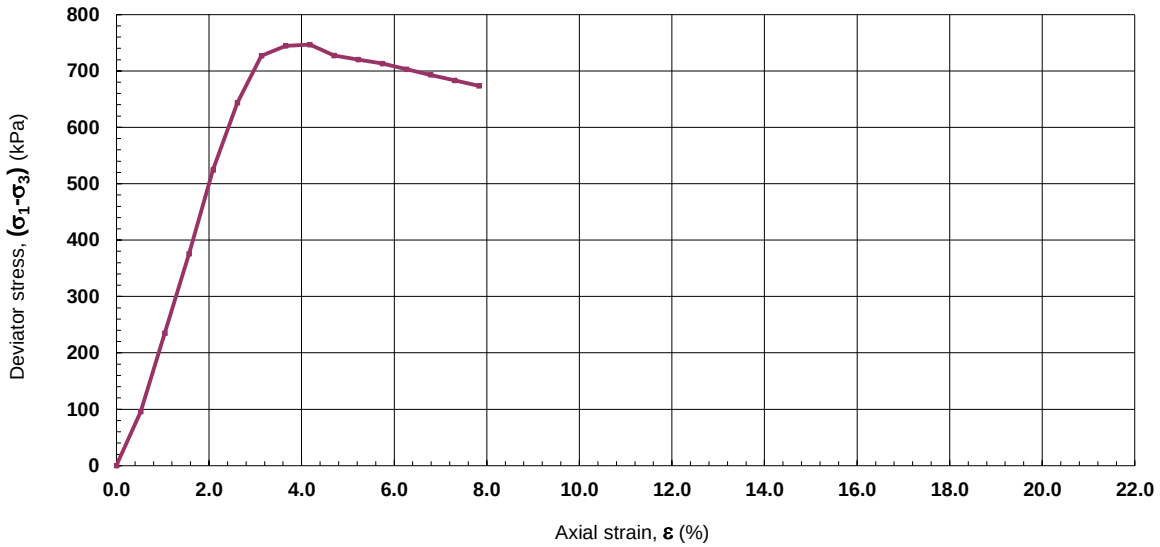
Sample Description:	**Very stiff dark grey slightly gravelly slightly sandy SILT/CLAY**		
Location:	**Emmet Road**	Date Sampled:	**N/A**
Sample Type:	**Core Sample**	Sampled by:	**Ground Investigations Ireland Ltd**
Client Sample Ref.:	**BH05-Core-2.6-3.0m**	Sampling Cert. Recd.:	**No**
Source / Supplier:	**GII**	Date Received:	**12 November 2020**
Specification:	**BS 1377: Part 7: 1990 Clause 8**	Date Tested:	**18 November 2020**

Specimen

Length:	**191.5**	mm	Diameter:	**102.5**	mm
Area:	**8244.9**	mm^2	Volume:	**1578.9**	cm^3
Mass:	**3656.9**	g			
Moisture content:	**9.5**	%			
Bulk density:	**2.32**	Mg m^{-3}			
Dry density:	**2.11**	Mg m^{-3}			
Preparation Method:	**BS 1377: Part 1: 1990 Clause 8 .3.1**				

Test

Membrane type:	**Latex**	
Membrane thickness:	**0.3**	mm
Membrane correction:	**0.58**	
Sample state:	**Disturbed**	
Number of stages:	**Single**	
Rate of strain:	**1.0**	% min^{-1}
Cell pressure: σ_3	**60**	kPa



Maximum Corrected Deviator Stress at Failure:	$(\sigma_1-\sigma_3)_f$	**746.7**	**kPa**
Strain at Failure:	ε	**4.18**	**%**
Maximum Cohesion / Shear Strength:	C_u	**373.3**	**kPa**
Type of Failure:		**Brittle**	

Signed

For NMTL Ltd

Authorised Signatories
☐ N Chana
☐ B Chana

20 November 2020

Remarks: Specimen end trimmed with high speed Diamond cutting wheel

Original to: **Client Rep.**
Copy 1 to: **File copy**

National Materials Testing Laboratory Ltd
Unit 18C Tullow Industrial Estate
Tel.: 059 9180822

Certificate of Test

Determination of the Undrained Shear Strength in Triaxial Compression

BS 1377 : Part 7 : 1990 Clause 8

Client Name:	**Ground Investigations Ireland Ltd**	Contract:	**Emmet Road**
Address:	**Catherinestown House Hazelhatch Newcastle, Co. Dublin**	Site Address:	**N/A**

Sample No.:	**BH07**	Depth:	**5.8-6.25**	File Reference:	**NMTL 3313**

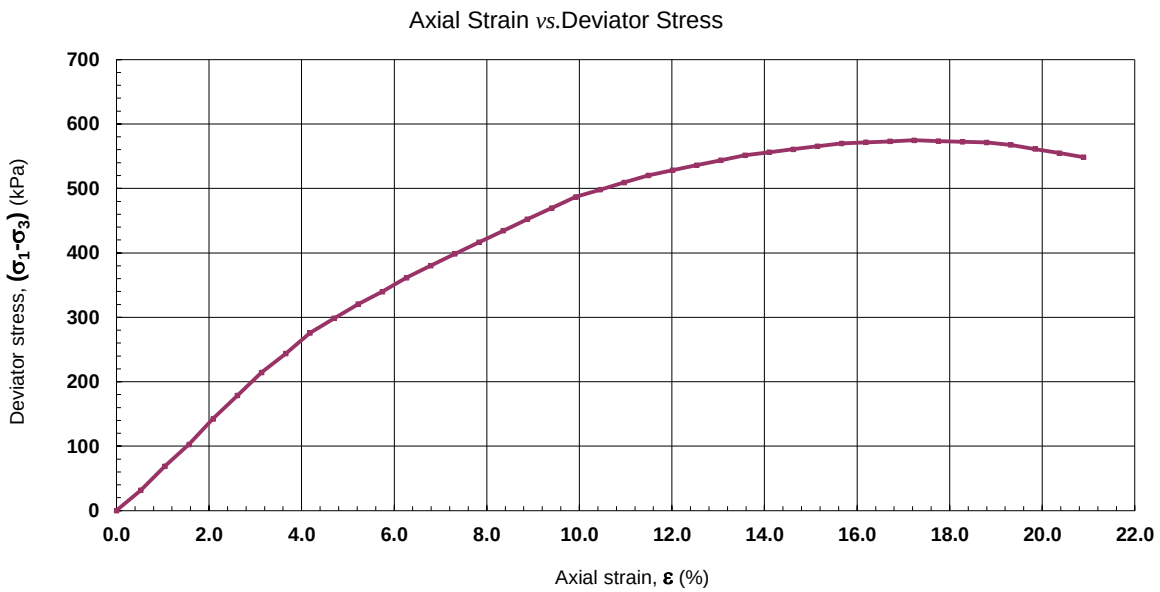
Sample Description:	**Very stiff dark grey slightly gravelly slightly sandy SILT/CLAY**		
Location:	**Emmet Road**	Date Sampled:	**N/A**
Sample Type:	**Core Sample**	Sampled by:	**Ground Investigations Ireland Ltd**
Client Sample Ref.:	**BH07-Core-5.8-6.25m**	Sampling Cert. Recd.:	**No**
Source / Supplier:	**GII**	Date Received:	**12 November 2020**
Specification:	**BS 1377: Part 7: 1990 Clause 8**	Date Tested:	**18 November 2020**

Specimen

Length:	**191.5**	mm	Diameter:	**103.1**	mm
Area:	**8349.0**	mm^2	Volume:	**1598.8**	cm^3
Mass:	**3875.0**	g			
Moisture content:	**9.8**	%			
Bulk density:	**2.42**	Mg m^{-3}			
Dry density:	**2.21**	Mg m^{-3}			
Preparation Method:	**BS 1377: Part 1: 1990 Clause 8 .3.1**				

Test

Membrane type:	**Latex**	
Membrane thickness:	**0.3**	mm
Membrane correction:	**2.41**	
Sample state:	**Disturbed**	
Number of stages:	**Single**	
Rate of strain:	**1.0**	% min^{-1}
Cell pressure: σ_3	**120**	kPa



Maximum Corrected Deviator Stress at Failure:	$(\sigma_1-\sigma_3)_f$	**574.7**	**kPa**
Strain at Failure:	ε	**17.23**	**%**
Maximum Cohesion / Shear Strength:	C_u	**287.3**	**kPa**
Type of Failure:		**Compound**	

Signed

For NMTL Ltd

Authorised Signatories
☐ N Chana
☐ B Chana

20 November 2020

Remarks: Specimen end trimmed with high speed Diamond cutting wheel

Original to: **Client Rep.**
Copy 1 to: **File copy**

James Fisher Testing Services
Materials Laboratory, Unit D
Zone 5, Clonminam Business Park
Portlaoise, Co. Laois

James Fisher Testing Services

Laboratory Test Report
Point Load Strength Index

Project :	Emmet Road 9897-08-20	**Job Number**	N/A
Client :	Ground Investigations Ireland	**Lab Ref No**	ST 98288 A
	Catherinestown House, Hazelhatch Road	**Date Received**	11/11/2020
	Newcastle, Co. Dublin	**Date Tested**	20/11/2020
Originator	Conor Finnerty	**Date Reported**	23/11/2020

Point Load Strength Index

Sample No:-	Depth (m)	Description	Type	Orientation	W (mm)	D (mm)	P (kN)	De² (mm²)	De (mm)	I_s	F	$I_{s(50)}$MN/m²
BH02	12.55-12.65	1	D	⊥	100.0	102.0	3.80	10404	102.0	0.365	1.38	0.50
BH02	14.22-14.50	1	D	⊥	302.0	102.0	36.00	10404	102.0	3.460	1.38	4.77
BH03	10.00-10.35	2	D	⊥	400.0	102.2	42.00	10445	102.2	4.021	1.38	5.55
BH03	12.51-12.70	2	D	⊥	235.0	102.0	25.00	10404	102.0	2.403	1.38	3.31

Description 1 : Black Rock
Description 2 : Dark Grey Rock
Description 3 :

$I_{s(50)}$MN/m² for	Description 1	Description 2	Description 3
Min	0.50	3.31	
Mean	2.64	4.43	
Max	4.77	5.55	

Test
A = axial
D = diametrical

Relationship to planes of weakness
IL = irregular lump
II = parallel
⊥ = perpendicular

	$I_{s(50)}$MN/m²	U.C.S. MN/m²
Extremely Weak	<0.05	0.6-1.0
Very Weak	0.05-0.20	1.0-5.0
Weak	0.20-0.50	5.0-25.0
Medium Strong	0.50-2.00	25-50
Strong	2.00-4.50	50-100
Very Strong	4.50-9.00	100-250
Extremely Strong	9.00 +	>250

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Approved Signature
James Fisher Testing Services Ireland

☐ **James Ward, Operations Manager**

James Fisher Testing Services

James Fisher Testing Services
Materials Laboratory, Unit D
Zone 5, Clonminam Business Park
Portlaoise, Co. Laois

James Fisher Testing Services

Laboratory Test Report
Point Load Strength Index

Project :	Emmet Road 9897-08-20	**Job Number**	N/A
Client :	Ground Investigations Ireland	**Lab Ref No**	ST 98288 B
	Catherinestown House, Hazelhatch Road	**Date Received**	11/11/2020
	Newcastle, Co. Dublin	**Date Tested**	20/11/2020
Originator	Conor Finnerty	**Date Reported**	23/11/2020

Point Load Strength Index

Sample No:-	Depth (m)	Description	Type	Orientation	W (mm)	D (mm)	P (kN)	De² (mm²)	De (mm)	I_s	F	$I_{s(50)}$MN/m²
BH04	12.65-12.90	2	D	⊥	280.0	102.0	13.00	10404	102.0	1.250	1.38	1.72
BH04	14.36-14.50	2	D	⊥	180.0	102.0	37.00	10404	102.0	3.556	1.38	4.90
BH05	8.50-8.77	2	D	⊥	295.0	102.0	33.00	10404	102.0	3.172	1.38	4.37
BH05	11.30-11.55	2	D	⊥	203.0	102.0	29.00	10404	102.0	2.787	1.38	3.84

Description 1 : Black Rock
Description 2 : Dark Grey Rock
Description 3 :

$I_{s(50)}$MN/m² for	Description 1	Description 2	Description 3
Min		1.72	
Mean		3.71	
Max		4.90	

Test
A = axial
D = diametrical

Relationship to planes of weakness
IL = irregular lump
II = parallel
⊥ = perpendicular

	$I_{s(50)}$MN/m²	U.C.S. MN/m²
Extremely Weak	<0.05	0.6-1.0
Very Weak	0.05-0.20	1.0-5.0
Weak	0.20-0.50	5.0-25.0
Medium Strong	0.50-2.00	25-50
Strong	2.00-4.50	50-100
Very Strong	4.50-9.00	100-250
Extremely Strong	9.00 +	>250

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James Fisher Testing Services

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Materials Laboratory, Unit D
Zone 5, Clonminam Business Park
Portlaoise, Co. Laois

James Fisher Testing Services

Laboratory Test Report
Point Load Strength Index

Project :	Emmet Road 9897-08-20	**Job Number**	N/A
Client :	Ground Investigations Ireland	**Lab Ref No**	ST 98288 C
	Catherinestown House, Hazelhatch Road	**Date Received**	11/11/2020
	Newcastle, Co. Dublin	**Date Tested**	20/11/2020
Originator	Conor Finnerty	**Date Reported**	23/11/2020

Point Load Strength Index

Sample No:-	Depth (m)	Description	Type	Orientation	W (mm)	D (mm)	P (kN)	De² (mm²)	De (mm)	I_s	F	$I_{s(50)}$MN/m²
BH06	7.25-7.46	2	D	⊥	285.0	102.0	27.00	10404	102.0	2.595	1.38	3.58
BH06	10.86-11.00	2	D	⊥	215.0	102.0	26.00	10404	102.0	2.499	1.38	3.44
BH07	10.00-10.22	2	D	⊥	255.0	102.0	20.00	10404	102.0	1.922	1.38	2.65
BH08	5.30-5.45	2	D	⊥	250.0	102.0	28.00	10404	102.0	2.691	1.38	3.71

Description 1 : Black Rock
Description 2 : Dark Grey Rock
Description 3 :

$I_{s(50)}$MN/m² for	Description 1	Description 2	Description 3
Min		2.65	
Mean		3.35	
Max		3.71	

Test
A = axial
D = diametrical

Relationship to planes of weakness
IL = irregular lump
II = parallel
⊥ = perpendicular

	$I_{s(50)}$MN/m²	U.C.S. MN/m²
Extremely Weak	<0.05	0.6-1.0
Very Weak	0.05-0.20	1.0-5.0
Weak	0.20-0.50	5.0-25.0
Medium Strong	0.50-2.00	25-50
Strong	2.00-4.50	50-100
Very Strong	4.50-9.00	100-250
Extremely Strong	9.00 +	>250

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James Fisher Testing Services

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Materials Laboratory, Unit D
Zone 5, Clonminam Business Park
Portlaoise, Co. Laois

James Fisher Testing Services

Laboratory Test Report
Point Load Strength Index

Project :	Emmet Road 9897-08-20	**Job Number**	N/A
Client :	Ground Investigations Ireland	**Lab Ref No**	ST 98288 E
	Catherinestown House, Hazelhatch Road	**Date Received**	11/11/2020
	Newcastle, Co. Dublin	**Date Tested**	20/11/2020
Originator	Conor Finnerty	**Date Reported**	23/11/2020

Point Load Strength Index

Sample No:-	Depth (m)	Description	Type	Orientation	W (mm)	D (mm)	P (kN)	De² (mm²)	De (mm)	I_s	F	$I_{s(50)}$MN/m²
BH11	4.86-5.10	2	D	⊥	310.0	102.0	47.00	10404	102.0	4.517	1.38	6.23
BH12	4.35-4.52	2	D	⊥	180.0	102.0	8.00	10404	102.0	0.769	1.38	1.06
BH12	6.43-6.55	2	D	⊥	130.0	102.0	5.00	10404	102.0	0.481	1.38	0.66

Description 1 : Black Rock
Description 2 : Dark Grey Rock
Description 3 :

$I_{s(50)}$MN/m² for	Description 1	Description 2	Description 3
Min		0.66	
Mean		2.65	
Max		6.23	

Test
A = axial
D = diametrical

Relationship to planes of weakness
IL = irregular lump
II = parallel
⊥ = perpendicular

	$I_{s(50)}$MN/m²	U.C.S. MN/m²
Extremely Weak	<0.05	0.6-1.0
Very Weak	0.05-0.20	1.0-5.0
Weak	0.20-0.50	5.0-25.0
Medium Strong	0.50-2.00	25-50
Strong	2.00-4.50	50-100
Very Strong	4.50-9.00	100-250
Extremely Strong	9.00 +	>250

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Approved Signature
James Fisher Testing Services Ireland

☐ **James Ward, Operations Manager**

James Fisher Testing Services

James Fisher Testing Services
Materials Laboratory, Unit D
Zone 5, Clonminam Business Park
Portlaoise, Co. Laois

James Fisher Testing Services

Laboratory Test Report
Point Load Strength Index

Project :	Emmet Road 9897-08-20	**Job Number**	N/A
Client :	Ground Investigations Ireland	**Lab Ref No**	ST 98288 F
	Catherinestown House, Hazelhatch Road	**Date Received**	11/11/2020
	Newcastle, Co. Dublin	**Date Tested**	20/11/2020
Originator	Conor Finnerty	**Date Reported**	23/11/2020

Point Load Strength Index

Sample No:-	Depth (m)	Description	Type	Orientation	W (mm)	D (mm)	P (kN)	De² (mm²)	De (mm)	I_s	F	$I_{s(50)}$MN/m²
BH13	4.25-4.45	2	D	⊥	340.0	102.0	37.00	10404	102.0	3.556	1.38	4.90
BH13	5.16-5.35	2	D	⊥	230.0	102.0	27.00	10404	102.0	2.595	1.38	3.58

Description 1 : Black Rock
Description 2 : Dark Grey Rock
Description 3 :

$I_{s(50)}$MN/m² for	Description 1	Description 2	Description 3
Min		3.58	
Mean		4.24	
Max		4.90	

Test
A = axial
D = diametrical

Relationship to planes of weakness
IL = irregular lump
II = parallel
⊥ = perpendicular

	$I_{s(50)}$MN/m²	U.C.S. MN/m²
Extremely Weak	<0.05	0.6-1.0
Very Weak	0.05-0.20	1.0-5.0
Weak	0.20-0.50	5.0-25.0
Medium Strong	0.50-2.00	25-50
Strong	2.00-4.50	50-100
Very Strong	4.50-9.00	100-250
Extremely Strong	9.00 +	>250

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Approved Signature
James Fisher Testing Services Ireland

☐ **James Ward, Operations Manager**

James Fisher Testing Services

James Fisher Testing Services Ltd
Materials Laboratory, Unit D
Zone 5, Clonminam Business Park
Portlaoise, Co. Laois

James Fisher Testing Services

Laboratory Test Report
Uniaxial Compressive Strength

Project:	Emmet Road	**Job Number**	9897-08-20
Client:	Ground Investigations Ireland	**Lab Ref No**	ST 98289
	Catherinestown House, Hazelhatch Road	**Date Received**	11/11/2020
	Newcastle. Co. Dublin	**Date Tested**	26/11/2020
Originator:	Conor Finnerty	**Date Reported**	27/11/2020

Sample Reference	Moisture Content	Density (Mg/m^3)	Uniaxial Compressive Strength (N/mm^2)
BH09 5.50 -5.80m	0.2	2695	30.5
BH10 7.24 -7.67m	0.3	2663	38.1

The stated result only relates to the item/location tested, this report shall not be reproduced except in full.

Approved Signature
James Fisher Testing Services Ireland
☐ James Ward, Operations Manager

A part of James Fisher and Sons plc Marine Services Worldwide

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Ground Investigations Ireland
Catherinestown House
Hazelhatch Road
Newcastle
Co. Dublin
Ireland

Attention :	Diarmaid MagLochlainn
Date :	26th November, 2020
Your reference :	9897-08-20
Our reference :	Test Report 20/14656 Batch 1
Location :	Emmet Road
Date samples received :	23rd October, 2020
Status :	Final report
Issue :	2

Sixteen samples were received for analysis on 23rd October, 2020 of which sixteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Phil Sommerton BSc
Senior Project Manager

Please include all sections of this report if it is reproduced

Element Materials Technology
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Ground Investigations Ireland
Catherinestown House
Hazelhatch Road
Newcastle
Co. Dublin
Ireland

Attention :	Conor Finnerty
Date :	16th November, 2020
Your reference :	9897-08-20
Our reference :	Test Report 20/14172 Batch 1
Location :	Emmet Road
Date samples received :	15th October, 2020
Status :	Final report
Issue :	2

Two samples were received for analysis on 15th October, 2020 of which two were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

Bruce Leslie
Project Manager

Please include all sections of this report if it is reproduced

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Conor Finnerty
EMT Job No: 20/14172

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-3	4-6									LOD/LOR	Units	Method No.
Sample ID	BH03	BH03											
Depth	0.80-1.00	3.00-3.40											
COC No / misc													
Containers	V J T	V J T											
Sample Date	09/10/2020	09/10/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	15/10/2020	15/10/2020											
Antimony	<1	2									<1	mg/kg	TM30/PM15
Arsenic #	5.8	11.8									<0.5	mg/kg	TM30/PM15
Barium #	27	40									<1	mg/kg	TM30/PM15
Cadmium #	0.7	1.9									<0.1	mg/kg	TM30/PM15
Chromium #	44.4	43.5									<0.5	mg/kg	TM30/PM15
Copper #	13	31									<1	mg/kg	TM30/PM15
Lead #	20	16									<5	mg/kg	TM30/PM15
Mercury #	<0.1	<0.1									<0.1	mg/kg	TM30/PM15
Molybdenum #	3.8	5.9									<0.1	mg/kg	TM30/PM15
Nickel #	15.7	39.3									<0.7	mg/kg	TM30/PM15
Selenium #	<1	3									<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	671	2996									<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.4	0.4									<0.1	mg/kg	TM74/PM32
Zinc #	38	73									<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03									<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05									<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	0.08									<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	<0.03									<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	<0.03									<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06									<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	0.04									<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	<0.07									<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
Coronene	<0.04	<0.04									<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	<0.22									<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	<0.64									<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	<0.05									<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	<0.02									<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	<1									<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	90	83									<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_Total)	<30	<30									<30	mg/kg	TM5/PM8/PM16

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Conor Finnerty
EMT Job No: 20/14172

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6									LOD/LOR	Units	Method No.
Sample ID	BH03	BH03											
Depth	0.80-1.00	3.00-3.40											
COC No / misc													
Containers	V J T	V J T											
Sample Date	09/10/2020	09/10/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	15/10/2020	15/10/2020											
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL) #	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL) #	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_1D_AL) #	<0.2	<0.2									<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_1D_AL) #	<4	<4									<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_1D_AL) #	<7	<7									<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_1D_AL) #	<7	<7									<7	mg/kg	TM5/PM8/PM16
>C35-C40 (EH_1D_AL)	<7	<7									<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40 (EH+HS_1D_AL)	<26	<26									<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10 (HS_1D_AL)	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>C10-C25 (EH_1D_AL)	<10	<10									<10	mg/kg	TM5/PM8/PM16
>C25-C35 (EH_1D_AL)	<10	<10									<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 (HS_1D_AR) #	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR) #	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR) #	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_1D_AR) #	<0.2	<0.2									<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_1D_AR) #	<4	<4									<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_1D_AR) #	<7	<7									<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_1D_AR) #	<7	<7									<7	mg/kg	TM5/PM8/PM16
>EC35-EC40 (EH_1D_AR)	<7	<7									<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40 (EH+HS_1D_AR)	<26	<26									<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40) (EH+HS_CU_1D_Total)	<52	<52									<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 (HS_1D_AR) #	<0.1	<0.1 SV									<0.1	mg/kg	TM36/PM12
>EC10-EC25 (EH_1D_AR)	<10	<10									<10	mg/kg	TM5/PM8/PM16
>EC25-EC35 (EH_1D_AR)	<10	<10									<10	mg/kg	TM5/PM8/PM16
MTBE #	<5	<5 SV									<5	ug/kg	TM36/PM12
Benzene #	<5	<5 SV									<5	ug/kg	TM36/PM12
Toluene #	<5	<5 SV									<5	ug/kg	TM36/PM12
Ethylbenzene #	<5	<5 SV									<5	ug/kg	TM36/PM12
m/p-Xylene #	<5	<5 SV									<5	ug/kg	TM36/PM12
o-Xylene #	<5	<5 SV									<5	ug/kg	TM36/PM12
PCB 28 #	<5	<5									<5	ug/kg	TM17/PM8
PCB 52 #	<5	<5									<5	ug/kg	TM17/PM8
PCB 101 #	<5	<5									<5	ug/kg	TM17/PM8
PCB 118 #	<5	<5									<5	ug/kg	TM17/PM8
PCB 138 #	<5	<5									<5	ug/kg	TM17/PM8
PCB 153 #	<5	<5									<5	ug/kg	TM17/PM8
PCB 180 #	<5	<5									<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	<35									<35	ug/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Conor Finnerty
EMT Job No: 20/14172

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-3	4-6									LOD/LOR	Units	Method No.
Sample ID	BH03	BH03											
Depth	0.80-1.00	3.00-3.40											
COC No / misc													
Containers	V J T	V J T											
Sample Date	09/10/2020	09/10/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	15/10/2020	15/10/2020											
Phenol #	<0.01	<0.01									<0.01	mg/kg	TM26/PM21B
Natural Moisture Content	11.1	9.0									<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	10.0	8.2									<0.1	%	PM4/PM0
Hexavalent Chromium #	<0.3	<0.3									<0.3	mg/kg	TM38/PM20
Chromium III	44.4	43.5									<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	<0.5									<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.55	0.79									<0.02	%	TM21/PM24
Sulphide	<10	<10									<10	mg/kg	TM107/PM45
Elemental Sulphur	<1	5									<1	mg/kg	TM108/PM114
Loss on Ignition #	1.5	2.2									<1.0	%	TM22/PM0
pH #	8.09	8.09									<0.01	pH units	TM73/PM11
Mass of raw test portion	0.1095	0.0993										kg	NONE/PM17
Mass of dried test portion	0.09	0.09										kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Conor Finnerty
EMT Job No: 20/14172

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-3	4-6									LOD/LOR	Units	Method No.
Sample ID	BH03	BH03											
Depth	0.80-1.00	3.00-3.40											
COC No / misc													
Containers	V J T	V J T											
Sample Date	09/10/2020	09/10/2020											
Sample Type	Soil	Soil											
Batch Number	1	1											
Date of Receipt	15/10/2020	15/10/2020											
Dissolved Antimony #	<0.002	<0.002									<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	<0.02	<0.02									<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025									<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025									<0.025	mg/kg	TM30/PM17
Dissolved Barium #	<0.003	0.016									<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	<0.03	0.16									<0.03	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005									<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005									<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015									<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015									<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007									<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07									<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005									<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05									<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.011	0.023									<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.11	0.23									<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002									<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02									<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	0.021	0.023									<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	0.21	0.23									<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	0.003	<0.003									<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	0.03	<0.03									<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	<0.00001	0.00005									<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	<0.0001	0.0005									<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01									<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1									<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3									<0.3	mg/l	TM173/PM0
Fluoride	<3	<3									<3	mg/kg	TM173/PM0
Sulphate as SO4 #	1.3	37.7									<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	13	377									<5	mg/kg	TM38/PM0
Chloride #	0.4	13.0									<0.3	mg/l	TM38/PM0
Chloride #	4	130									<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.03	0.06									<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.3	0.6									<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	4	3									<2	mg/l	TM60/PM0
Dissolved Organic Carbon	40	30									<20	mg/kg	TM60/PM0
pH	9.00	7.89									<0.01	pH units	TM73/PM0
Total Dissolved Solids #	62	116									<35	mg/l	TM20/PM0
Total Dissolved Solids #	620	1160									<350	mg/kg	TM20/PM0

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Conor Finnerty
EMT Job No: 20/14172

Report : EN12457_2

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	1-3	4-6														
Sample ID	BH03	BH03														
Depth	0.80-1.00	3.00-3.40														
COC No / misc																
Containers	V J T	V J T														
Sample Date	09/10/2020	09/10/2020														
Sample Type	Soil	Soil														
Batch Number	1	1														
Date of Receipt	15/10/2020	15/10/2020														
												Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.
Solid Waste Analysis																	
Total Organic Carbon #	0.55	0.79										3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	<0.025	<0.025 [SV]										6	-	-	<0.025	mg/kg	TM36/PM12
Sum of 7 PCBs #	<0.035	<0.035										1	-	-	<0.035	mg/kg	TM17/PM8
Mineral Oil	<30	<30										500	-	-	<30	mg/kg	TM5/PM8/PM16
PAH Sum of 6 #	<0.22	<0.22										-	-	-	<0.22	mg/kg	TM4/PM8
PAH Sum of 17	<0.64	<0.64										100	-	-	<0.64	mg/kg	TM4/PM8
CEN 10:1 Leachate																	
Arsenic #	<0.025	<0.025										0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	<0.03	0.16										20	100	300	<0.03	mg/kg	TM30/PM17
Cadmium #	<0.005	<0.005										0.04	1	5	<0.005	mg/kg	TM30/PM17
Chromium #	<0.015	<0.015										0.5	10	70	<0.015	mg/kg	TM30/PM17
Copper #	<0.07	<0.07										2	50	100	<0.07	mg/kg	TM30/PM17
Mercury #	<0.0001	0.0005										0.01	0.2	2	<0.0001	mg/kg	TM61/PM0
Molybdenum #	0.11	0.23										0.5	10	30	<0.02	mg/kg	TM30/PM17
Nickel #	<0.02	<0.02										0.4	10	40	<0.02	mg/kg	TM30/PM17
Lead #	<0.05	<0.05										0.5	10	50	<0.05	mg/kg	TM30/PM17
Antimony #	<0.02	<0.02										0.06	0.7	5	<0.02	mg/kg	TM30/PM17
Selenium #	0.21	0.23										0.1	0.5	7	<0.03	mg/kg	TM30/PM17
Zinc #	0.03	<0.03										4	50	200	<0.03	mg/kg	TM30/PM17
Total Dissolved Solids #	620	1160										4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	40	30										500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.1095	0.0993										-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	82.4	90.2										-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.881	0.89										-	-	-		l	NONE/PM17
Eluate Volume	0.8	0.85										-	-	-		l	NONE/PM17
pH #	8.09	8.09										-	-	-	<0.01	pH units	TM73/PM11
Phenol	<0.1	<0.1										1	-	-	<0.1	mg/kg	TM26/PM0
Fluoride	<3	<3										-	-	-	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	13	377										1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	4	130										800	15000	25000	<3	mg/kg	TM38/PM0

Client Name: Ground Investigations Ireland

Reference: 9897-08-20

Location: Emmet Road

Contact: Conor Finnerty

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/14172	1	BH03	0.80-1.00	1-3	No interpretation possible
20/14172	1	BH03	3.00-3.40	4-6	No interpretation possible

Client Name: Ground Investigations Ireland
Reference: 20/08/9897
Location: Emmet Road
Contact: Conor Finnerty

Note:

Asbestos Screen analysis is carried out in accordance with our documented in-house methods PM042 and TM065 and HSG 248 by Stereo and Polarised Light Microscopy using Dispersion Staining Techniques and is covered by our UKAS accreditation. Detailed Gravimetric Quantification and PCOM Fibre Analysis is carried out in accordance with our documented in-house methods PM042 and TM131 and HSG 248 using Stereo and Polarised Light Microscopy and Phase Contrast Optical Microscopy (PCOM). Samples are retained for not less than 6 months from the date of analysis unless specifically requested.

Opinions, including ACM type and Asbestos level less than 0.1%, lie outside the scope of our UKAS accreditation.

Where the sample is not taken by a Element Materials Technology consultant, Element Materials Technology cannot be responsible for inaccurate or unrepresentative sampling.

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Date Of Analysis	Analysis	Result
20/14172	1	BH03	0.80-1.00	2	23/10/2020	**General Description (Bulk Analysis)**	soil.stones
					23/10/2020	**Asbestos Fibres**	NAD
					23/10/2020	**Asbestos ACM**	NAD
					23/10/2020	**Asbestos Type**	NAD
					23/10/2020	**Asbestos Level Screen**	NAD
20/14172	1	BH03	3.00-3.40	5	23/10/2020	**General Description (Bulk Analysis)**	soil.stones
					23/10/2020	**Asbestos Fibres**	NAD
					23/10/2020	**Asbestos ACM**	NAD
					23/10/2020	**Asbestos Type**	NAD
					23/10/2020	**Asbestos Level Screen**	NAD

Client Name: Ground Investigations Ireland

Reference: 9897-08-20

Location: Emmet Road

Contact: Conor Finnerty

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
20/14172	1	BH03	0.80-1.00	1-3	Cyanide, LOI, Phenols, Tot SO4	Sample holding time exceeded
20/14172	1	BH03	3.00-3.40	4-6	Cyanide, LOI, Phenols, Tot SO4	Sample holding time exceeded

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.

Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/14172

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/14172

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/14172

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21B	As Received samples are extracted in Methanol: Water (60:40) by reciprocal shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes

EMT Job No: 20/14172

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM65	Asbestos Bulk Identification method based on HSG 248 First edition (2006)	PM42	Modified SCA Blue Book V.12 draft 2017 and WM3 1st Edition v1.1:2018. Solid samples undergo a thorough visual inspection for asbestos fibres prior to asbestos identification using TM065.	Yes		AR	
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes

EMT Job No: 20/14172

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1	2	3	4	5-7	8	9	10-12	13	14-16	LOD/LOR	Units	Method No.
Sample ID	BH02	BH02	BH03	BH04	BH04	BH06	BH07	BH07	BH07	BH08			
Depth	2.50-2.80	7.00-7.30	3.50-4.00	2.50	3.00-3.40	0.20-0.60	2.50	3.00-3.40	5.00-5.50	1.00-2.00			
COC No / misc													
Containers	T	T	T	T	V J T	T	T	V J T	T	V J T			
Sample Date	15/10/2020	15/10/2020	07/10/2020	07/10/2020	07/10/2020	09/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020			
Antimony	-	-	-	-	2	-	-	2	-	<1	<1	mg/kg	TM30/PM15
Arsenic #	-	-	-	-	11.1	-	-	9.9	-	5.6	<0.5	mg/kg	TM30/PM15
Barium #	-	-	-	-	77	-	-	72	-	31	<1	mg/kg	TM30/PM15
Cadmium #	-	-	-	-	2.5	-	-	2.0	-	0.3	<0.1	mg/kg	TM30/PM15
Chromium #	-	-	-	-	40.7	-	-	34.8	-	44.4	<0.5	mg/kg	TM30/PM15
Copper #	-	-	-	-	43	-	-	34	-	10	<1	mg/kg	TM30/PM15
Lead #	-	-	-	-	15	-	-	15	-	6	<5	mg/kg	TM30/PM15
Mercury #	-	-	-	-	<0.1	-	-	<0.1	-	<0.1	<0.1	mg/kg	TM30/PM15
Molybdenum #	-	-	-	-	5.6	-	-	4.6	-	2.4	<0.1	mg/kg	TM30/PM15
Nickel #	-	-	-	-	42.9	-	-	39.0	-	8.8	<0.7	mg/kg	TM30/PM15
Selenium #	-	-	-	-	4	-	-	3	-	<1	<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	-	-	-	-	3164	-	-	2626	-	203	<50	mg/kg	TM50/PM29
Water Soluble Boron #	-	-	-	-	0.5	-	-	0.5	-	0.3	<0.1	mg/kg	TM74/PM32
Zinc #	-	-	-	-	87	-	-	89	-	68	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	-	-	-	-	<0.04	-	-	<0.04	-	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	-	-	-	-	<0.03	-	-	<0.03	-	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	-	-	-	-	<0.05	-	-	<0.05	-	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	-	-	-	-	<0.04	-	-	<0.04	-	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	-	-	-	-	0.06	-	-	<0.03	-	0.09	<0.03	mg/kg	TM4/PM8
Anthracene #	-	-	-	-	<0.04	-	-	<0.04	-	0.05	<0.04	mg/kg	TM4/PM8
Fluoranthene #	-	-	-	-	<0.03	-	-	<0.03	-	0.10	<0.03	mg/kg	TM4/PM8
Pyrene #	-	-	-	-	<0.03	-	-	<0.03	-	0.11	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	-	-	-	-	<0.06	-	-	<0.06	-	0.08	<0.06	mg/kg	TM4/PM8
Chrysene #	-	-	-	-	0.03	-	-	<0.02	-	0.06	<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	-	-	-	-	<0.07	-	-	<0.07	-	0.11	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	-	-	-	-	<0.04	-	-	<0.04	-	0.07	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	-	-	-	-	<0.04	-	-	<0.04	-	0.05	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	-	-	-	-	<0.04	-	-	<0.04	-	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	-	-	-	-	<0.04	-	-	<0.04	-	0.06	<0.04	mg/kg	TM4/PM8
Coronene	-	-	-	-	<0.04	-	-	<0.04	-	<0.04	<0.04	mg/kg	TM4/PM8
PAH 6 Total #	-	-	-	-	<0.22	-	-	<0.22	-	0.39	<0.22	mg/kg	TM4/PM8
PAH 17 Total	-	-	-	-	<0.64	-	-	<0.64	-	0.78	<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	-	-	-	-	<0.05	-	-	<0.05	-	0.08	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	-	-	-	-	<0.02	-	-	<0.02	-	0.03	<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	-	-	-	-	<1	-	-	<1	-	<1	<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	-	-	-	-	74	-	-	61 SV	-	82	<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_Total)	-	-	-	-	<30	-	-	<30	-	66	<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced
All solid results are expressed on a dry weight basis unless stated otherwise.

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1	2	3	4	5-7	8	9	10-12	13	14-16	LOD/LOR	Units	Method No.
Sample ID	BH02	BH02	BH03	BH04	BH04	BH06	BH07	BH07	BH07	BH08			
Depth	2.50-2.80	7.00-7.30	3.50-4.00	2.50	3.00-3.40	0.20-0.60	2.50	3.00-3.40	5.00-5.50	1.00-2.00			
COC No / misc													
Containers	T	T	T	T	V J T	T	T	V J T	T	V J T			
Sample Date	15/10/2020	15/10/2020	07/10/2020	07/10/2020	07/10/2020	09/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020			
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL) #	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL) #	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_1D_AL) #	-	-	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_1D_AL) #	-	-	-	-	<4	-	-	<4	-	<4	<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_1D_AL) #	-	-	-	-	<7	-	-	<7	-	<7	<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_1D_AL) #	-	-	-	-	<7	-	-	<7	-	56	<7	mg/kg	TM5/PM8/PM16
>C35-C40 (EH_1D_AL)	-	-	-	-	<7	-	-	<7	-	10	<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40 (EH+HS_1D_AL)	-	-	-	-	<26	-	-	<26	-	66	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10 (HS_1D_AL)	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C25 (EH_1D_AL)	-	-	-	-	<10	-	-	<10	-	<10	<10	mg/kg	TM5/PM8/PM16
>C25-C35 (EH_1D_AL)	-	-	-	-	<10	-	-	<10	-	48	<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 (HS_1D_AR) #	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR) #	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR) #	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_1D_AR) #	-	-	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_1D_AR) #	-	-	-	-	<4	-	-	<4	-	<4	<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_1D_AR) #	-	-	-	-	<7	-	-	<7	-	10	<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_1D_AR) #	-	-	-	-	<7	-	-	<7	-	88	<7	mg/kg	TM5/PM8/PM16
>EC35-EC40 (EH_1D_AR)	-	-	-	-	<7	-	-	<7	-	14	<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40 (EH+HS_1D_AR)	-	-	-	-	<26	-	-	<26	-	112	<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40) (EH+HS_CU_1D_Total)	-	-	-	-	<52	-	-	<52	-	178	<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 (HS_1D_AR) #	-	-	-	-	<0.1 SV	-	-	<0.1 SV	-	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC25 (EH_1D_AR)	-	-	-	-	<10	-	-	<10	-	31	<10	mg/kg	TM5/PM8/PM16
>EC25-EC35 (EH_1D_AR)	-	-	-	-	<10	-	-	<10	-	67	<10	mg/kg	TM5/PM8/PM16
MTBE #	-	-	-	-	<5 SV	-	-	<5 SV	-	<5	<5	ug/kg	TM36/PM12
Benzene #	-	-	-	-	<5 SV	-	-	<5 SV	-	<5	<5	ug/kg	TM36/PM12
Toluene #	-	-	-	-	<5 SV	-	-	<5 SV	-	<5	<5	ug/kg	TM36/PM12
Ethylbenzene #	-	-	-	-	<5 SV	-	-	<5 SV	-	<5	<5	ug/kg	TM36/PM12
m/p-Xylene #	-	-	-	-	<5 SV	-	-	<5 SV	-	<5	<5	ug/kg	TM36/PM12
o-Xylene #	-	-	-	-	<5 SV	-	-	<5 SV	-	<5	<5	ug/kg	TM36/PM12
PCB 28 #	-	-	-	-	<5	-	-	<5	-	<5	<5	ug/kg	TM17/PM8
PCB 52 #	-	-	-	-	<5	-	-	<5	-	<5	<5	ug/kg	TM17/PM8
PCB 101 #	-	-	-	-	<5	-	-	<5	-	<5	<5	ug/kg	TM17/PM8
PCB 118 #	-	-	-	-	<5	-	-	<5	-	<5	<5	ug/kg	TM17/PM8
PCB 138 #	-	-	-	-	<5	-	-	<5	-	<5	<5	ug/kg	TM17/PM8
PCB 153 #	-	-	-	-	<5	-	-	<5	-	<5	<5	ug/kg	TM17/PM8
PCB 180 #	-	-	-	-	<5	-	-	<5	-	<5	<5	ug/kg	TM17/PM8
Total 7 PCBs #	-	-	-	-	<35	-	-	<35	-	<35	<35	ug/kg	TM17/PM8

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1	2	3	4	5-7	8	9	10-12	13	14-16	LOD/LOR	Units	Method No.
Sample ID	BH02	BH02	BH03	BH04	BH04	BH06	BH07	BH07	BH07	BH08			
Depth	2.50-2.80	7.00-7.30	3.50-4.00	2.50	3.00-3.40	0.20-0.60	2.50	3.00-3.40	5.00-5.50	1.00-2.00			
COC No / misc													
Containers	T	T	T	T	V J T	T	T	V J T	T	V J T			
Sample Date	15/10/2020	15/10/2020	07/10/2020	07/10/2020	07/10/2020	09/10/2020	12/10/2020	12/10/2020	12/10/2020	12/10/2020			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020			
Phenol #	-	-	-	-	<0.01	-	-	<0.01	-	<0.01	<0.01	mg/kg	TM26/PM21B
Natural Moisture Content	-	-	-	-	12.1	-	-	10.1	-	2.4	<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	-	-	-	-	10.8	-	-	9.2	-	2.4	<0.1	%	PM4/PM0
Chloride (2:1 Ext BRE) #	0.007	0.021	0.019	0.007	-	0.008	0.009	-	0.017	-	<0.002	g/l	TM38/PM20
Hexavalent Chromium #	-	-	-	-	<0.3	-	-	<0.3	-	<0.3	<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) #	0.0184	0.0644	0.0849	0.0257	-	0.0172	0.0168	-	0.0701	-	<0.0015	g/l	TM38/PM20
Chromium III	-	-	-	-	40.7	-	-	34.8	-	44.4	<0.5	mg/kg	NONE/NONE
Total Cyanide #	-	-	-	-	<0.5	-	-	<0.5	-	<0.5	<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	-	-	-	-	0.76	-	-	0.74	-	0.13	<0.02	%	TM21/PM24
Sulphide	-	-	-	-	<10	-	-	<10	-	<10	<10	mg/kg	TM107/PM45
Elemental Sulphur	-	-	-	-	9	-	-	4	-	4	<1	mg/kg	TM108/PM114
Loss on Ignition #	-	-	-	-	2.1	-	-	1.9	-	<1.0	<1.0	%	TM22/PM0
pH #	8.54	8.47	8.45	8.67	8.22	8.94	8.29	8.38	8.40	9.15	<0.01	pH units	TM73/PM11
Mass of raw test portion	-	-	-	-	0.0978	-	-	0.1018	-	0.0958		kg	NONE/PM17
Mass of dried test portion	-	-	-	-	0.09	-	-	0.09	-	0.09		kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

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All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	17-19	20	21	22	23-25	26-28					LOD/LOR	Units	Method No.
Sample ID	BH08	BH09	BH09	BH11	BH12	BH12							
Depth	3.00-3.40	0.50-0.80	2.20-2.50	0.35-1.05	1.85-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	T	T	T	V J T	V J T							
Sample Date	12/10/2020	12/10/2020	13/10/2020	13/10/2020	14/10/2020	14/10/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020							
Antimony	2	-	-	-	1	1					<1	mg/kg	TM30/PM15
Arsenic #	5.1	-	-	-	6.9	7.4					<0.5	mg/kg	TM30/PM15
Barium #	22	-	-	-	21	23					<1	mg/kg	TM30/PM15
Cadmium #	1.8	-	-	-	0.2	0.6					<0.1	mg/kg	TM30/PM15
Chromium #	28.7	-	-	-	28.7	27.1					<0.5	mg/kg	TM30/PM15
Copper #	20	-	-	-	22	24					<1	mg/kg	TM30/PM15
Lead #	9	-	-	-	12	10					<5	mg/kg	TM30/PM15
Mercury #	<0.1	-	-	-	<0.1	<0.1					<0.1	mg/kg	TM30/PM15
Molybdenum #	2.3	-	-	-	1.8	2.6					<0.1	mg/kg	TM30/PM15
Nickel #	20.8	-	-	-	39.1	40.5					<0.7	mg/kg	TM30/PM15
Selenium #	2	-	-	-	2	2					<1	mg/kg	TM30/PM15
Total Sulphate as SO4 #	1014	-	-	-	1316	1578					<50	mg/kg	TM50/PM29
Water Soluble Boron #	0.5	-	-	-	0.8	1.0					<0.1	mg/kg	TM74/PM32
Zinc #	56	-	-	-	25	37					<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	-	-	-	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	-	-	-	<0.05	<0.05					<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Phenanthrene #	<0.03	-	-	-	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Fluoranthene #	<0.03	-	-	-	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Pyrene #	<0.03	-	-	-	<0.03	<0.03					<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	-	-	-	<0.06	<0.06					<0.06	mg/kg	TM4/PM8
Chrysene #	<0.02	-	-	-	<0.02	<0.02					<0.02	mg/kg	TM4/PM8
Benzo(bk)fluoranthene #	<0.07	-	-	-	<0.07	<0.07					<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
Coronene	<0.04	-	-	-	<0.04	<0.04					<0.04	mg/kg	TM4/PM8
PAH 6 Total #	<0.22	-	-	-	<0.22	<0.22					<0.22	mg/kg	TM4/PM8
PAH 17 Total	<0.64	-	-	-	<0.64	<0.64					<0.64	mg/kg	TM4/PM8
Benzo(b)fluoranthene	<0.05	-	-	-	<0.05	<0.05					<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	<0.02	-	-	-	<0.02	<0.02					<0.02	mg/kg	TM4/PM8
Benzo(j)fluoranthene	<1	-	-	-	<1	<1					<1	mg/kg	TM4/PM8
PAH Surrogate % Recovery	70	-	-	-	76	81					<0	%	TM4/PM8
Mineral Oil (C10-C40) (EH_CU_1D_Total)	<30	-	-	-	<30	<30					<30	mg/kg	TM5/PM8/PM16

Please see attached notes for all abbreviations and acronyms

Please include all sections of this report if it is reproduced

All solid results are expressed on a dry weight basis unless stated otherwise.

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	17-19	20	21	22	23-25	26-28					LOD/LOR	Units	Method No.
Sample ID	BH08	BH09	BH09	BH11	BH12	BH12							
Depth	3.00-3.40	0.50-0.80	2.20-2.50	0.35-1.05	1.85-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	T	T	T	V J T	V J T							
Sample Date	12/10/2020	12/10/2020	13/10/2020	13/10/2020	14/10/2020	14/10/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020							
TPH CWG													
Aliphatics													
>C5-C6 (HS_1D_AL) #	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C6-C8 (HS_1D_AL) #	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C8-C10 (HS_1D_AL)	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C10-C12 (EH_1D_AL) #	<0.2	-	-	-	<0.2	<0.2					<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 (EH_1D_AL) #	<4	-	-	-	<4	<4					<4	mg/kg	TM5/PM8/PM16
>C16-C21 (EH_1D_AL) #	<7	-	-	-	<7	<7					<7	mg/kg	TM5/PM8/PM16
>C21-C35 (EH_1D_AL) #	<7	-	-	-	<7	<7					<7	mg/kg	TM5/PM8/PM16
>C35-C40 (EH_1D_AL)	<7	-	-	-	<7	<7					<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-40 (EH+HS_1D_AL)	<26	-	-	-	<26	<26					<26	mg/kg	TM5/TM36/PM8/PM12/PM16
>C6-C10 (HS_1D_AL)	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>C10-C25 (EH_1D_AL)	<10	-	-	-	<10	<10					<10	mg/kg	TM5/PM8/PM16
>C25-C35 (EH_1D_AL)	<10	-	-	-	<10	<10					<10	mg/kg	TM5/PM8/PM16
Aromatics													
>C5-EC7 (HS_1D_AR) #	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC7-EC8 (HS_1D_AR) #	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC8-EC10 (HS_1D_AR) #	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC10-EC12 (EH_1D_AR) #	<0.2	-	-	-	<0.2	<0.2					<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 (EH_1D_AR) #	<4	-	-	-	<4	<4					<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 (EH_1D_AR) #	<7	-	-	-	<7	<7					<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 (EH_1D_AR) #	<7	-	-	-	<7	<7					<7	mg/kg	TM5/PM8/PM16
>EC35-EC40 (EH_1D_AR)	<7	-	-	-	<7	<7					<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-40 (EH+HS_1D_AR)	<26	-	-	-	<26	<26					<26	mg/kg	TM5/TM36/PM8/PM12/PM16
Total aliphatics and aromatics(C5-40) (EH+HS_CU_1D_Total)	<52	-	-	-	<52	<52					<52	mg/kg	TM5/TM36/PM8/PM12/PM16
>EC6-EC10 (HS_1D_AR) #	<0.1 SV	-	-	-	<0.1 SV	<0.1 SV					<0.1	mg/kg	TM36/PM12
>EC10-EC25 (EH_1D_AR)	<10	-	-	-	<10	<10					<10	mg/kg	TM5/PM8/PM16
>EC25-EC35 (EH_1D_AR)	<10	-	-	-	<10	<10					<10	mg/kg	TM5/PM8/PM16
MTBE #	<5 SV	-	-	-	<5 SV	<5 SV					<5	ug/kg	TM36/PM12
Benzene #	<5 SV	-	-	-	<5 SV	<5 SV					<5	ug/kg	TM36/PM12
Toluene #	<5 SV	-	-	-	<5 SV	<5 SV					<5	ug/kg	TM36/PM12
Ethylbenzene #	<5 SV	-	-	-	<5 SV	<5 SV					<5	ug/kg	TM36/PM12
m/p-Xylene #	<5 SV	-	-	-	<5 SV	<5 SV					<5	ug/kg	TM36/PM12
o-Xylene #	<5 SV	-	-	-	<5 SV	<5 SV					<5	ug/kg	TM36/PM12
PCB 28 #	<5	-	-	-	<5	<5					<5	ug/kg	TM17/PM8
PCB 52 #	<5	-	-	-	<5	<5					<5	ug/kg	TM17/PM8
PCB 101 #	<5	-	-	-	<5	<5					<5	ug/kg	TM17/PM8
PCB 118 #	<5	-	-	-	<5	<5					<5	ug/kg	TM17/PM8
PCB 138 #	<5	-	-	-	<5	<5					<5	ug/kg	TM17/PM8
PCB 153 #	<5	-	-	-	<5	<5					<5	ug/kg	TM17/PM8
PCB 180 #	<5	-	-	-	<5	<5					<5	ug/kg	TM17/PM8
Total 7 PCBs #	<35	-	-	-	<35	<35					<35	ug/kg	TM17/PM8

Element Materials Technology

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	17-19	20	21	22	23-25	26-28					LOD/LOR	Units	Method No.
Sample ID	BH08	BH09	BH09	BH11	BH12	BH12							
Depth	3.00-3.40	0.50-0.80	2.20-2.50	0.35-1.05	1.85-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	T	T	T	V J T	V J T							
Sample Date	12/10/2020	12/10/2020	13/10/2020	13/10/2020	14/10/2020	14/10/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020							
Phenol #	<0.01	-	-	-	<0.01	<0.01					<0.01	mg/kg	TM26/PM21B
Natural Moisture Content	7.1	-	-	-	9.1	10.5					<0.1	%	PM4/PM0
Moisture Content (% Wet Weight)	6.6	-	-	-	8.3	9.5					<0.1	%	PM4/PM0
Chloride (2:1 Ext BRE) #	-	0.008	0.004	0.005	-	-					<0.002	g/l	TM38/PM20
Hexavalent Chromium #	<0.3	-	-	-	<0.3	<0.3					<0.3	mg/kg	TM38/PM20
Sulphate as SO4 (2:1 Ext) #	-	0.0615	0.0262	0.0310	-	-					<0.0015	g/l	TM38/PM20
Chromium III	28.7	-	-	-	28.7	27.1					<0.5	mg/kg	NONE/NONE
Total Cyanide #	<0.5	-	-	-	<0.5	<0.5					<0.5	mg/kg	TM89/PM45
Total Organic Carbon #	0.52	-	-	-	0.76	0.80					<0.02	%	TM21/PM24
Sulphide	<10	-	-	-	<10	<10					<10	mg/kg	TM107/PM45
Elemental Sulphur	22	-	-	-	4	3					<1	mg/kg	TM108/PM114
Loss on Ignition #	1.2	-	-	-	2.5	2.6					<1.0	%	TM22/PM0
pH #	8.18	8.17	8.23	8.42	8.49	8.47					<0.01	pH units	TM73/PM11
Mass of raw test portion	0.0975	-	-	-	0.1014	0.1004						kg	NONE/PM17
Mass of dried test portion	0.09	-	-	-	0.09	0.09						kg	NONE/PM17

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : CEN 10:1 1 Batch

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	5-7	10-12	14-16	17-19	23-25	26-28					LOD/LOR	Units	Method No.
Sample ID	BH04	BH07	BH08	BH08	BH12	BH12							
Depth	3.00-3.40	3.00-3.40	1.00-2.00	3.00-3.40	1.85-3.00	3.00-3.40							
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T							
Sample Date	07/10/2020	12/10/2020	12/10/2020	12/10/2020	14/10/2020	14/10/2020							
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil							
Batch Number	1	1	1	1	1	1							
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020							
Dissolved Antimony #	0.003	<0.002	<0.002	0.009	0.007	0.007					<0.002	mg/l	TM30/PM17
Dissolved Antimony (A10) #	0.03	<0.02	<0.02	0.09	0.07	0.07					<0.02	mg/kg	TM30/PM17
Dissolved Arsenic #	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025					<0.0025	mg/l	TM30/PM17
Dissolved Arsenic (A10) #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025					<0.025	mg/kg	TM30/PM17
Dissolved Barium #	0.028	0.019	0.003	0.014	0.007	0.008					<0.003	mg/l	TM30/PM17
Dissolved Barium (A10) #	0.28	0.19	0.03	0.14	0.07	0.08					<0.03	mg/kg	TM30/PM17
Dissolved Cadmium #	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005					<0.0005	mg/l	TM30/PM17
Dissolved Cadmium (A10) #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/kg	TM30/PM17
Dissolved Chromium #	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015	<0.0015					<0.0015	mg/l	TM30/PM17
Dissolved Chromium (A10) #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015					<0.015	mg/kg	TM30/PM17
Dissolved Copper #	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007					<0.007	mg/l	TM30/PM17
Dissolved Copper (A10) #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07					<0.07	mg/kg	TM30/PM17
Dissolved Lead #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					<0.005	mg/l	TM30/PM17
Dissolved Lead (A10) #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					<0.05	mg/kg	TM30/PM17
Dissolved Molybdenum #	0.026	0.023	<0.002	0.005	0.004	0.007					<0.002	mg/l	TM30/PM17
Dissolved Molybdenum (A10) #	0.26	0.23	<0.02	0.05	0.04	0.07					<0.02	mg/kg	TM30/PM17
Dissolved Nickel #	<0.002	<0.002	<0.002	0.002	0.002	0.002					<0.002	mg/l	TM30/PM17
Dissolved Nickel (A10) #	<0.02	<0.02	<0.02	0.02	0.02	<0.02					<0.02	mg/kg	TM30/PM17
Dissolved Selenium #	0.041	0.023	<0.003	0.019	0.012	0.008					<0.003	mg/l	TM30/PM17
Dissolved Selenium (A10) #	0.41	0.23	<0.03	0.19	0.12	0.08					<0.03	mg/kg	TM30/PM17
Dissolved Zinc #	<0.003	<0.003	0.006	<0.003	<0.003	<0.003					<0.003	mg/l	TM30/PM17
Dissolved Zinc (A10) #	<0.03	<0.03	0.06	<0.03	<0.03	<0.03					<0.03	mg/kg	TM30/PM17
Mercury Dissolved by CVAF #	0.00012	0.00003	<0.00001	<0.00001	<0.00001	<0.00001					<0.00001	mg/l	TM61/PM0
Mercury Dissolved by CVAF #	0.0012	0.0003	<0.0001	<0.0001	<0.0001	<0.0001					<0.0001	mg/kg	TM61/PM0
Phenol	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01					<0.01	mg/l	TM26/PM0
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					<0.1	mg/kg	TM26/PM0
Fluoride	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3					<0.3	mg/l	TM173/PM0
Fluoride	<3	<3	<3	<3	<3	<3					<3	mg/kg	TM173/PM0
Sulphate as SO4 #	40.4	22.1	<0.5	11.6	18.0	20.8					<0.5	mg/l	TM38/PM0
Sulphate as SO4 #	404	221	<5	116	180	208					<5	mg/kg	TM38/PM0
Chloride #	10.5	6.2	<0.3	6.9	5.3	5.6					<0.3	mg/l	TM38/PM0
Chloride #	105	62	<3	69	53	56					<3	mg/kg	TM38/PM0
Ammoniacal Nitrogen as N #	0.07	0.05	0.15	0.16	2.68	4.16					<0.03	mg/l	TM38/PM0
Ammoniacal Nitrogen as N #	0.7	0.5	1.5	1.6	26.8	41.6					<0.3	mg/kg	TM38/PM0
Dissolved Organic Carbon	4	3	3	<2	2	2					<2	mg/l	TM60/PM0
Dissolved Organic Carbon	40	30	30	<20	20	<20					<20	mg/kg	TM60/PM0
pH	7.61	7.90	9.22	8.30	8.49	8.46					<0.01	pH units	TM73/PM0
Total Dissolved Solids #	133	89	<35	68	58	76					<35	mg/l	TM20/PM0
Total Dissolved Solids #	1330	890	<350	680	580	760					<350	mg/kg	TM20/PM0

Please see attached notes for all abbreviations and acronyms

Client Name: Ground Investigations Ireland
Reference: 9897-08-20
Location: Emmet Road
Contact: Diarmaid MagLochlainn
EMT Job No: 20/14656

Report : EN12457_2

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

Please see attached notes for all abbreviations and acronyms

EMT Sample No.	5-7	10-12	14-16	17-19	23-25	26-28										
Sample ID	BH04	BH07	BH08	BH08	BH12	BH12										
Depth	3.00-3.40	3.00-3.40	1.00-2.00	3.00-3.40	1.85-3.00	3.00-3.40										
COC No / misc																
Containers	V J T	V J T	V J T	V J T	V J T	V J T										
Sample Date	07/10/2020	12/10/2020	12/10/2020	12/10/2020	14/10/2020	14/10/2020										
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil										
Batch Number	1	1	1	1	1	1										
Date of Receipt	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020	23/10/2020										
Solid Waste Analysis											Inert	Stable Non-reactive	Hazardous	LOD LOR	Units	Method No.
Total Organic Carbon #	0.76	0.74	0.13	0.52	0.76	0.80					3	5	6	<0.02	%	TM21/PM24
Sum of BTEX	<0.025 SV	<0.025 SV	<0.025	<0.025 SV	<0.025 SV	<0.025 SV					6	-	-	<0.025	mg/kg	TM36/PM12
Sum of 7 PCBs #	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035					1	-	-	<0.035	mg/kg	TM17/PM8
Mineral Oil	<30	<30	66	<30	<30	<30					500	-	-	<30	mg/kg	TM5/PM8/PM16
PAH Sum of 6 #	<0.22	<0.22	0.39	<0.22	<0.22	<0.22					-	-	-	<0.22	mg/kg	TM4/PM8
PAH Sum of 17	<0.64	<0.64	0.78	<0.64	<0.64	<0.64					100	-	-	<0.64	mg/kg	TM4/PM8
CEN 10:1 Leachate																
Arsenic #	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025					0.5	2	25	<0.025	mg/kg	TM30/PM17
Barium #	0.28	0.19	0.03	0.14	0.07	0.08					20	100	300	<0.03	mg/kg	TM30/PM17
Cadmium #	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005					0.04	1	5	<0.005	mg/kg	TM30/PM17
Chromium #	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015					0.5	10	70	<0.015	mg/kg	TM30/PM17
Copper #	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07					2	50	100	<0.07	mg/kg	TM30/PM17
Mercury #	0.0012	0.0003	<0.0001	<0.0001	<0.0001	<0.0001					0.01	0.2	2	<0.0001	mg/kg	TM61/PM0
Molybdenum #	0.26	0.23	<0.02	0.05	0.04	0.07					0.5	10	30	<0.02	mg/kg	TM30/PM17
Nickel #	<0.02	<0.02	<0.02	0.02	0.02	<0.02					0.4	10	40	<0.02	mg/kg	TM30/PM17
Lead #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05					0.5	10	50	<0.05	mg/kg	TM30/PM17
Antimony #	0.03	<0.02	<0.02	0.09	0.07	0.07					0.06	0.7	5	<0.02	mg/kg	TM30/PM17
Selenium #	0.41	0.23	<0.03	0.19	0.12	0.08					0.1	0.5	7	<0.03	mg/kg	TM30/PM17
Zinc #	<0.03	<0.03	0.06	<0.03	<0.03	<0.03					4	50	200	<0.03	mg/kg	TM30/PM17
Total Dissolved Solids #	1330	890	<350	680	580	760					4000	60000	100000	<350	mg/kg	TM20/PM0
Dissolved Organic Carbon	40	30	30	<20	20	<20					500	800	1000	<20	mg/kg	TM60/PM0
Mass of raw test portion	0.0978	0.1018	0.0958	0.0975	0.1014	0.1004					-	-	-		kg	NONE/PM17
Dry Matter Content Ratio	91.9	88.7	93.6	92.3	88.8	89.4					-	-	-	<0.1	%	NONE/PM4
Leachant Volume	0.892	0.889	0.894	0.893	0.889	0.889					-	-	-		l	NONE/PM17
Eluate Volume	0.8	0.6	0.8	0.8	0.8	0.8					-	-	-		l	NONE/PM17
pH #	8.22	8.38	9.15	8.18	8.49	8.47					-	-	-	<0.01	pH units	TM73/PM11
Phenol	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1					1	-	-	<0.1	mg/kg	TM26/PM0
Fluoride	<3	<3	<3	<3	<3	<3					-	-	-	<3	mg/kg	TM173/PM0
Sulphate as SO4 #	404	221	<5	116	180	208					1000	20000	50000	<5	mg/kg	TM38/PM0
Chloride #	105	62	<3	69	53	56					800	15000	25000	<3	mg/kg	TM38/PM0

Client Name: Ground Investigations Ireland

Reference: 9897-08-20

Location: Emmet Road

Contact: Diarmaid MagLochlainn

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	EPH Interpretation
20/14656	1	BH04	3.00-3.40	5-7	No interpretation possible
20/14656	1	BH07	3.00-3.40	10-12	No interpretation possible
20/14656	1	BH08	1.00-2.00	14-16	Possible lubricating oil
20/14656	1	BH08	3.00-3.40	17-19	No interpretation possible
20/14656	1	BH12	1.85-3.00	23-25	No interpretation possible
20/14656	1	BH12	3.00-3.40	26-28	No interpretation possible

Client Name: Ground Investigations Ireland

Reference: 9897-08-20

Location: Emmet Road

Contact: Diarmaid MagLochlainn

Matrix : Solid

EMT Job No.	Batch	Sample ID	Depth	EMT Sample No.	Analysis	Reason
20/14656	1	BH04	3.00-3.40	5-7	Cyanide, EPH, GRO, PAH, PCB, Phenols	Sample holding time exceeded prior to receipt
20/14656	1	BH04	3.00-3.40	5-7	LOI, Tot SO4	Sample holding time exceeded
20/14656	1	BH07	3.00-3.40	10-12	Cyanide, Phenols	Sample holding time exceeded
20/14656	1	BH08	1.00-2.00	14-16	Cyanide, Phenols	Sample holding time exceeded
20/14656	1	BH08	3.00-3.40	17-19	Cyanide, Phenols	Sample holding time exceeded
20/14656	1	BH12	1.85-3.00	23-25	Cyanide, Phenols	Sample holding time exceeded
20/14656	1	BH12	3.00-3.40	26-28	Cyanide, Phenols	Sample holding time exceeded

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating.

Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/14656

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overesitimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.
Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/14656

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM16	Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.			AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM17	Modified US EPA method 8270D v5:2014. Determination of specific Polychlorinated Biphenyl congeners by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM20	Modified BS 1377-3:1990/USEPA 160.1/3 (TDS/TS: 1971) Gravimetric determination of Total Dissolved Solids/Total Solids	PM0	No preparation is required.	Yes		AR	Yes
TM21	Modified BS 7755-3:1995, ISO10694:1995 Determination of Total Organic Carbon or Total Carbon by combustion in an Eltra TOC furnace/analyser in the presence of oxygen. The CO2 generated is quantified using infra-red detection. Organic Matter (SOM) calculated as per EA MCERTS Chemical Testing of Soil, March 2012 v4.	PM24	Dried and ground solid samples are washed with hydrochloric acid, then rinsed with deionised water to remove the mineral carbon before TOC analysis.	Yes		AD	Yes

EMT Job No: 20/14656

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM22	Modified BS1377-3:1990 Gravimetric determination of Loss on Ignition by temperature controlled Muffle Furnace (35C-440C). On request modified ASTM D2974-00 LOI (105C-440C)	PM0	No preparation is required.	Yes		AD	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM0	No preparation is required.			AR	Yes
TM26	Determination of phenols by Reversed Phased High Performance Liquid Chromatography and Electro-Chemical Detection.	PM21B	As Received samples are extracted in Methanol: Water (60:40) by reciprocal shaker.	Yes		AR	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.			AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry): WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM0	No preparation is required.	Yes		AR	Yes
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AD	Yes

EMT Job No: 20/14656

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM38	Soluble Ion analysis using Discrete Analyser. Modified US EPA methods: Chloride 325.2 (1978), Sulphate 375.4 (Rev.2 1993), o-Phosphate 365.2 (Rev.2 1993), TON 353.1 (Rev.2 1993), Nitrite 354.1 (1971), Hex Cr 7196A (1992), NH4+ 350.1 (Rev.2 1993 (comparabl	PM20	Extraction of dried and ground or as received samples with deionised water in a 2:1 water to solid ratio using a reciprocal shaker for all analytes except hexavalent chromium. Extraction of as received sample using 10:1 ratio of 0.2M sodium hydroxide to soil for hexavalent chromium using a reciprocal shaker.	Yes		AR	Yes
TM50	Acid soluble sulphate (Total Sulphate) analysed by ICP-OES	PM29	A hot hydrochloric acid digest is performed on a dried and ground sample, and the resulting liquor is analysed.	Yes		AD	Yes
TM60	TC/TOC analysis of Waters by High Temperature Combustion followed by NDIR detection. Based on the following modified standard methods: USEPA 9060A (2002), APHA SMEWW 5310B:1999 22nd Edition, ASTM D 7573, and USEPA 415.1.	PM0	No preparation is required.			AR	Yes
TM61	Determination of Mercury by Cold Vapour Atomic Fluorescence - WATERS: Modified USEPA Method 245.7, Rev 2, Feb 2005. SOILS: Modified USEPA Method 7471B, Rev.2, Feb 2007	PM0	No preparation is required.	Yes		AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM0	No preparation is required.			AR	Yes
TM73	Modified US EPA methods 150.1 (1982) and 9045D Rev. 4 - 2004) and BS1377-3:1990. Determination of pH by Metrohm automated probe analyser.	PM11	Extraction of as received solid samples using one part solid to 2.5 parts deionised water.	Yes		AR	No
TM74	Analysis of water soluble boron (20:1 extract) by ICP-OES.	PM32	Hot water soluble boron is extracted from dried and ground samples using a 20:1 ratio.	Yes		AD	Yes
TM89	Modified USEPA method OIA-1667 (1999). Determination of cyanide by Flow Injection Analyser. Where WAD cyanides are required a Ligand displacement step is carried out before analysis.	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.	Yes		AR	Yes
TM107	Determination of Sulphide/Thiocyanate by Skalar Continuous Flow Analyser	PM45	As received solid samples are extracted with 1M NaOH by orbital shaker for Cyanide, Sulphide and Thiocyanate analysis.			AR	Yes
TM108	Determination of Elemental Sulphur by Reversed Phase High Performance Liquid Chromatography with Ultra Violet spectroscopy.	PM114	End over end extraction of dried and crushed soil samples for organic analysis. The solvent mix varies depending on analysis required			AD	Yes

EMT Job No: 20/14656

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/SANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM173	Analysis of fluoride by ISE (Ion Selective Electrode) using modified ISE method 9214 - 340.2 (EPA 1998)	PM0	No preparation is required.			AR	Yes
NONE	No Method Code	NONE	No Method Code			AD	Yes
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.				
NONE	No Method Code	PM17	Modified method BS EN12457-2:2002 As received solid samples are leached with water in a 10:1 water to soil ratio for 24 hours, the moisture content of the sample is included in the ratio.			AR	
NONE	No Method Code	PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.			AR	

Appendix C3 OCSC Generic Quantitative Risk Assessment (GQRA) Report

GENERIC QUANTITATIVE RISK ASSESSMENT

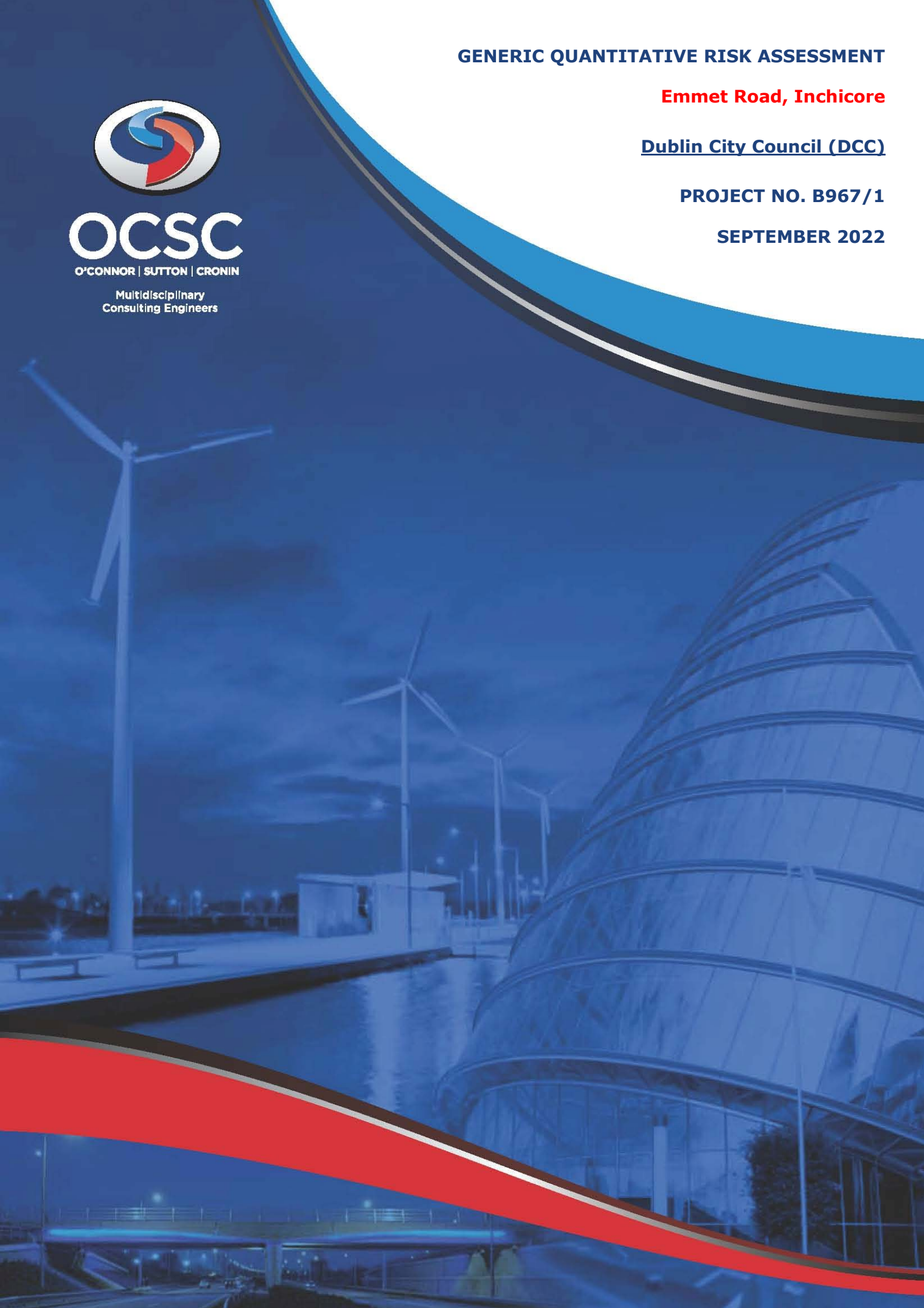
Emmet Road, Inchicore

Dublin City Council (DCC)

PROJECT NO. B967/1

SEPTEMBER 2022

OCSC
O'CONNOR | SUTTON | CRONIN
Multidisciplinary
Consulting Engineers



Generic Quantitative Risk Assessment

EMMET ROAD, INCHICORE, DUBLIN

For

Dublin City Council

OCSC Job No.:	Project Code	Originator	Zone Volume	Level	File Type	Role Type	Number	Status / Suitability Code	Revision
B967/1	B967/1	OCSC	ZZ	ZZ	RP	YE	800	S2	1

Rev.	Status	Authors	Checked	Authorised	Issue Date
P2	S2	KS	GB	EB	26/09/2022
P1	S2	KS	EB	EB	23/11/2021
P0	S2	KS	EB	EB	14/01/2021

NOTICE

This document represents the findings from a Generic Quantitative Risk Assessment (GQRA) at the Dublin City Council's Emmet Road site. Best practice was followed at all times and within the limitations stated. This document has been produced by O'Connor Sutton Cronin & Associates for its client, Dublin City Council. It may not be used for any purpose other than that specified by any other person without the written permission of the authors.

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1. INTRODUCTION

1.1. Project Contractual Basis & Parties Involved

This report has been prepared by O'Connor Sutton Cronin & Associates Ltd. (OCSC) at the request of their Client, Dublin City Council (DCC) as part of the Civil & Structural Engineering scope of services for the proposed development. The site for assessment is at Emmet Road in Inchicore, Dublin 8 and currently comprises a grass field (demolished former residential estate), a recreational club building, an employment building centre, and a health community centre. For the purposes of the planning application the site includes an area of watermain upgrades along Emmet Road as shown in Figure 1.1. However for the purpose of this Generic Quantitative Risk Assessment (GQRA) only the main site within red line area of the site has been investigated and assessed.

The field assessment and reporting were undertaken by Kate Santos, Environmental Engineer with OCSC and Glenda Barry, Principal Consultant with OCSC and approved by Eleanor Burke, Chartered Scientist (CSci), Member of the Institution of Environmental Sciences (MIEnvSc), and the Environmental Division Manager of OCSC.

1.2. Background Information

The red line site is located in Inchicore adjacent to various recreational, retail, residential and commercial facilities (refer to Figure 1.1). The site area extends across c. 3.8 hectares of land and is bounded by Emmet Road (R810) to the north, Patriot's Path and St. Michael's Estate Road to the east, a protected stone boundary wall and Goldenbridge Cemetery to the south, and St. Vincent's Street West to the west.



Figure 1.1: Site Location (approximate boundary in red; Source: OSI, 2022)

The central and southern area of the site consists of the former St. Michael's Estate (Dublin City Council Social Housing) which has been demolished and exists now as open space. The northern section of the site consists of a number of structures that will be demolished, including St. Michael's Community Centre and the EVE Tuiscint Health Centre, under a separate Part 8 planning application. Another building, the Celtic Pigeon Club, was located on the northern section of the site but was demolished in November 2020. The Inchicore Community Sports Centre does not form part of the planning application.

The area of proposed watermain upgrade works extends along Emmet Road from the northweastern portion of the site west to the junction with Tyrconnell Road and does not form part of this assessment.

The site is relatively flat with a fall from south to north of approximately 6m. The topographic map is included in Appendix B. The centre of the site is at Ordnance Survey of Ireland (OSI) ITM reference 712063E, 733325N.



Figure 1.2: Aerial image of the site with indicative boundary. Source: Google Earth, 2021)

1.3. Proposed Development

The proposed development includes a mixed used development of 578 no. apartments in addition to commercial, retail and community facilities and associated infrastructure, including roads, footpaths, services and landscaping. A basement is not proposed as part of the development works although an approximately 530m2, full-storey height area of below ground plant space is proposed for the development.

The central and southern area of the site consists of the former St. Michael's Estate (Dublin City Council Social Housing) which has been demolished and exists now as open space. The northern section of the site consists of a number of structures that will be demolished, including St. Michael's Community Centre and the EVE Tuiscint

Health Centre, under a separate Part 8 planning application. Another building, the Celtic Pigeon Club, was located on the northern section of the site but was demolished in November 2020. The Inchicore Community Sports Centre does not form part of the planning application. The current proposed site layout is shown in Figure 1.3.

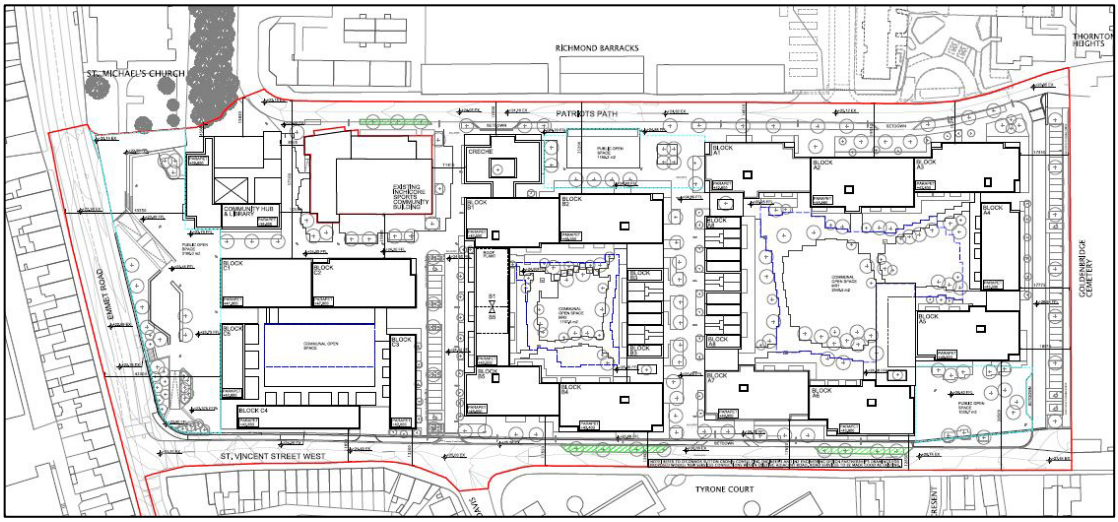


Figure 1.3 Proposed Site Layout (Source: Bucholz McEvoy Architects)

1.4. Project Objectives

The overall project objectives include:

- Provide environmental information on the site including its environmental setting, past activities, and current soil quality in terms of contamination;
- Undertake a Generic Quantitative Risk Assessment to establish whether there is any material onsite that could present a risk to human health of future residential occupiers; and
- Assess any obvious environmental liabilities and potential risk to future site users.

1.5. Methodology and Approach

The methodology and approach for the proposed work will follow:

- BS 10175:2011+A2:2017, Investigation of potentially contaminated sites, Code of Practice;
- EPA, 2020, Guidance on waste acceptance criteria at authorised soil recovery facilities;
- EPA 2013, Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites;
- EPA 2007, Code of Practice, Environmental Risk Assessment for Unregulated Waste Disposal Sites;
- EA, 2020, Land contamination risk management (LCRM);

- The LQM/CIEH S4ULs for Human Health Risk Assessment (2015);
- SP1010 – Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination CL:AIRE (2014);
- EIC/AGS/CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment (2010);
- 2010 European Communities Environmental Objectives (Groundwater) Regulations (Statutory Instrument No. 9 of 2010);
- 2016 European Communities Environmental Objectives (Groundwater) (Amendment) Regulations (Statutory Instrument No. 366 of 2016);
- EPA (2003) Towards Setting Guideline Values for the Protection of Groundwater in Ireland (2003);
- Environmental Liability Regulations (S.I. 547 of 2008);
- Environment Agency (2000) Guidance on the Assessment and Monitoring of Natural Attenuation of Contaminants in Groundwater;
- DoELG, EPA and GSI, 1999. Groundwater Protection Schemes. Department of Environment and Local Government, Environmental Protection Agency and Geological Survey of Ireland, Dublin, Ireland.

1.6. Scope of Works

To meet the project objectives the following scope of works were completed:

- Undertake and record a site visit and walkover including reference to readily available local information; specifically obtaining information regarding storage of deleterious materials or potential contamination related to historical operations on site;
- Obtain, where possible, records of past spillages which could potentially have impacted upon the soil and/or groundwater, and any environmental reports on the site's historic operations and condition;
- Present a discussion of the current site status and key environmental influences around the site;
- Undertake and present a historical site and area review, primarily referring to old Ordnance Survey Maps but utilising other sources as appropriate and readily available;
- Identify requirements for an environmental site investigation;
- Present a discussion of the general soil and groundwater conditions within the topographical and area context;
- Review of analytical data of soil sampled on-site at selected locations;
- Complete a Generic Quantitative Risk Assessment for 'Residential' and 'Public Open Space (Resi)' and 'Commercial' land use; and

Based on the results of the above assessment the requirement for further detailed site investigation, mitigation measures or more site specific Detailed Quantitative Risk Assessment (DQRA) will be discussed.

1.7. Limitations

This Generic Quantitative Risk Assessment (GQRA) Report has been prepared for the sole use Dublin City Council ("the Client") as part of the Civil & Structural Engineering scope of services for the proposed development. No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by OCSC. This Report is confidential and may not be disclosed by the Client nor relied upon by any other party without the prior and express written agreement of OCSC.

This assessment is based on a review of available historical information, environmental records, consultations, relevant information and reports from third parties. All information received has been taken in good faith as being true and representative. There was lack of accessibility to a former halting site area, located directly east adjacent to the former Pigeon Club building. In addition, the area of proposed watermain upgrade works along Emmet Road has not been assessed as part of the site investigation or this GQRA.

This report has been prepared in line with best industry standards. The methodology adopted and the sources of information used by OCSC in providing its services are outlined in this Report. The scope of this Report and the services are accordingly factually limited by these circumstances.

OCSC disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to OCSC's attention after the date of the Report.

The conclusions presented in this report represent OCSC's best professional judgement based on a review of site conditions observed and the relevant information available at the time of writing. The opinions and conclusions presented are valid only to the extent that the information provided was accurate and complete.

2. ENVIRONMENTAL SITE SETTING

2.1. Site Location

The site location is in Inchicore, Dublin 8 and comprises of a vacant grass field (former St. Michaels Estate), a former halting site, and a number of structures that will be demolished under a separate Part 8 planning application including St. Michael's Community Centre and the EVE Tuiscint Health Centre. The regional site location is illustrated on Figure 2.1 by the red star.

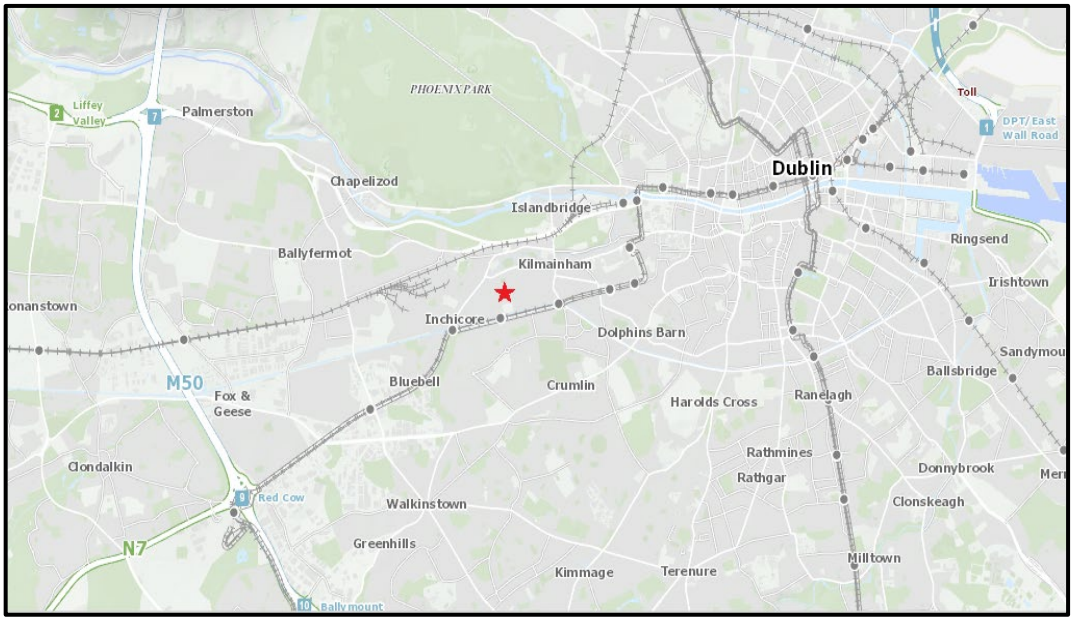


Figure 2.1 Regional Site Location (approximate site location indicated by red star. Source: OSI, 2021)

2.2. Surrounding Land Use

The surrounding area is residential with a mixture of residential, recreational and commercial/retail buildings.

The site's surrounding area is urban in nature. North of the site are Emmet Road (R810), residential and commercial structures, Grattan Crescent Park and Richmond Park. East of the site is Patriots Path, St Michael's Estate Road, Saint Michael`s Church, Bulfin Court Day Centre, residential buildings, Inchicore Primary Care Centre, and Richmond Barracks Cultural Centre with associated gardens and a vacant site. Further east are residential structures. South of the site are Goldenbridge Cemetery and the Common Ground Art building. Further south are the Grand Canal, the Luas Line transport link (red line), Davitt Road (R812) and residential buildings. West of the site are St. Vincent Street West, residential buildings, commercial businesses, and retail outlets.Refer to Figure 1.2 in Section 1 for an aerial photograph of the site. The adjacent land uses are listed in Table 2.1 below.

Table 2.1 – Adjacent Land Uses

BOUNDARY	LAND USE
North	Emmet Road (R810), residential and commercial structures, Grattan Crescent Park and Richmond Park.
East	Patriot's Path, St. Michael's Estate Road, Saint Michael`s Church, Bulfin Court Day Centre, residential buildings, Inchicore Primary Care Centre, Richmond Barracks Cultural Centre with associated gardens, a vacant site.
South	Goldenbridge Cemetery, Common Ground Art building, The Grand Canal, The Luas line transport link (red line), Davitt Road (812), residential buildings.
West	St. Vincent Street West, residential buildings, commercial and retail businesses.

2.3. Site History

An understanding of the site history was gained by undertaking a review of the following primary sources including:

- Review of available extracts of historical Ordnance Survey of Ireland (OSI) maps at http://map.geohive.ie/mapviewer.html;
- Review of information held by the Environmental Protection Agency (EPA) EnVision online Mapping at https://gis.epa.ie/EPAMaps/;
- Aerial images available of the site (Google Earth and Google Maps);
- Historical Maps available at Ordnance Survey Ireland (OSI) https://webapps.geohive.ie/mapviewer/index.html;
- Geological Survey of Ireland (GSI) online map tool at https://dcenr.maps.arcgis.com/apps/MapSeries/index.html;
- National Parks and Wildlife Service online map tool at https://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=8f7060450de3485fa1c1085536d477ba;
- Richmond Barracks history website at http://www.richmondbarracks.ie/history/keogh-square/; and
- Michael O'Flanagan's "The History of Kilmainham and Inchicore".

2.4. Site Development

The following section outlines the historically mapped features in the immediate environs of the site.

The 6" historical map dated 1837-1842 shows the site as part of the western portion of the Richmond Barracks, a military complex inside the Goldenbridge North Townland. The site is comprised of building structures along the perimeter of the site with an open area in the centre.

To the east boundary of the site was the eastern portion of Richmond Barracks military camp buildings, vacant lots, and several estates. To the north of the site is a roadway; a vacant lot; a mill race, mill pond, and river; and a woolen mill. To the south of the site is a cemetery with a chapel, a guard house, and the Grand Canal. To the southeast of the site was an extension of the military camp area and the Mount Shannon Mills on the south side of the canal. To the west of the site were probable residential buildings and gardens, vacant lots, a roadway, a school, a meeting house, and a paper mill.

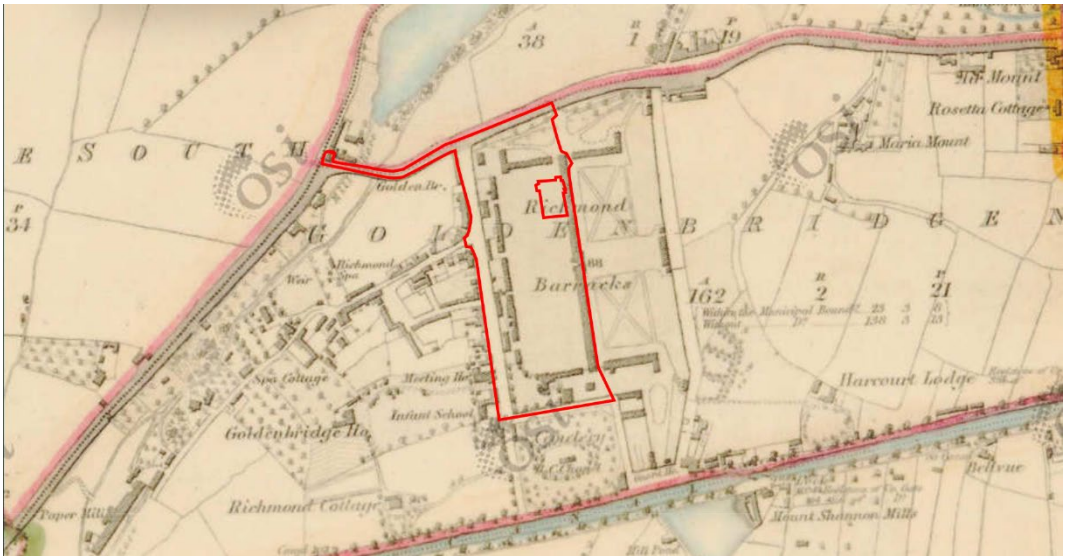


Figure 2.2. Approximate site boundary indicated by red line on a 6 inch historical map dated 1837-1842 (Source: OSI, 2021).

The 25" historical map (1888-1913) (Figure 2.3) shows the site as largely unchanged from the previous mapping except for the construction of a number of small buildings along the northern and western boundaries of the site. including a Church in the northeast.

The main road on the north boundary was identified as Emmet Road. A tramway, and houses had been constructed to the north of the site and a church to the northeast. Additional buildings had been constructed to the east within Richmond Barracks and along Emmet Road to the east of the barracks. Limited additional development had occurred to the southeast of the site on both sides of the canal. Development to the west of the site included a tramway depot, two industrial schools, two additional schools, St. Vincent's Roman Catholic Church, and residences.

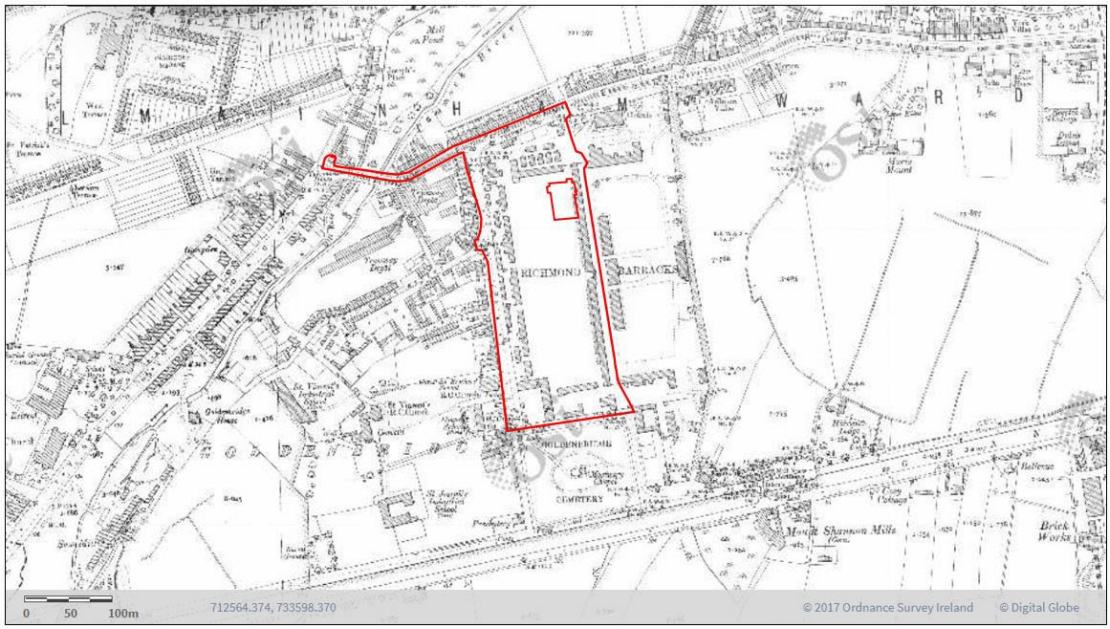


Figure 2.3. Approximate site boundary indicated by red line on historic 25 inch map (1888-1913) (OSI, 2021)

The 6" Cassini historical map (Figure 2.4) identifies a change to the layout of Richmond Barracks with the removal of buildings along the northern and western boundaries of the site and the construction of a large building in the south-central portion of the site and Keogh Square in the north-central portion of the site.

The tramlines along Emmet Road were no longer shown to the north, but Richmond Park had been constructed to the north along with additional residential structures. A school was noted within the barracks to the east. Extensive residential development had occurred further to the east. To the south of the site a mill pond had been infilled and a paint and varnish factory constructed on the south side of the Grand Canal along with extensive residential construction. To the west of the site a chassis works and omnibus works had replaced the tramway depots and a saw mill had been constructed.

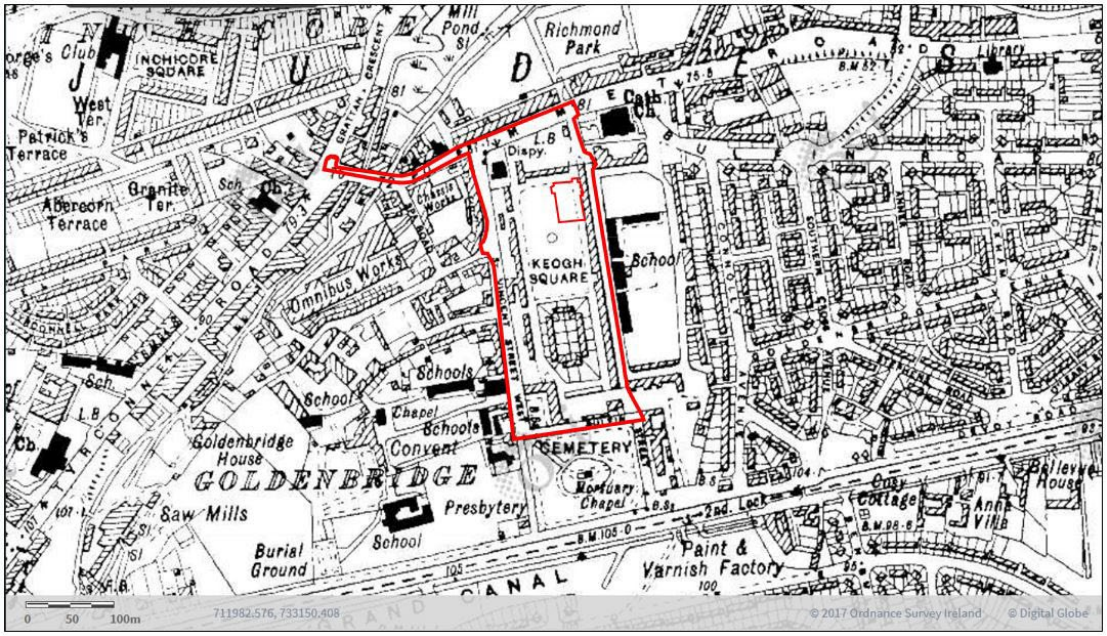


Figure 2.4. Approximate site boundary indicated by red line on a 6 inch Cassini map (1830 - 1930) (Source: OSI, 2021)

Keogh Square was replaced with St. Michael's Estate (residential) which was opened in 1969 and consisted of seven apartments/flat buildings and open areas within the site. A review of the Ordnance Survey Ireland aerial images from 1995 (see Figure 2.5) and 2000 (refer to Figure 2.6) indicate that the site area had undergone significant changes since the 6" Cassini historical mapping including the construction of St. Michael's Estate and associated infrastructure. The northern section of the site was occupied by playing yards, a halting site east adjacent to the Pigeon Club, and three additional structures. North of the site, the mill pond had been infilled and converted into an open green area. East of the site, residential structures, Richmond Barracks Museum, and Hollybrook Lodge Residential Units had replaced the school. Additional construction had also occurred to the south and west of the site.

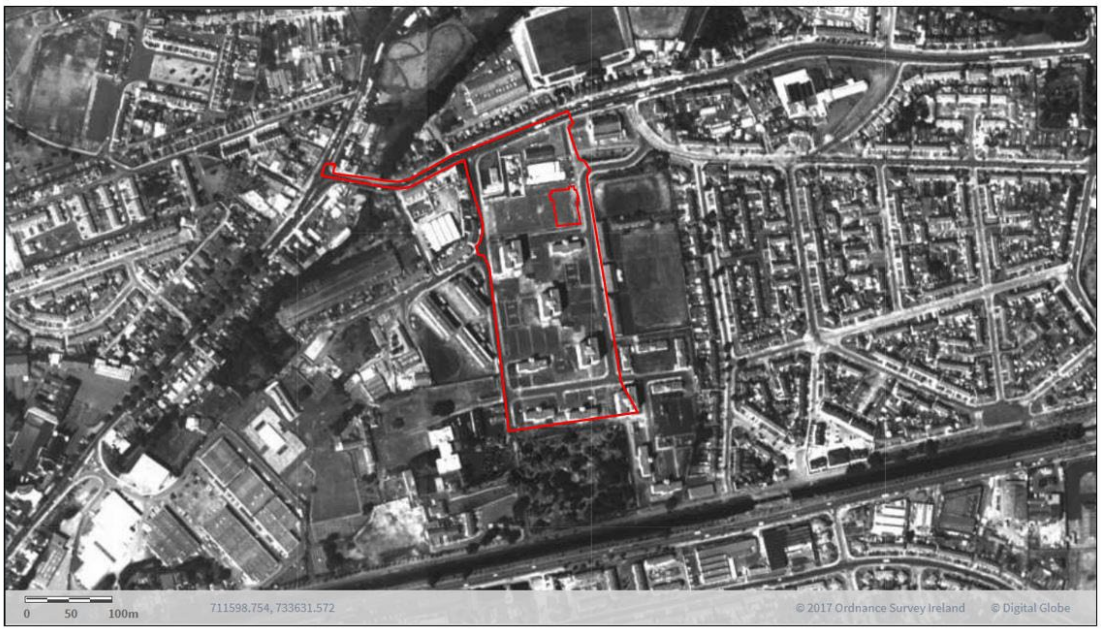


Figure 2.5. Approximate site boundary indicated by red line on 1995 aerial image (Source: OSI, 2021)

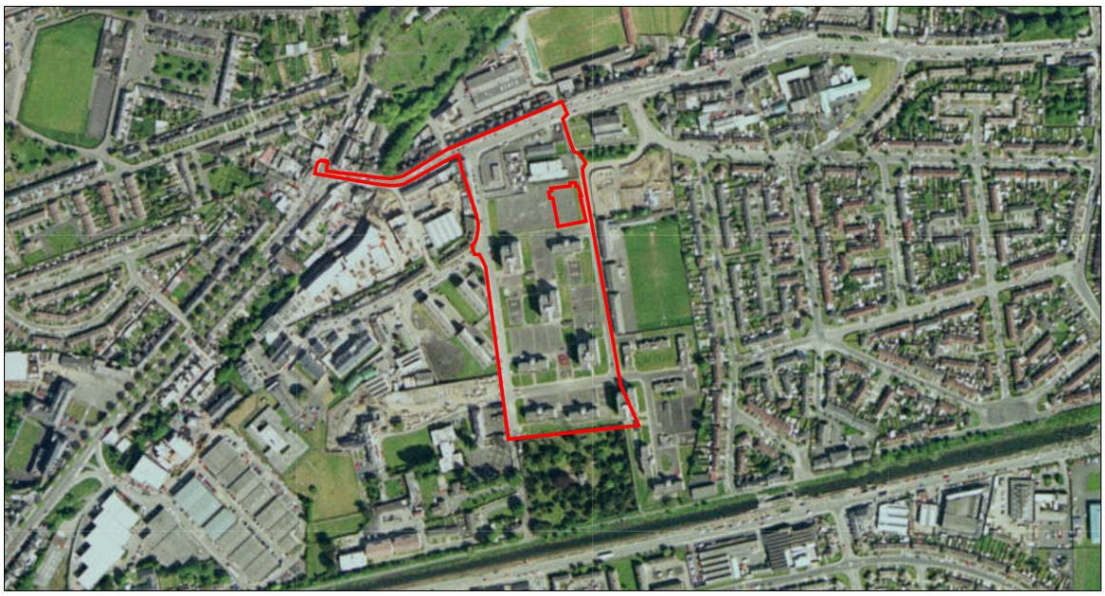


Figure 2.6. Approximate site boundary indicated by red red line on the 2000 aerial image (Source: OSI, 2021)

The aerial image dated 2005 - 2012 (refer to Figure 2.7) shows that three of the seven buildings of the St. Michael's Estate had been demolished.

Development of residential housing is visible at Bulfin Court. The residential properties which bound the barracks to the south had undergone demolition since 2000.

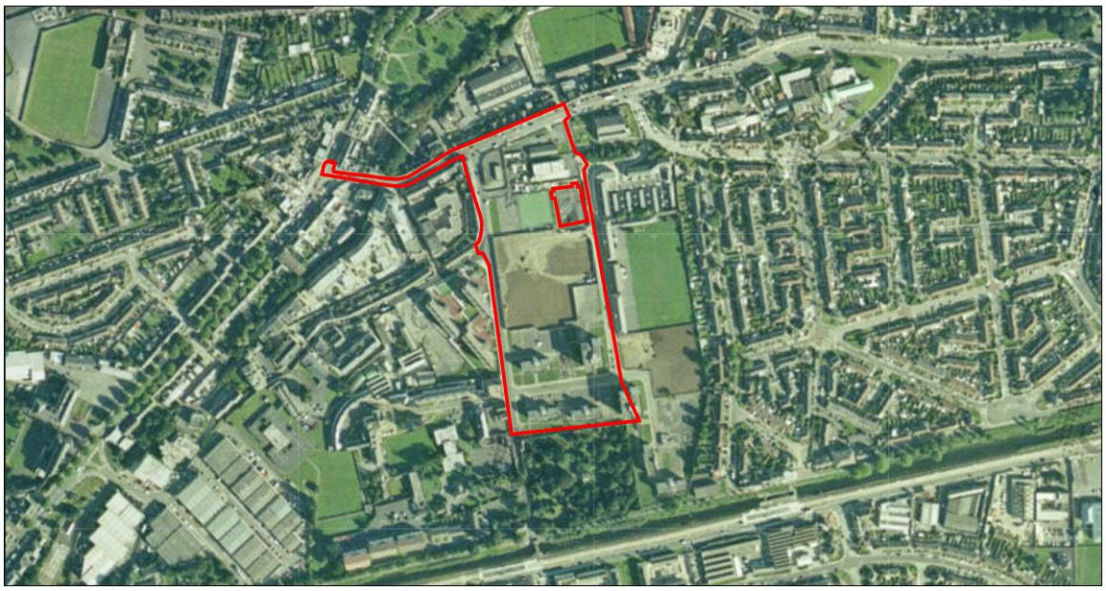


Figure 2.7. Approximate site boundary indicated by red red line on the 2005-2012 aerial image (Source: OSI, 2021)

Analysis of aerial image from 2013 – 2018 (refer to Figure 2.8) shows the site in its current form with the St. Michaels estate fully demolished thereby leaving open space which remains now as a grass field. On the north of the site, the Inchicore Community Sports Centre had been built, one of the northern buildings was partially demolished, and the other three buildings remain similar to what they were in the aerial images dated 2005 - 2012 (refer to Figure 1.2). The halting site was depicted as demolished.



Figure 2.8. Approximate site boundary indicated by red line on the 2013-2018 aerial image (Source: OSI, 2021)

2.5. Site Physical Setting

Information regarding the site topography, hydrology, geology, hydrogeology, and ecology of the area has been obtained from records held by the Geological Survey of Ireland (GSI), Environmental Protection Agency (EPA) Envision online mapping tool, Ordnance Survey of Ireland (OSI), Water Framework Directive Maps and National Parks and Wildlife Service (NPWS) databases.

2.5.1 Topography

The topography of the site varies from 28.70mAOD in the southwest corner to 22.81mAOD in the northern end.

Contour lines decrease from southwest to northeast. Land survey and elevation maps for existing and nearby buildings and for adjacent streets are in Appendix B.

2.5.2 Area of Geological Interest

GSI online mapping service was consulted regarding areas of geological interest in the area of the site. The nearest area of geological heritage is the Phoenix Park (site code DC009) which is located approximately 0.9 km north of the site. The site comprises an extensive natural landscape scanning out over an area of 707 hectares (ha). The site is designated due to the complexity of the native glacial sediments. Refer to Figure 2.9 from the GSI online mapping for further information.

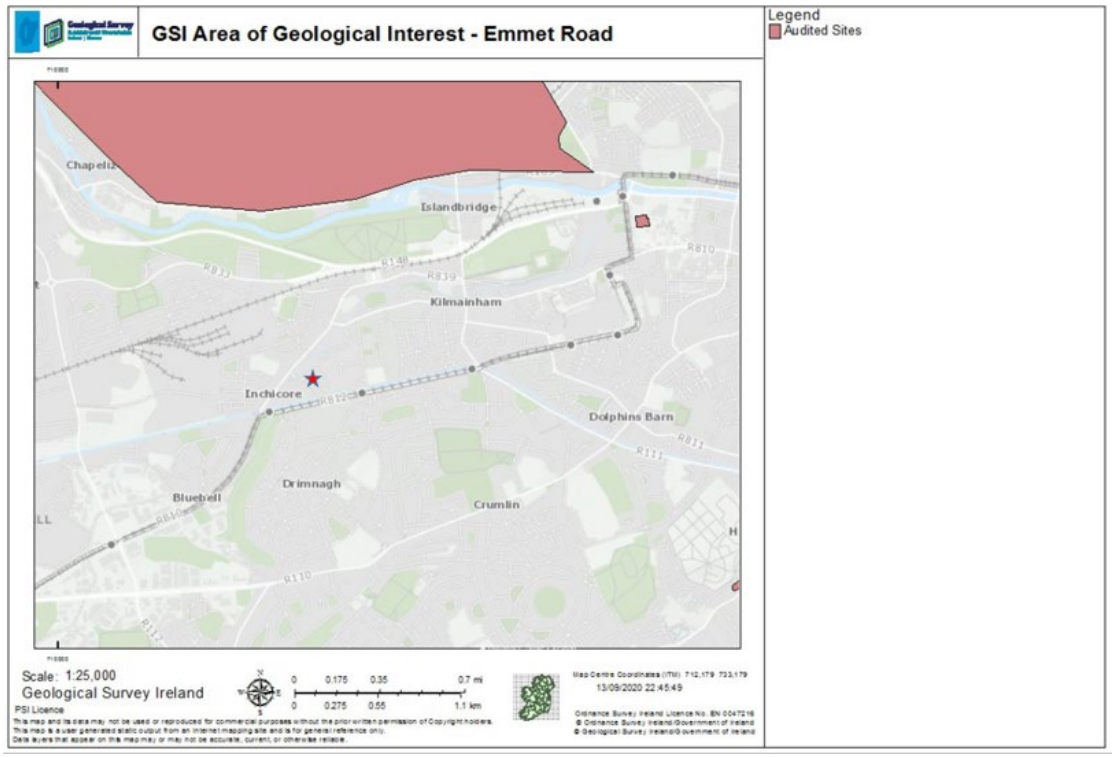


Figure 2.9 Area of Geological Interest (Approximate site location indicated by the red star) (Source: GSI, 2020)

2.5.3 Topsoil

The topsoil beneath the site and the immediately surrounding area have been classified as made ground. Refer to Figure 2.10 from the GSI online mapping for further information.

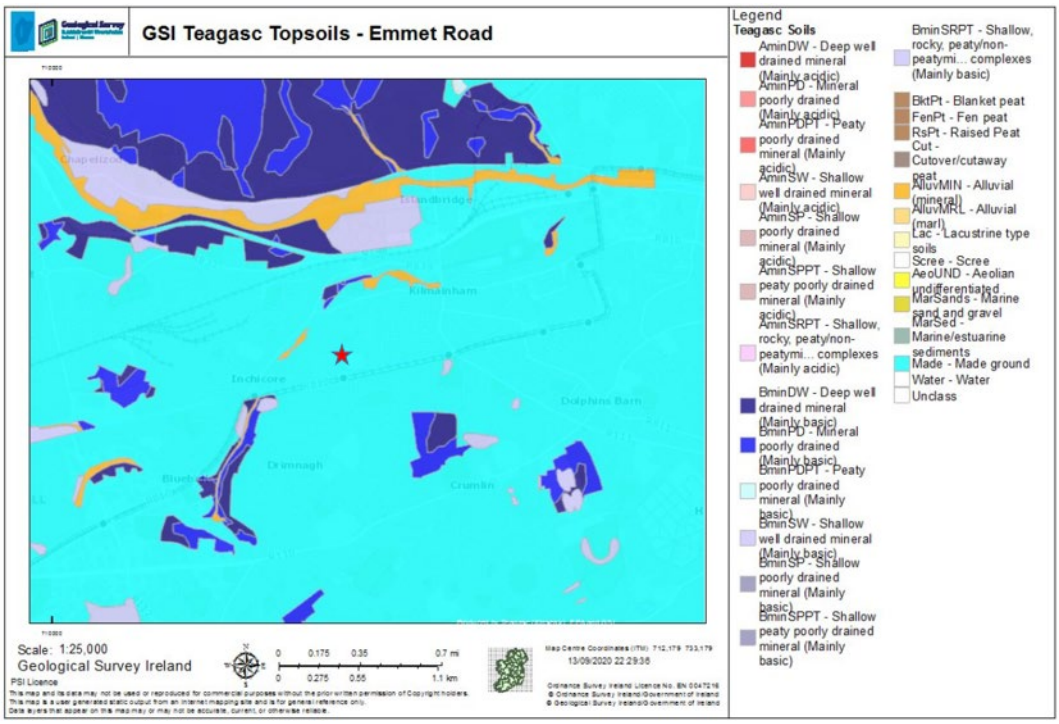


Figure 2.10. Teagasc Topsoils (Approximate site location indicated by the red star) (Source: GSI, 2020)

2.5.4 Unconsolidated Geology

"The Quaternary geology of Ireland – Sediments Map is a representation of the surficial geology of Ireland at a scale of 1 to 50,000. The map shows the sediments mapped within one meter of the surface which were laid down during the Quaternary Period, bedrock at or close to the surface, water bodies, or made ground. Quaternary sediments are categorised according to their genesis. The main types of sediment recognised are tills, (glacio) fluvio/lacustrine deposits, alluvium, lacustrine sediments, and peat. Bedrock and karstified bedrock at or close to the surface are also mapped out as separate units. The Quaternary sediments have been described beneath the site as `tills derived from limestones`. Refer to Figure 2.11.

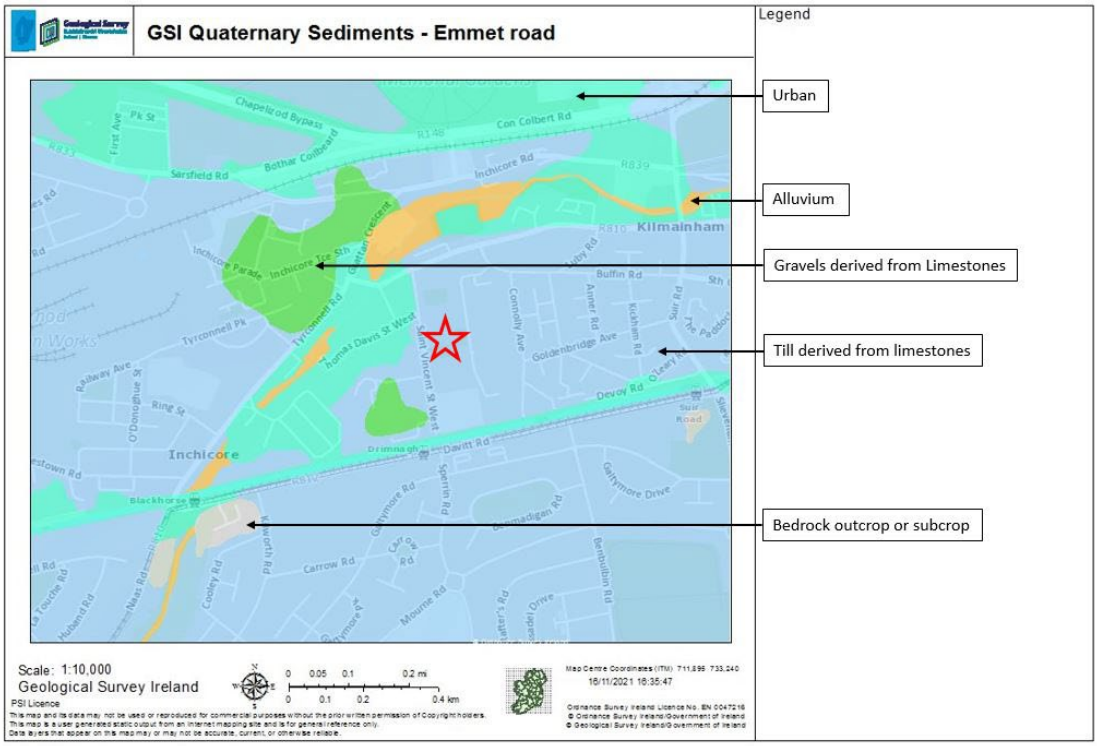


Figure 2.11 Quaternary Sediments (approximate site location indicated by red star) (Source: GSI, 2021)

2.5.5 Geology

The bedrock beneath the site area consists of the Carboniferous Lucan Formation, a dark limestone and shale. "The formation comprises dark-grey to black, fine-grained, occasionally cherty, micritic limestones that weather paler, usually to pale grey. There are rare dark coarser grained calcarenitic limestones, sometimes graded, and interbedded dark-grey calcar" (GSI). The local geology mapped by the GSI is illustrated on Figure 2.12.

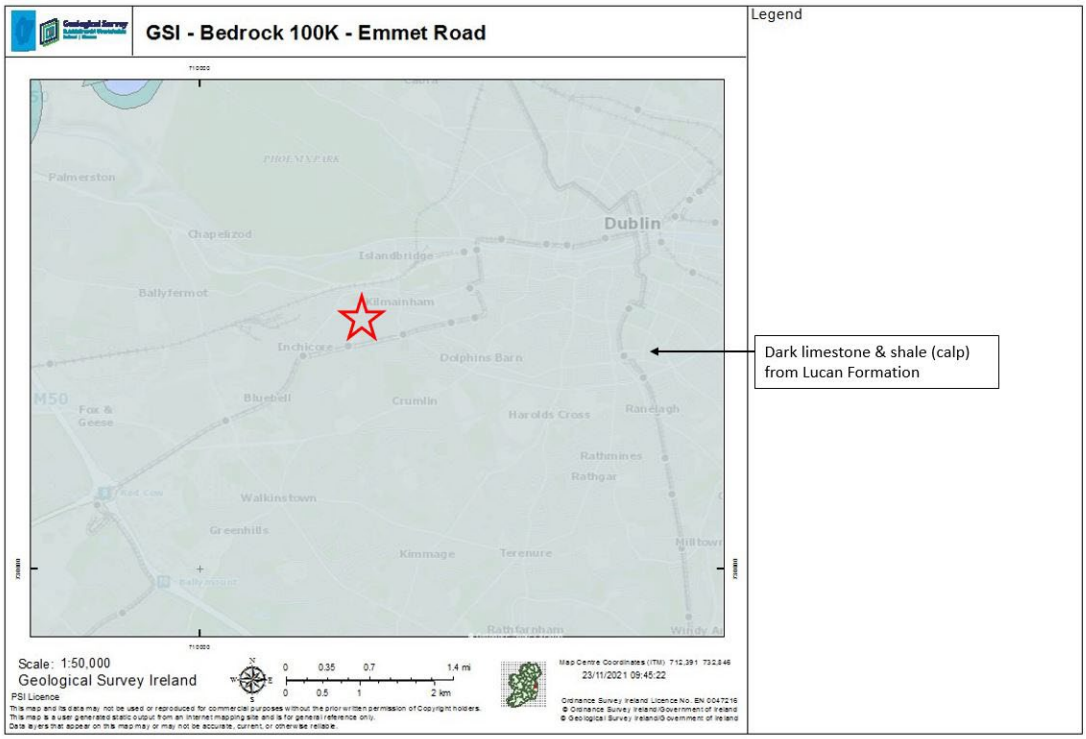


Figure 2.12. Bedrock 100K (Approximate site location indicated by the red star) (Source: GSI, 2020)

2.5.6 Aquifers

The GSI provides a methodology for aquifer classification based on resource value (Regionally Important, Locally Important, and Poor) and vulnerability (Extreme, High, Moderate, or Low). Resource value refers to the scale and production potential of the aquifer whilst vulnerability refers to the ease with which groundwater may be contaminated by human activities (vulnerability classification primarily based on the permeability and thickness of subsoils).

The site is underlain by a LI - locally important aquifer which spans out/covers an area of 1,309 km^2. The bedrock aquifer is classified as moderately productive only in local zones (refer to Figure 2.13) and is part of the Dublin Ground Water Body (GWB) which is described as poorly productive. The GWB covers an area of 837km^2 of Dublin and Kildare. The GSI Summary Characteristics of the Dublin GWB indicate that the transmissivity of these rock units is likely to be low (1-10m^2/d).

Most flow in this aquifer will occur near the surface in fractures. In general, the effective thickness of this aquifer is likely to be about 10 m, comprising a weathered zone of a few metres and a connected fractured zone below this. However, deep water strikes are commonly found in more isolated faults/ fractures at depths of 30 – 50 mbGL. Flow path lengths are not considered to be on a regional scale and are typically less than 1km in length.

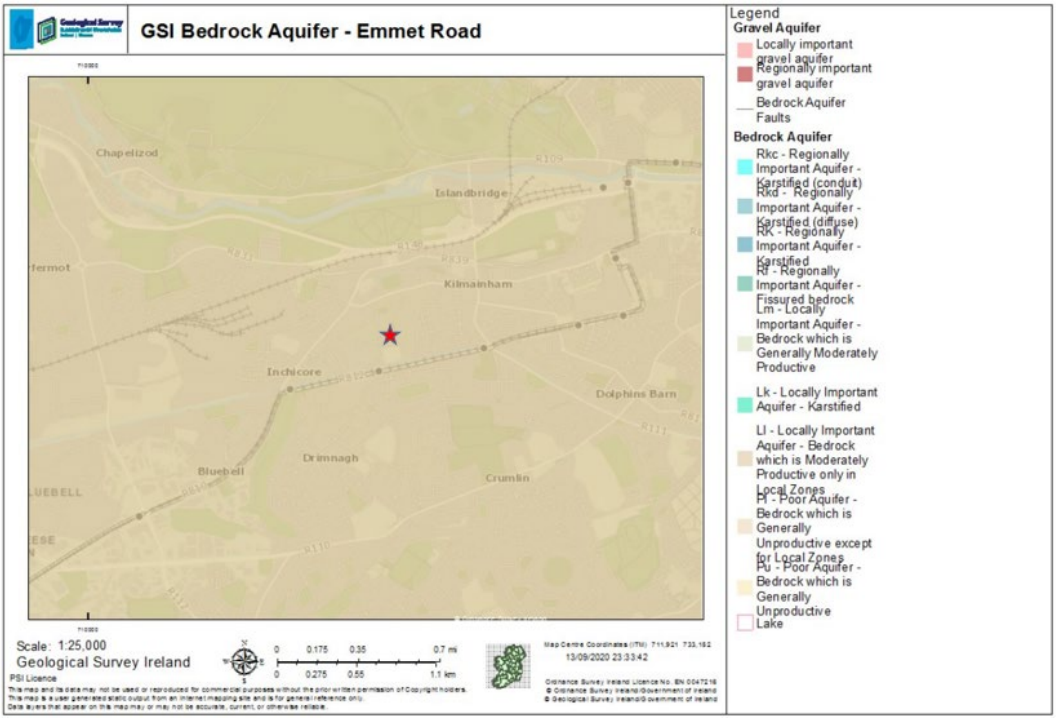


Figure 2.13 Aquifers (Approximate site location indicated by the red star) (Source: GSI, 2020)

2.5.7 Aquifer Vulnerability

The groundwater vulnerability beneath the site is ***High*** with localized ***Extreme*** zones 0.6 km southeast and southwest of the site (refer to Figure 2.14). Vulnerability ratings are a function of overburden thickness and permeability which might offer a degree of protection and/or attenuation to the underlying aquifer from surface activities and pollution.

There were no karst features identified adjacent to the site.

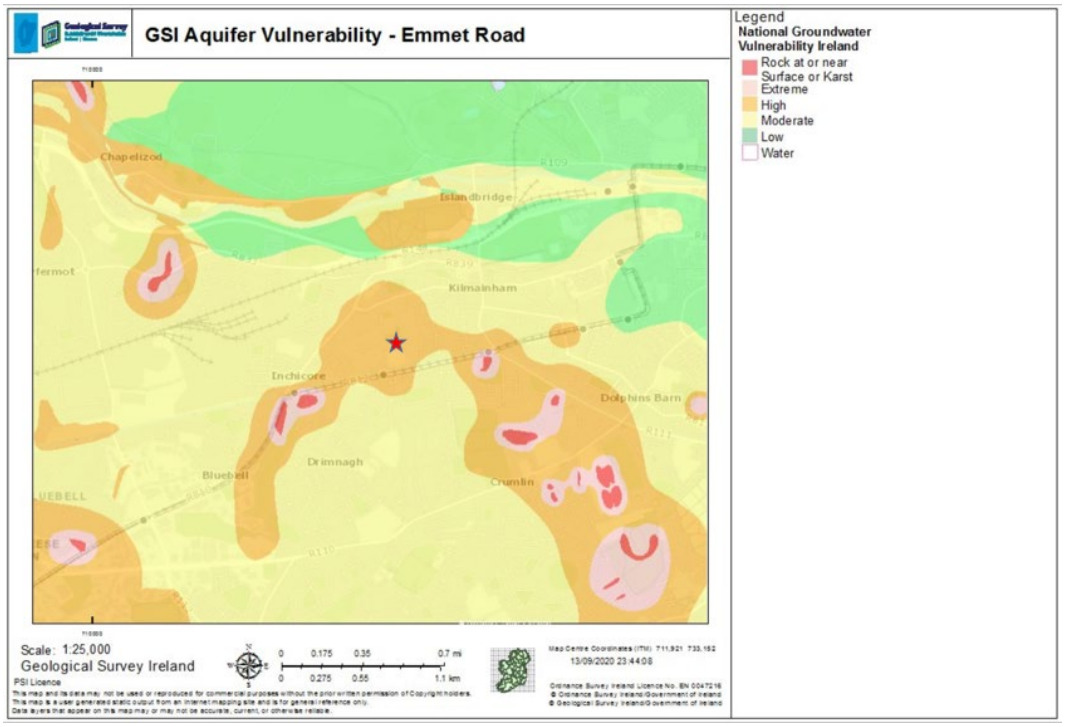


Figure 2.14 Groundwater Vulnerability (Approximate site location indicated by the red star) (Source: GSI, 2020)

2.5.8 Groundwater Status

An assessment carried out under the Water Framework Directive (WFD) 2013-2018 groundwater body (EPA, 2021) has concluded that the groundwater within the bedrock aquifer is presently of 'Good Status'. Accordingly, the objective is to protect the "Good Status" by recognizing that the quality of groundwater is at risk due to point and diffuse sources of pollution. Refer to Figure 2.15.

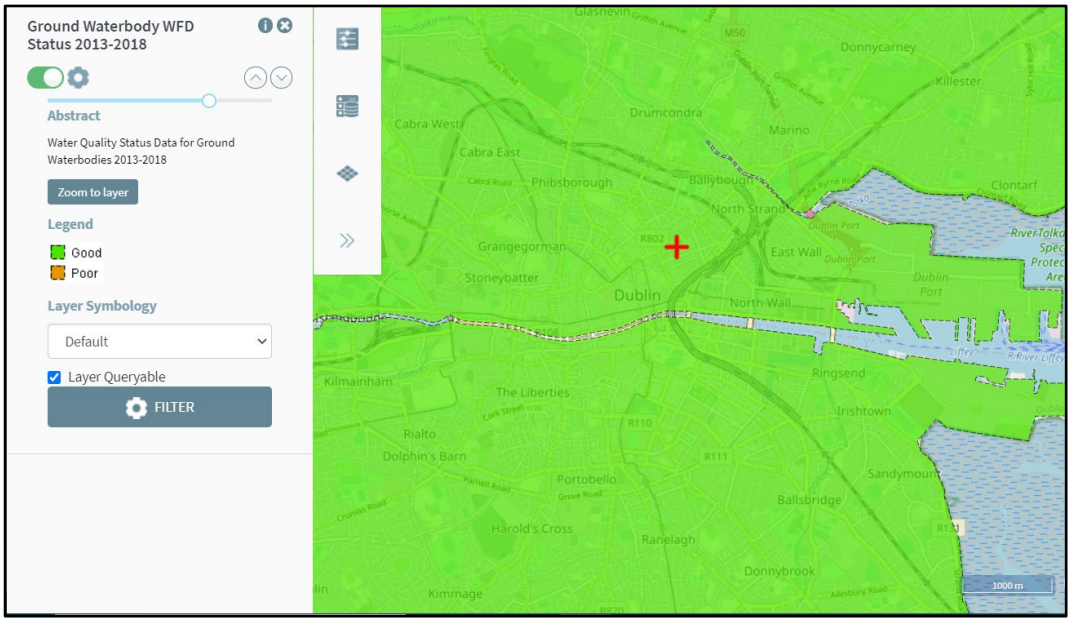


Figure 2.15 WFD Status 2013-2018 (Approximate site location indicated by the red cross star) (Source: EPA maps, 2021)

According to the Water Framework Directive Classification Scheme, the risk of the groundwater body not meeting its WFD objectives by 2027 is 'At Review' (see Figure 2.16).

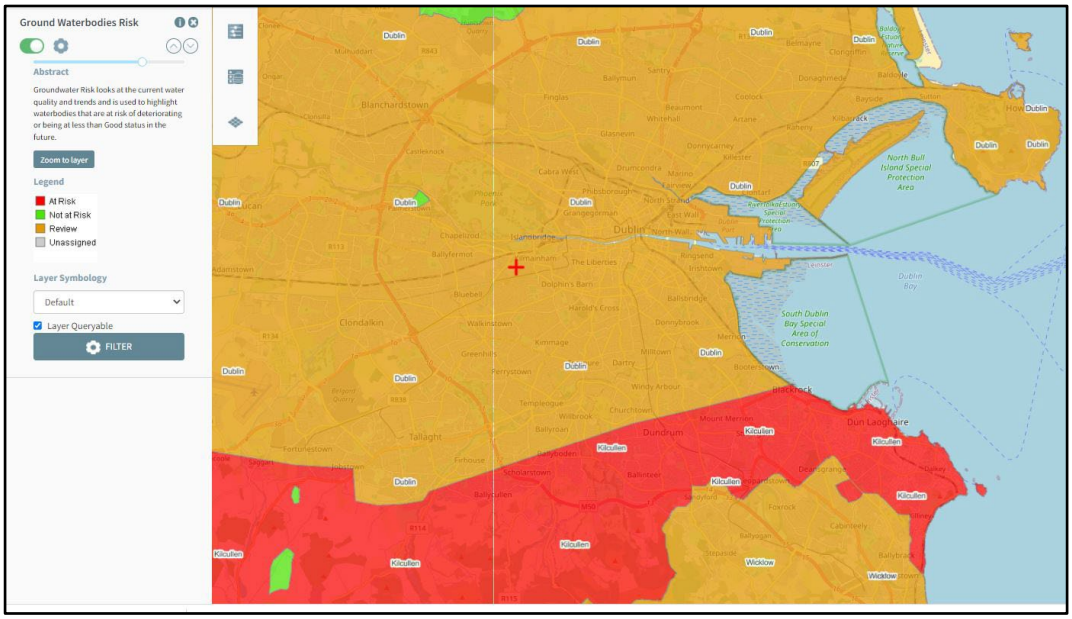


Figure 2.16 WFD Risk Status (Approximate site location indicated by the red cross) (Source: EPA maps, 2021)

2.5.9 Groundwater Recharge

Diffuse recharge generally occurs via rainfall percolating through the subsoil and reaching the aquifer. Recharge is higher in areas where the subsoil is thinner and/or more permeable. The proportion of the effective rainfall that recharges the aquifer

is largely determined by the thickness and permeability of the soil and subsoil, and by the slope.

The GSI's groundwater recharge model parameters for the site are summarised in Table 2.2. Figure 2.17 depicts the GSI groundwater recharge zones for the site area. These estimates of recharge do not account for leakage to ground from water supply, storm drains, and sewers.

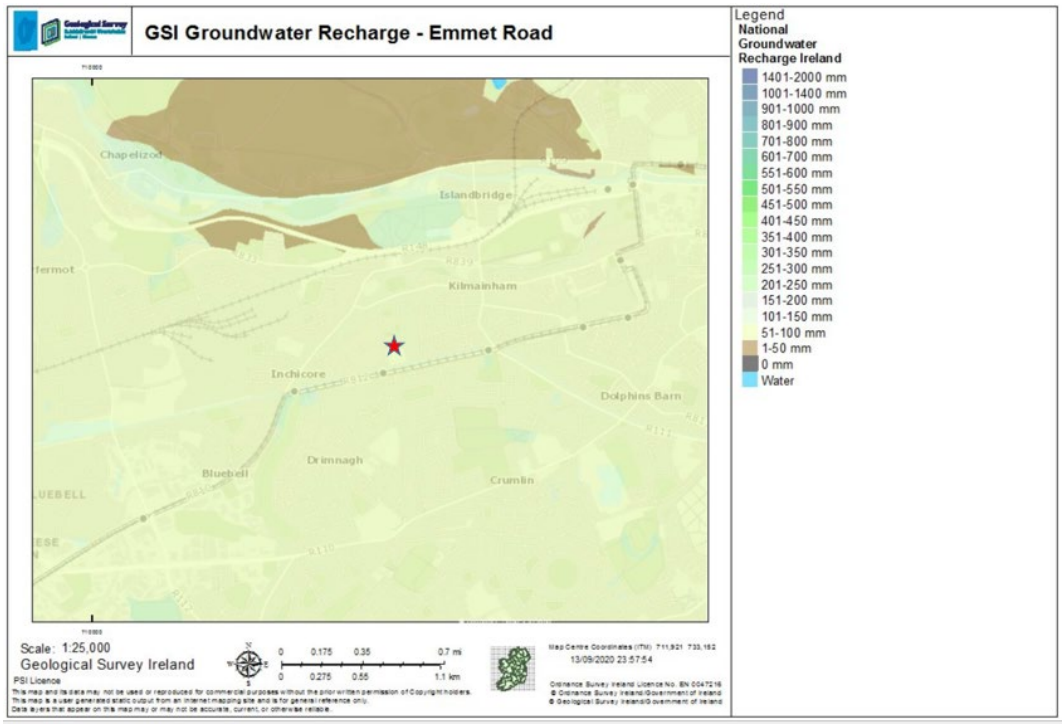


Figure 2.17 Groundwater Recharge (Approximate site location indicated by the red star) (Source: GSI, 2020)

Table 2.2 GSI Groundwater Recharge Parameters

Groundwater Recharge Parameters	
Average Recharge (mm/yr):	70
Hydrogeological Setting Description:	Made ground
Soil Drainage:	MADE
Subsoil Type:	Made
Subsoil Description:	Made ground
Subsoil Permeability:	L
Subsoil Permeability Description:	Low
GW Vulnerability:	H
GW Vulnerability Description:	High
Aquifer Category:	LI
Aquifer Category Description:	Locally important aquifer- Bedrock which is moderately productive only in local zones
Recharge Coefficient (%):	20
Maximum Recharge Capacity (mm/yr):	200
Effective Rainfall (mm/yr):	350

2.5.10 Wells & Springs

A search of the GSI groundwater well database was conducted to identify registered wells in the surrounding area. The well in closest proximity to the site is located approximately 1.3 km to the south/southeast of the site in Drimnagh, Dublin 12. It was drilled on January 4th 1996 to a depth of 3.3 m for an unspecified purpose. The second nearest is a borehole drilled on August 1th 1949 to 41.1 meters for industrial use.

The GSI (1999) also provides a framework for the protection of groundwater source zones (e.g. areas of contribution to water supply bores). There are no reported source protection zones (SPZs) within a 20km radius of the site.

Mapped wells and springs in the general vicinity of the site identified by the GSI are illustrated on Figure 2.18.

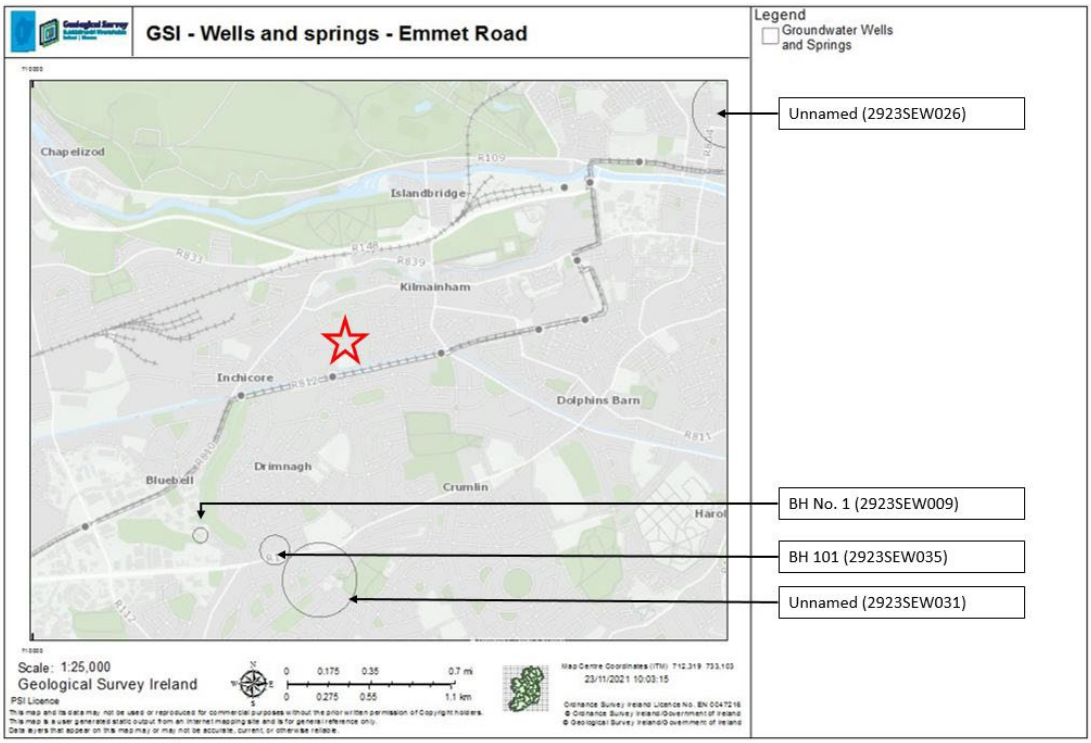


Figure 2.18 Wells and springs (Approximate site location indicated by the red star) (Source: GSI, 2021)

2.5.11 Hydrology

The Grand Canal, at its closest point, is located approximately 0.11 km south of the site and flows in an easterly direction. The WFD status of the Grand Canal has been designated as 'Good'. The Camac River is located approximately 0.07 km northwest of the site and has been designated as having a 'Poor' WFD status. The River Liffey is approximately 0.65 km north of the site and has been identified as having a 'Moderate' WFD status. Refer to Figure 2.19.

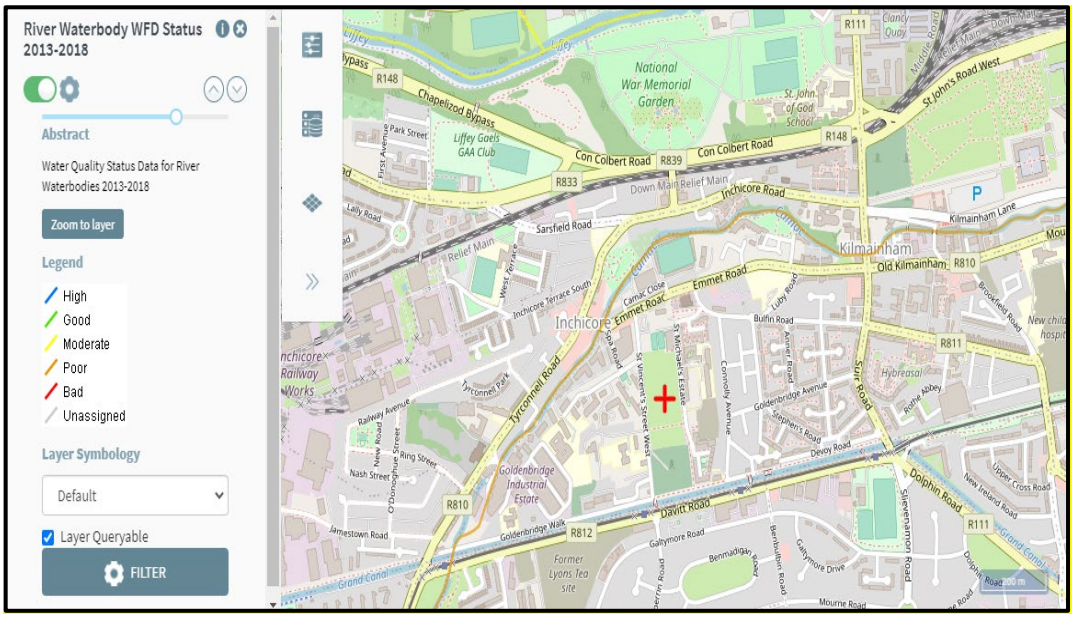


Figure 2.19 River Waterbody Status 2013- 2018 (Approximate site location indicated by the red star) (Source: EPA, 2020)

The Grand Canal has been designated as 'Not at Risk' of meeting its WFD objectives by 2027. Conversely, the Camac River and River Liffey are both identified as 'At Risk' of not meeting their WFD objectives by 2027. Refer to Figure 2.20.

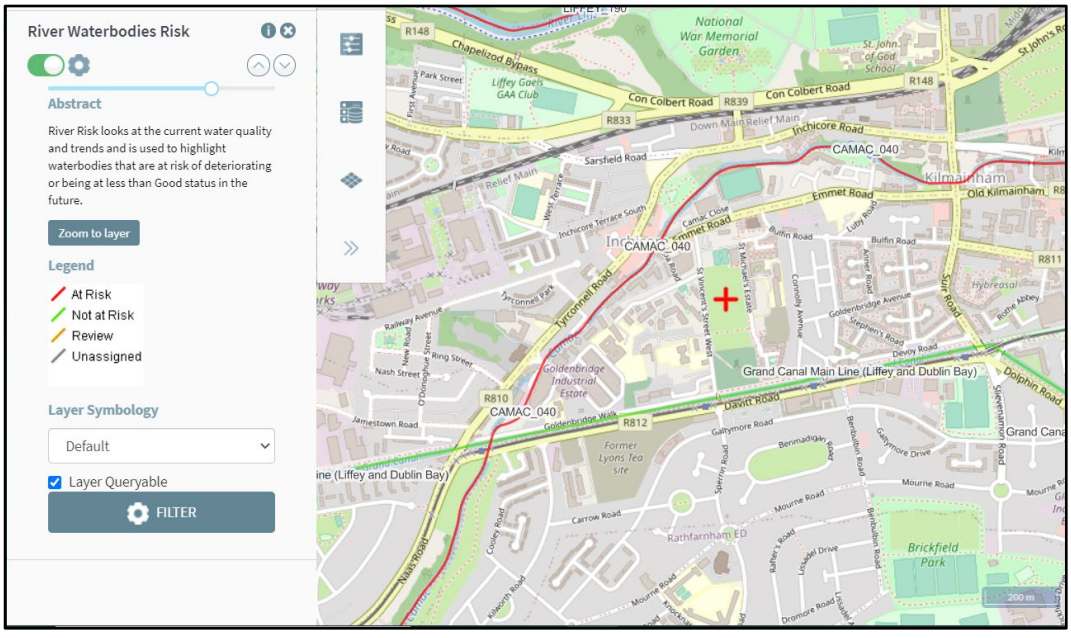


Figure 2.20 WFD Risk score 2013- 2018 (Approximate site location indicated by the red star) (Source: EPA, 2020)

2.5.12 Radon

According to the EPA (now incorporating the Radiological Protection Institute of Ireland) about 1 in 20 homes in this area is likely to have high radon levels. This is considered a low ranking score. Refer to Figure 2.21.

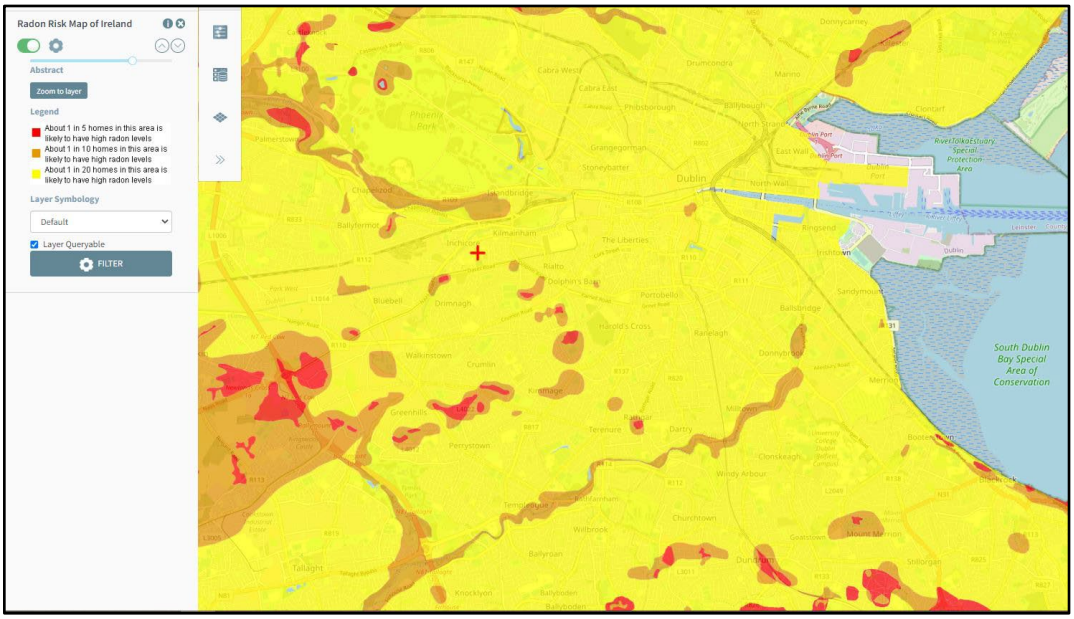


Figure 2.21 Radon Map (Approximate site location indicated by the red cross) (Source: EPA, 2021)

2.5.13 Designated Areas of Conservation

The nearest Proposed Natural Heritage Area (pNHA) is the Grand Canal (Site Code 002104) main line located approximately 0.1km south of the site (refer to Figure 2.22). The second nearest pNHA is River Liffey Valley (Site Code 000128), located 2.7km northwest of the site at its closest point.

The nearest Special Protected Area (SPA) is the South Dublin Bay and River Tolka Estuary SPA (Site Code 004024), located approximately 6.9km east of the site (refer to Figure 2.22). The second nearest pNHA is North Bull Island SPA (Site Code 004006), located 9.1km northeast of the site at its closest point.

The nearest Special Area of Conservation (SAC) is South Dublin Bay (Site Code 000210), located approximately 6.9km east of the site (refer to Figure 2.22). The second nearest SAC is North Dublin Bay SAC (Site Code 000206), located 9.3km northeast of the site at its closest point.

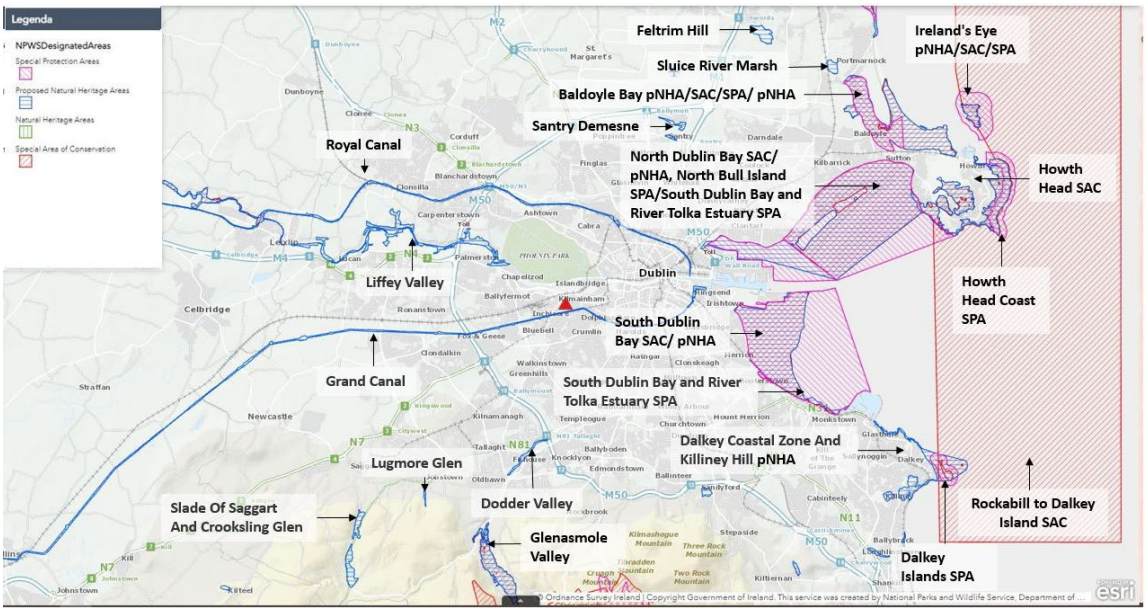


Figure 2.22 NPWS Designated Area (approximate site perimeter location indicated by red line)

2.5.14 Summary of the Physical Site Setting

Summary of the site physical setting are outlined in Table 2.3.

Table 2.3 Summary Site Setting

FEATURE	DETAILS & COMMENTS
Topography	Relatively flat site at elevation in an urban setting.
Geology	**Topsoil and Subsoil:** Made ground and 'Urban'.
	Solid Geology: According to GSI data, the bedrock geology beneath the site is underlain by Carboniferous Lucan Formation comprising dark limestones and shales
Hydrogeology	**Aquifer Classification:** ***Ll -*** Locally Important which is moderately productive only in for local zones
	Vulnerability & Recharge: The vulnerability has been classified as ***High***. The maximum recharge capacity has been modelled at 200 mm/year.
	Groundwater Flow:

	The regional bedrock groundwater flow direction is from the southwest to the north and east of the site.
	Well Search: There were no Source Protection Zones identified on or near the site. Therefore, the assumption is that there are no public supply wells within a 20km zone. The nearest registered borehole is located approximately 1.4 km south-southeast of the site in Drimnagh. It was drilled on January 4th, 1996, to a depth of 3.3m for an unspecified purpose. The second nearest is a borehole drilled on August 1st 1949 to 41.1 meters for industrial use.
Hydrology	**Surface Water Courses:** There are no surface watercourses on the site. The Grand Canal main line, the River Camac, and the River Liffey are 110m, 70m and 650m, respectively from the site. The WFD status is 'Good' for Grand Canal, 'Poor' for Camac, and 'Moderate' for the Liffey. Grand Canal was designated 'Not at Risk' and the River Liffey and River Camac are designated 'At Risk' of meeting their 2027 WFD objectives.
Designated sites	The nearest Proposed Natural Heritage Areas (pNHA) are the Grand Canal (Site Code 002104) main line and River Liffey Valley (Site Code 000128), located approximately 0.1km south and 2.7km northwest, respectively. The nearest Special Protected Area (SPA) are the South Dublin Bay and River Tolka Estuary SPA (Site Code 004024), and pNHA is North Bull Island SPA (Site Code 004006) located 6.9 east and 9.1km northeast, respectively. The nearest Special Area of Conservation (SAC) is the South Dublin Bay (Site Code 000210) and North Dublin Bay SAC (Site Code 000206), located 6.9km east and 9.3km northeast, respectively.

2.6. Site Walkover

OCSC undertook a site walkover survey at the site in October 2020. Photographs taken during the site investigation are included in Appendix C. The main observations of the survey are summarised below.

2.6.1 Infrastructure

Four buildings were on-site, including the Celtic Pigeon Club which has since been demolished, Inchicore Community Sports Center which does not form part of the planning application, and the EVE Tusicint Health Building and the St. Michaels

Parish Community Center which are part of a separate Part 8 planning application. The former halting site located directly east of the Pigeon Club, was not accessible, was bounded by stone walls and inside contained large boulders, shrubs, trees and fly-tipped waste.

2.6.2 Waste

The site is littered with general waste and domestic waste with evidence of fly tipping. In addition, evidence of waste burning was noted on the site during the ground investigation works.

2.6.3 Surface Waterbodies

No surface waterbodies are located on the site. The River Camac is the closest surface waterbody and is located 0.07km northwest of the site. The Grand Canal is located 0.11km south of the site.

2.6.4 Monitoring Infrastructure

No monitoring infrastructure was observed during the site walkover.

2.6.5 Asbestos

No asbestos was observed during the site walkover. However, waste was observed across the site during the ground investigation mainly domestic household waste. There is a low potential for Potentially Containing Asbestos Material (pACM) to be located within the fly-tipped waste.

3 PRELIMINARY CONCEPTUAL SITE MODEL

3.1 Risk Assessment Methodology

Currently there is no specific legislation addressing contaminated land in Ireland and therefore this report has been prepared considering the most relevant guidance published by the Irish Environmental Protection Agency (EPA) and the UK Environment Agency (EA) guidance as referenced in Section 1.6. Both authorities advocate a risk-based assessment when dealing with contaminated land and groundwater issues and this is considered best practice as well as being a requirement under the Environmental Liability Regulations (S.I. 547 of 2008).

A critical element of the risk assessment process is the establishment of a Conceptual Site Model (CSM) for the site. A CSM describes the potential sources of contamination at a site, the migration pathways it may follow and the receptors it could impact. If a complete source-pathway-receptor scenario exists, then there is a potential pollutant linkage that needs to be characterised and assessed (via formal risk assessment). All three elements need to be present for a viable risk to exist (e.g. if a source and receptor exist but no pathway is present then there is no pollutant linkage and hence no risk). The CSM is updated and refined as more information is gathered from subsequent desk studies and site investigations.

3.2 Contamination Sources

Following the Phase I review the areas of concern which are considered as potential pollutant sources are summarised in Table 3.1:

Table 3.1 Potential Areas of Concern

AREA/ ASPECT	DETAILS & COMMENTS	SIZE/ MAGNITUDE	POTENTIAL FUTURE RISK
Made Ground/ Urban	Any contaminants within the material used to fill the site.	Medium	Medium
Previous/ existing site use – construction and demolition waste, storage tanks, military buildings, former residential units	Any contaminants within the material associated with the past/current site use, former military operations, fly tipped waste, former fuel storage tanks, construction and demolition works, former use as a halting site, and pACMs.	Medium	Medium

AREA/ ASPECT	DETAILS & COMMENTS	SIZE/ MAGNITUDE	POTENTIAL FUTURE RISK
Surrounding land	Contaminants migrating into the site via groundwater.	Low	Low to Medium

3.3 Outline Conceptual Site Model

Based on the Environmental Site Assessment, several possible pollution linkages were identified for the site (Refer Table 3.2).

Table 3.2 Preliminary Conceptual Site Model

SOURCE	PATHWAY	RECEPTOR	POTENTIAL POLLUTANT LINKAGE Y/N	RISK
Environmental				
Migration of contamination from onsite and adjacent properties.	Perched groundwater flow into and through the site	Groundwater in the bedrock aquifer	Y	Moderate Potential Risk following desk study
Potential contamination from unknown source of material	Leaching contaminants from made ground	Perched Groundwater	Y	Low Potential Risk following desk study
	Perched groundwater leaching and transporting contaminants from made ground	Groundwater in the bedrock aquifer	Y	Low Potential Risk following desk study
Potential contamination from unknown source of material, from former military operations, former fuel storage tanks, fly-tipped waste,	Surface deposition	Soils (leaching)	Y	Potential Risk

SOURCE	PATHWAY	RECEPTOR	POTENTIAL POLLUTANT LINKAGE Y/N	RISK
construction and demolition waste				
Human Health				
Potential contamination from a) Imported made ground b) Past site usage including construction/demolition works, fly-tipped waste, former military operations, former fuel storage tanks	Vapour migration to indoor and outdoor air	Commercial users onsite and residential offsite	Y	Potential Risk
Migration of contamination from adjacent properties, historic Chassis Works, historic Omnibus Works, historic Tramway and Depots	Inhalation/ dermal contact/ ingestion of soils/ dusts	Commercial users onsite and residential offsite	Y	Low Potential Risk following desk study
Potential contamination from a) Imported made ground b) Past site usage including construction/demolition works, fly-tipped waste, former military operations, former fuel storage tanks			Y	Potential Risk
Potential contamination within groundwater	Migration of contaminants in the bedrock aquifer	Groundwater users	Y	Low Risk

Table 3.2 (Continued) Preliminary Conceptual Site Model

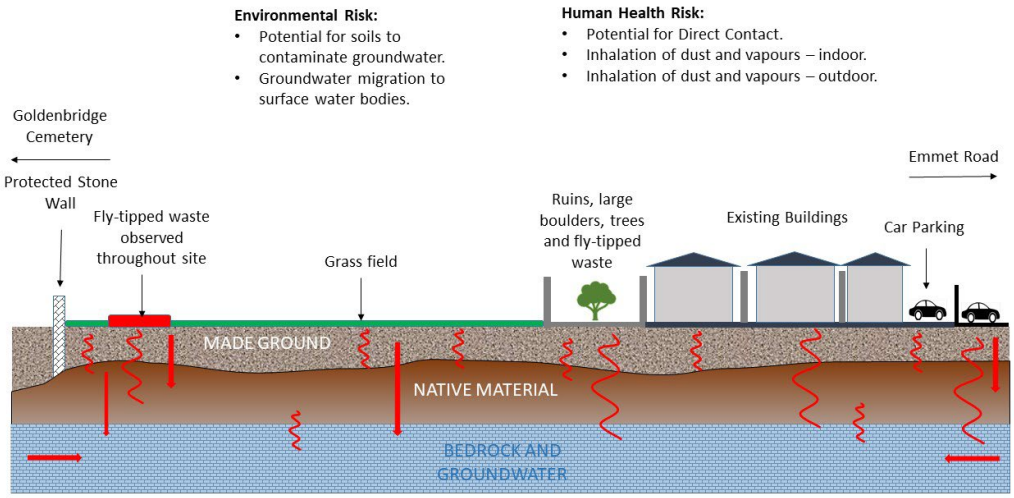


Figure 3.1 Preliminary Conceptual Site Model

Note: Generic risk assessments do not assess risks to construction workers who are managed under the Safety and Welfare at Work Regulations.

4 SITE INVESTIGATION – METHODOLOGY

Window sampling works were undertaken from 16th September to 1st October 2020. Trail pitting works were undertaken from 9th to 13th October 2020. Geobore works were undertaken from 7th to 14th October 2020. The GII Ground Investigation report is included in Appendix D. Site investigation and monitoring locations are illustrated and included in Appendix E.

Site investigation completed included the following:

- 51No. window sampling locations
- 14No. Trial Pit locations
- 6No. GeoBore locations
- 221No. soil samples collected and analysed (224No. samples for asbestos analysis)
- Gas Monitoring of 10No. standpipe locations
- 3No. groundwater samples collected and analysed

4.1 Soil Sampling & Analysis

Best practice environmental sampling techniques were adopted to minimize the risk of cross contamination between sampling locations. OCSC's field scientists wore single-use disposable nitrile gloves, which were changed following the collection of each sample. Eight (8No.) samples were collected from GII's boreholes by GII personal using best practice environmental sampling techniques. Samples selected for analyses were placed into laboratory supplied sample jars.

Samples were stored in a chilled cool box and dispatched to Element Materials Technology in Deeside, UK accompanied with an appropriate chain of custody form and scheduled for analysis. Additional soil samples were stored in a laboratory provided container and dispatched to IOM laboratory in Edinburgh, Scotland accompanied with an appropriate COC from and scheduled for specialist asbestos analysis.

4.2 Laboratory Analysis – Soil

A total of two-hundred-and-twenty-one (221No.) soil samples had been collected and were submitted to Element a UKAS accredited laboratory, for a suite of analysis. The suite of analysis includes:

- Heavy metals (antimony, arsenic, barium, cadmium, chromium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, hexavalent chromium and chromium III);
- Polycyclic Aromatic Hydrocarbons (PAHs);
- Total Petroleum Hydrocarbons Criteria Working Group (TPH CWG);
- Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) and Methyl-Tert-Butyl-Ether (MTBE);

- Mineral Oil;
- Speciated Polychlorinated Biphenyl (PCBs);
- Total Organic Carbon, dissolved organic carbon;
- Fluoride, chloride, sulphate, phenol;
- Volatile Organic Compounds (VOC) in selected samples; and
- Leachability (metals – as above);

A total of two-hundred-and-twenty-four (224 No.) soil samples were sent to IOM Laboratories (Edinburgh, Scotland) for quantitative and qualitative asbestos soil testing.

4.3 Groundwater Sampling

A groundwater sampling event was conducted on 8th January 2021. Prior to sampling, all monitoring wells were dipped with an interface probe to monitor the depth to water level in the standpipe and also to investigate the presence or absence of light non-aqueous phase liquids (LNAPLs) or dense non-aqueous phase liquids (DNAPLs). The monitoring wells were then developed prior to sample collection by removing a large volume of water and fines from the boreholes to ensure continuity with surrounding waterbody/aquifer.

Groundwater samples were taken using a bailer. OCSC's field scientists wore single-use disposable nitrile gloves and single-use tubing, which were changed following the collection of each sample. Samples selected for analyses were placed into laboratory supplied sample jars. Samples were stored in a chilled cool box and dispatched to Element Materials Technology laboratory in Deeside, UK accompanied with an appropriate chain of custody form and scheduled for analysis.

4.4 Laboratory Analysis - Water

A total of three (3No.) ground water samples were collected and submitted to Element a UKAS accredited laboratory for a suite of analyses including:

- Heavy metals (arsenic, boron, cadmium, calcium, chromium, copper, lead, mercury, magnesium, potassium, nickel, selenium, sodium, and zinc);
- Sulphate as SO_4, Chloride, and Ammoniacal Nitrogen as NH_3;
- Total Petroleum Hydrocarbon (TPH) Criteria Working Group (CWG);
- Semi-VOCs (sVOCs) for selected locations;
- Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), and Methyl-Tert-Butyl-Ether (MTBE);
- Mineral Oil;
- Polycyclic Aromatic Hydrocarbons (PAHs);
- Gasoline Range Organics (GRO); and

- Extractable Petroleum Hydrocarbons (EPH).

Laboratory Certificates are available in Appendix B.

4.5 Groundwater Level Monitoring

Groundwater level monitoring was performed from November to December 2020 and is described in Section 5.2.

4.6 Gas Monitoring

Gas Monitoring was undertaken in accordance with best practice guidelines. Samples were collected from 10No. boreholes on 7No. occasions using a GA5000 Geotech landfill gas meter equipped with flow measuring capabilities. The following parameters were measured:

- Methane (CH_4) %
- Lower Explosive Limit (%)
- Carbon dioxide (CO_2) %
- Carbon monoxide (CO) parts per million (ppm)
- Hydrogen sulphide (H_2S) ppm
- Oxygen %
- Balance of Gases %
- Flow l/hr
- Barometric pressure

4.7 Quality Assurance & Quality Control Procedures

Comprehensive Quality Assurance and Quality Control (QA/QC) procedures were implemented at all stages of the works to assess the accuracy of the data set collected and enable provision of data that is considered acceptable. In addition to adherence of sampling protocols, internal QA/QC checks by the laboratory are completed.

5 SITE INVESTIGATION – FINDINGS

5.1 Conditions Encountered

The sequence of strata encountered was recorded from OCSC's window sampling field observations, GII window sampling log, GII's trial pit log, and GII's borehole log (GII Report in Appendix D) and is summarised in Table 5.1:

Table 5.1 Measured Thickness – Conditions Encountered (m)

Measured thickness Range (m)	Strata	Description
0 to 3.2	Made Ground	MADE GROUND depths varied throughout the site, and some surface layers consisted of tarmac or concrete, while others consisted of grass topsoil at the surface layer. Brown silty sandy gravelly fill CLAY with fragments of mortar, concrete, plastic, timber, glass, and bricks. Multiple brick building structures were observed at varying depths.
1.1 to 12.6	Native Material	Brown-dark brown firm sandy gravelly CLAY. Dark grey sandy gravelly CLAY with cobbles and boulders.
3.05 to 14.5	Bedrock	Bedrock was encountered at varying depths from 3.05mbgl to 12.6mbgl. Strong thinly laminated grey fined argillaceous LIMESTONE with occasional calcite veins interbedded with weak to medium strong thinly laminated black fine grained calcareous MUDSTONE with pyrite lamination.

5.2 Conditions Encountered – Groundwater Field Observations

Water levels were recorded from 9th November 2020 to 16th December 2020 at ten locations on site and are listed in Table 5.2.

Table 5.2 Water Levels

	BH02	WS07	WS15	BH07	BH08	WS34	WS43	WS44	BH12	WS50
Ground Elevation mAOD	23.45	23.50	24.41	25.44	24.90	25.53	25.56	26.70	25.71	26.20
Slotted Depths of Standpipe (mbgl)	2.0 to 14.5	1.0 to 3.5	1.0 to 3.6	2.0 to 10.4	1.3 to 5.3	1.0 to 3.5	1.0 to 2.5	1.0 to 3.5	2.0 to 7.0	1.0 to 2.0
Response Strata	Sandy gravelly CLAY/ Clayey gravelly BOULDERS / MUDSTONE / Fine grained LIMESTONE	Sandy gravelly CLAY	Sandy gravelly CLAY	Sandy gravelly CLAY/ Clayey gravelly BOULDERS/ Fine grained LIMESTONE	Sandy clayey GRAVEL	Sandy gravelly CLAY	Sandy gravelly CLAY	Sandy gravelly CLAY	Sandy gravelly CLAY / Fine grained LIMESTONE and MUDSTONE	Sandy gravelly CLAY
09/11/2020 - mBGL	Inaccessible	Inaccessible	1.43	1.78	1.19	1.22	1.35	3.08	Inaccessible	1.06
09/11/2020 - mAOD			**22.98**	**23.66**	**23.71**	**24.31**	**24.21**	**23.62**		**25.14**
17/11/2020 - mBGL	2.36	1.56	1.27	1.68	1.15	1.09	1.14	3.05	Inaccessible	1.08
17/11/2020 - mAOD	**21.09**	**21.94**	**23.14**	**23.76**	**23.75**	**24.44**	**24.42**	**23.65**		**25.12**
19/11/2020 - mBGL	2.4	1.6	1.38	1.71	1.18	1.2	1.24	3.07	Inaccessible	1.09
19/11/2020 - mAOD	**21.05**	**21.9**	**23.03**	**23.73**	**23.72**	**24.33**	**24.32**	**23.63**		**25.11**
23/11/2020 - mBGL	2.40	1.59	1.40	1.75	1.18	1.22	1.27	3.08	Inaccessible	1.10
23/11/2020 - mAOD	**21.05**	**21.91**	**23.01**	**23.69**	**23.72**	**24.31**	**24.29**	**23.62**		**25.1**
26/11/2020 - mBGL	2.38	1.63	1.49	1.78	1.20	1.26	1.39	3.09	2.27	1.11
26/11/2020 - mAOD	**21.07**	**21.87**	**22.92**	**23.66**	**23.7**	**24.27**	**24.17**	**23.61**	**23.44**	**25.09**
01/12/2020 - mBGL	2.42	1.68	1.54	1.84	1.23	1.36	1.50	3.10	2.29	1.13
01/12/2020 - mAOD	**21.03**	**21.82**	**22.87**	**23.6**	**23.67**	**24.17**	**24.06**	**23.6**	**23.42**	**25.07**
03/12/2020 - mBGL	2.39	1.65	1.50	1.85	1.20	1.31	1.63	3.11	2.25	1.13
03/12/2020 - mAOD	**21.06**	**21.85**	**22.91**	**23.59**	**23.7**	**24.22**	**23.93**	**23.59**	**23.46**	**25.07**
16/12/2020 - mBGL	2.3	1.46	1.12	1.66	1.11	1.16	0.95	2.22	2.19	1.03
16/12/2020 - mAOD	**21.15**	**22.04**	**23.29**	**23.78**	**23.79**	**24.37**	**24.61**	**24.48**	**23.52**	**25.17**

Notes: Depths are recorded from ground surface elevation of the monitoring wells

Table 5.3 shows the water levels maximum and minimum values recorded during the monitoring period and shows a maximum variation of 0.89m of water level with fluctuations throughout the monitoring period.

Table 5.3 Water Levels Maximum and Minimum

	BH02	WS07	WS15	BH07	BH08	WS34	WS43	WS44	BH12	WS50
Ground Elevation mAOD	23.45	23.50	24.41	25.44	24.90	25.53	25.56	26.70	25.71	26.20
Slotted Depths of Standpipe (mbgl)	2.0 to 14.5	1.0 to 3.5	1.0 to 3.6	2.0 to 10.4	1.3 to 5.3	1.0 to 3.5	1.0 to 2.5	1.0 to 3.5	2.0 to 7.0	1.0 to 2.0
Response Strata	Sandy gravelly CLAY/ Clayey gravelly BOULDERS / MUDSTONE / Fine grained LIMESTONE	Sandy gravelly CLAY	Sandy gravelly CLAY	Sandy gravelly CLAY/ Clayey gravelly BOULDERS/ Fine grained LIMESTONE	Sandy clayey GRAVEL	Sandy gravelly CLAY	Sandy gravelly CLAY	Sandy gravelly CLAY	Sandy gravelly CLAY / Fine grained LIMESTONE and MUDSTONE	Sandy gravelly CLAY
Maximum Water Level (mbgl)	2.42	1.68	1.54	1.85	1.23	1.36	1.63	3.11	2.29	1.13
Maximum Water Level (mAOD)	**21.15**	**22.04**	**23.29**	**23.78**	**23.79**	**24.44**	**24.61**	**24.48**	**23.52**	**25.17**
Minimum Water Level (mbgl)	2.3	1.46	1.12	1.66	1.11	1.09	0.95	2.22	2.19	1.03
Minimum Water Level (mAOD)	**21.03**	**21.82**	**22.87**	**23.59**	**23.67**	**24.17**	**23.93**	**23.59**	**23.42**	**25.07**
Difference (+/-) in water level between min and max	0.12	0.22	0.42	0.19	0.12	0.27	0.68	0.89	0.1	0.1

5.3 Conditions Encountered - Gas

Gas monitoring was undertaken on 7No. occasions from November 2020 to December 2020 by an OCSC Environmental Consultant. See Section 6.5 for full details regarding the gas assessment.

6 GENERIC QUANTITATIVE RISK ASSESSMENT

6.1 Generic Assessment Criteria

A risk-based approach has been adopted for the assessment of data obtained during the site investigations as per the CLEA methodology (CLR 7). The risk scenario identified is Residential without Plant Uptake, Commercial and Public Open Space (POS) (Resi), Laboratory analytical results for soil samples were compared to the Generic Assessment Criteria (GAC) for 'Residential', 'Commercial' and 'POS (Resi)'.

Constituent concentrations in the site soils were deemed 'potentially significant' where they exceeded the generic values. These generic values are used for initial assessment of contaminant concentrations for the purpose of providing an initial indication of impacts at a site. Comparison with GACs is a means of evaluating the compounds that may require a more detailed assessment. It should be noted that generic exceedances are not an indication of the requirement for remediation and instead are indicative of the need for further assessment or Detailed Quantitative Risk Assessment (DQRA).

Additionally, where further risk assessment is considered necessary, use of more site-specific information in the assessment can often lead to the conclusion that the observed concentrations are present at levels which represent an acceptable level of risk, considering the actual or proposed end use of a site (although each site assessment has to be considered on an individual basis).

The risk to construction workers is not considered under the CLEA methodology. It is assumed that health and safety guidelines will be adhered to and appropriate health and safety planning/assessments shall be undertaken in advance of any on-site works.

6.1.1 Soil Screening Criteria

The soil analytical data was compared with a set of standard GAC 'Residential', 'Commercial' and 'POS (Resi)' criteria. The sources of the generic screening criteria included the following published information:

- The LQM/CIEH S4ULs for Human Health Risk Assessment (2015);
- SP1010 – Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination CL:AIRE (2014);
- EIC/AGS/CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment (2010);

In general, GACs are conservative screening criteria protective of human health. If the concentrations are below the GAC, then the risks to human health are considered negligible. If the concentrations are above the GAC, a potential risk to human health is identified and further assessment is required. The GACs are consistent with the principles of human health protection in Irish EPA, UK DEFRA, and UK Environment Agency guidance.

The active exposure pathways considered under the 'Residential', 'Commercial' and 'POS (Resi)' scenarios are:

- Ingestion of soil and dust;
- Dermal contact with soils and dust;

- Inhalation of dusts; and
- Inhalation of vapours (indoor and outdoor air).

Soil Organic Matter (SOM) was calculated to determine the most appropriate GAC values for the samples to be analysed against. The overall average of SOM in the 221No. samples is 1.44%, so 1% GAC was applied to all samples.

6.1.2 Groundwater Screening Criteria

Groundwater samples results were compared to the Society of Brownfield Risk Assessment (SoBRA) GAC for Assessing Vapour Risks to Human Health from Volatile Contaminants in Groundwater 2017. To determine environmental risk, the groundwater sample results were compared to the European Union Environmental Objectives (Groundwater) (Amendment) Regulations 2016 - SI No 366 of 2016, Environmental Protection Agency Interim Guideline Values for the Protection of Groundwater in Ireland – 2003, European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2015 S.I. No. 386 of 2015.

It is noted that the comparison of groundwater analytical results with the relevant Environmental Regulation guideline values does not determine the level of actual risk but is used as a guide to the potential risks posed. Contaminant concentrations below the GACs are considered to warrant no further risk assessment. However, concentrations above the environmental generic screening criteria may require further consideration through either qualitative or quantitative assessment. Groundwater samples results is documented in Section 6.3.

The Society of Brownfield Risk Assessment – Development of Generic Assessment Criteria for Assessing Vapour Risks to Human Health from Volatile Contaminants in Groundwater February 2017 were used to assess potential risks from volatile compounds in on-site groundwater. Further evaluation of any identified contaminants of concern (COC) were conducted in a site-specific Detailed Quantitative Risk Assessment (DQRA) to determine if the concentrations pose an unacceptable significant risk to receptors. Supplementary information on Henry's Law for additional compounds is available in the LQM/CIEH S4ULs for Human Health Risk Assessment (2015).

6.1.3 Ground Gas (Permanent Gases) Screening Criteria

A semi-quantitative assessment of ground gas concentrations was undertaken as set out in BS8485: 2015 Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings. Information was also taken from CIRIA C665 (2007) Assessing risks posed by hazardous ground gases to buildings, Wilson, S. et al. Gas screening criteria and assessment is documented in Section 6.3.

6.2 Soil Assessment Results

The soil analytical results are presented in Table 1 and the laboratory Certificate of Results in Appendix F. Soil analytical results are imposed on sample location maps and are attached in Appendix E.

6.2.1 TPHs, BTEX and MTBE

The analytical results for TPHs were below the Commercial, POS (Resi) and Residential GACs in all of samples, with the exception of:

- TPH CWG Aliphatics in 9No. samples exceeded the Residential GACs.
  - C10-C12 in 9No. samples exceeded the Residential GAC, with values ranging from 153.8mg/kg in WS30 (1 to 2mbgl) to 588.7mg/kg in WS34 (0.8 to 1mbgl).
  - C12-C16 in 3No. samples exceeded the Residential GAC, with values ranging from 1,120mg/kg in WS34 (1.3 to 1.5mbgl) to 1,602mg/kg in WS34 (0.8 to 1mbgl).
- TPH CWG Aromatics in 1No. sample exceeded the Residential GACs.
  - EC10-EC12 in 1No. sample exceeded the Residential GAC, with a concentration of 300.8mg/kg in WS34 (0.8 to 1mbgl).

The analytical results for BTEX and MTBE were below the Residential, Commercial and POS (Resi) GACs in all of samples.

6.2.2 PAHs

The analytical results for PAHs were below the Commercial, POS (Resi) and Residential GACs in all of samples, with the exception of:

- Dibenzo(ah)anthracene in 1No. sample exceeded the Residential GAC, with a concentration of 0.34mg/kg in WS13 (0 to 1mbgl).

6.2.3 Metals

The analytical results for metals were below the Commercial, POS (Resi) and Residential GACs in all of samples, with the exception of:

- Arsenic in 7No. samples exceeded the Residential GAC and 2No. samples also exceeded their POS (Resi) GAC, with values ranging from 45.3mg/kg in WS49 (0 to 0.9) to 133.9mg/kg in WS37 (0 to 1mbgl).
- Lead in 2No. samples exceeded the Residential GAC, with values ranging from 319mg/kg in WS47 (0.8 to 1mbgl) to 402mg/kg in WS38 (0.8 to 1mbgl).

6.2.4 PCBs

None of the samples contained concentrations of PCBs in excess of the Commercial, POS (Resi) and Residential GACs. All of the samples reported concentrations below the laboratory MDL.

6.2.5 Phenol

None of the samples contained concentrations of phenol in excess of the Commercial, POS (Resi) and Residential GACs.

6.2.6 Asbestos

Samples from all soil sampling locations were submitted to IOM laboratories for asbestos identification and quantification. Results confirmed that all but two of the 224No. samples were negative for asbestos. The two samples containing quantifiable levels were from two hotspots with percentages of 0.003% and 0.176% chrysotile identified in TP19 (2-3mbGL) and WS13 (0-1mbGL), respectively.

6.3 Groundwater Assessment Results

The groundwater analytical results for the three (3No.) groundwater samples are presented in Table 2. The laboratory Certificate of Results is included in Appendix F.

6.3.1 Dissolved Metals

The analytical results for dissolved metals were below the Groundwater Regulations and EPA Interim Guideline Values in all of samples, with the exception of:

- Dissolved Arsenic in 1No. sample exceeded the Groundwater Regulations and EPA Interim Guideline Values with a concentration of 12.7 ug/l in WS34.

6.3.2 TPHs, MTBE and BTEX

The analytical results for TPHs, MTBE and BTEX were below the Groundwater Regulations and EPA Interim Guideline Values in all of samples.

6.3.3 PAHs

The analytical results for PAHs were below the Groundwater Regulations and EPA Interim Guideline Values in all samples, with the exception of:

- Benzo(a)pyrene in 1No. sample exceeded the Groundwater Regulations and EPA Interim Guideline Values, with a concentration 0.034 ug/l in WS43.
- Total 16 EPA PAHs in 2No. samples exceeded in the EPA Interim Guideline Values, with concentrations of 8.02 ug/l in WS34 and 0.424 ug/l in WS43.

6.3.4 PCBs

The analytical results for PCBs were below the Groundwater Regulations and EPA Interim Guideline Values in all samples.

6.4 Groundwater Vapour Assessment Results

The groundwater results were compared to the SoBRA GACs (2017) for commercial and residential use as a screening exercise to evaluate whether the concentrations on site present a potential risk to onsite and offsite human health. These results are presented in Table 3.

All analytical results for dissolved metals, TPHs, MTBE, BTEX, PAHs, and PCBs were below the SoBRA GACs (2017) for commercial and residential Guideline Values in all of samples, with the exception of:

- TPH in 1No. sample exceeded the SoBRA 2017 Residential Development GAC for TPH CWG Aliphatics >C11-C12 (sol), with a concentration of 248 ug/l in WS34.

6.5 Gas Assessment Results

6.5.1 Site history and ground conditions

The desk study information indicates that the site has been structurally occupied since at least 1837-1842 when the site was a part of Richmond Barracks. Former site activities include military operations at the site, further conversion of the Barracks to St. Michael's Estate residential housing, and the demolition of St. Michael's Estate.

Analysis of soil organic matter (SOM) content of 221No. samples gave an overall site average of 1.44%. The peak result of 22.22% is in the Made Ground at WS44 (0 to 1mbgl) and was among four samples (all associated with Made Ground) with SOM results above 5%. These elevated results were not representative of values across the site.

6.5.2 Conditions Encountered - Gas

Gas monitoring was undertaken on 7No. occasions from November 2020 to December 2020 by an OCSC Environmental Consultant during rising and falling barometric conditions. Gas was measured in 10No. boreholes on site. Refer to Table 3 for the results.

Methane was detected at BH08 during two events with 0.1% on 3rd December 2020 and 0.4% on 16th December 2020. Methane was also detected at WS34 during four events with the highest stable concentration of 0.5% on 17th November 2020. Methane was not detected in any other boreholes.

Carbon dioxide was detected in all wells monitored. The highest peak concentration was observed in WS44 at 3.9% (stable CO_2). Concentrations in this well fluctuated from 2.6 % to 3.9%. Carbon dioxide levels in other wells ranged from 0% to 3.4%, with WS43 having the next highest concentration of stable carbon dioxide. See Table 6.1 for maximum stable concentrations of carbon dioxide.

There did not appear to be any significant impact of falling and rising barometric pressure on concentrations observed. The highest barometric pressure was recorded on 19 November 2020 (1,029mb).

Hydrogen sulphide was not detected in any of the wells during any event.

Carbon monoxide was detected in three wells monitored. Readings in BH02 and WS34 were typically at the method detection limit of the meter and were in the region of 1-2ppm. The highest concentrations were observed in BH08 at 11ppm (max

stable CO observed). Carbon monoxide was only detected in this well on one other occasion with a stable concentration of 2ppm.

Flow readings ranged from 1.3l/hr in WS34 to 0.9l/hr in BH02.

Table 6.1: Ground Gas Response Zones and maximum stable concentrations.

Monitoring Location	Slotted Depths of Standpipe (mbgl)	Response Zone	Maximum Stable Carbon Dioxide (CO_2)
BH02	2.0 to 14.5	Sandy gravelly CLAY/ Clayey gravelly BOULDERS / MUDSTONE / Fine grained LIMESTONE	0.6%
WS07	1.0 to 3.5	Sandy gravelly CLAY	0.3%
WS15	1.0 to 3.6	Sandy gravelly CLAY	2.6%
BH07	2.0 to 10.4	Sandy gravelly CLAY/ Clayey gravelly BOULDERS / Fine grained LIMESTONE	1.4%
BH08	1.3 to 5.3	Sandy clayey GRAVEL	0.3%
WS34	1.0 to 3.5	Sandy gravelly CLAY	2.4%
WS43	1.0 to 2.5	Sandy gravelly CLAY	3.4%
WS44	1.0 to 3.5	Sandy gravelly CLAY	3.9%
BH12	2.0 to 7.0	Sandy gravelly CLAY/ Fine grained LIMESTONE and MUDSTONE	2.9%
WS50	1.0 to 2.0	Sandy gravelly CLAY	2.3%

6.5.3 Risk Assessment

Possible Sources

As can be seen from Table 6.1, the carbon dioxide concentrations varied across the site with changes in depth and strata. Most of the higher concentrations of CO2 were

in sandy gravelly CLAY, which contained made ground and native material and varied in thickness and composition across the site.

Made Ground – Based on the ground gas results, it is considered that the Made Ground on site presents a limited potential ground gas source given the low degradable content. WS43, WS44, and WS50 standpipes were installed in areas of made ground with no native material. All other standpipes were installed in made ground and native material.

Made ground typically contained brick, plastic, concrete, mortar, and metal fragments.

Native Material –Based on the ground gas results, it is considered that the native material presents a limited potential ground gas source given the low degradable content.

Receptors

The receptors that have been considered during this assessment are the onsite residential, commercial, and public open space (resi) receptors of the proposed development. There will be mixed-use multi-storey apartment units in addition to commercial, retail and community facilities with no basement. The apartment units, community centres, and retail facilities can be considered a Type B building.

A Type B building according to BS8485 is a '*private or commercial property with central building management control of any alterations to the building or its uses but limited or no central building management control of the maintenance of the building, including the gas protection measures. Multiple occupancy. Small to medium size rooms with passive ventilation of rooms and other internal spaces throughout ground floor and basement areas. May be conventional building or civil engineering construction. Examples include managed apartments, multiple occupancy offices, some retail premises and parts of some public buildings (such as schools, hospitals, leisure centres) and parts of hotels.'*

Pathways

Potential pathways include:

1. Services: Given that this is a new building, services will be cast into the slab and will be sealed to ensure they are waterproof. Therefore, gas migration will not be significant.
2. Vertical migration through the floor slab.
    a. Foundation slab – concrete floor slab with minimal penetrations.

The risk associated with the migration scenarios identified above have also been assessed following the CIRIA document C665 (Assessing risks posed by hazardous ground gases to buildings). The pathway, likelihood, consequence, and overall risk has been assessed in Table 6.2.

Table 6.2: Overall Risk

Pathway	Likelihood	Consequence	Overall Risk
1. Services	Unlikely	Severe	Low Risk
2. Vertical Migration	Unlikely	Severe	Low Risk

Based on the ground gas measurements of methane and carbon dioxide concentrations of less than 4%, the made ground and native material on site likely present a limited potential ground gas source given their low degradable content.

To assess the level of risk associated with the carbon dioxide concentrations recorded in site soils, a gas screening value (GSV) has been determined for the site using the highest concentration recorded. The GSV is given by:

GSV = borehole flow rate (l/hr) x gas concentration (%)

Note: the gas concentration is in the mathematical form.

The GSV for the Site is 0.0507l/hr. This corresponds to a Characteristic Situation 1 (CS1) which has a hazard potential of Very Low. The gas concentrations measured are in accordance with the additional factors that need to be considered including the fact that the methane concentrations are <1% and carbon dioxide concentrations are <5%.

6.5.4 Conclusions and Recommendations

Based on the available information, it is considered that the made ground and native material on site present a limited ground gas source given the low degradable content. Therefore, the risk posed to the future residential and commercial occupiers of the development by the detected concentrations of ground gas is considered low.

7 REFINED CONCEPTUAL SITE MODEL (CSM)

Based on the findings of the soil assessment i.e., the results of the GQRA, there is the potential for some material to present a risk to future residential receptors. The CSM can now be refined using site specific information and the potential risk to human health can be assessed taking into account the proposed redevelopment of the site as outlined in Section 1.3.

7.1 Source – Made Ground – from previous site use or original source.

The exceedances of the GAC for metals (arsenic and lead) for residential (without plant uptake) and for public open space (resi) were in made ground. TPH and PAH exceedances of the GAC for Residential were both in the made ground and native material.

A Generic Quantitative Risk Assessment identified that the risk from the material in terms of 'Residential', 'Commercial' and 'Public Open Space (Resi)' scenarios are acceptable with the following exclusions: 20No. of the 221No. samples contained concentrations in excess of their GACs.

- WS15, WS16, WS17, TP19, WS20, WS37 and WS49 had exceedances above their GACs for arsenic. WS38 and WS47 had exceedances above their GACs for lead.
- WS13 had an exceedance above its GACs for dibenzo(ah)anthracene. WS30, TP33, WS34, WS39, and TP40 had exceedances above their GACs for TPH CWG Aliphatics (C10-C12). WS34 and WS39 had exceedances above their GACs for TPH CWG Aliphatics (C12-C16) and WS34 had additional exceedance of TPH CWG Aromatics (EC10-EC12).

As part of the design, it will be possible to break the Source Pathway Receptor linkage using the proposed buildings and hardstanding. This is particularly relevant for arsenic, lead and dibenzo(ah)anthracene exceedances. However, TPH exceedances will require additional modelling, mitigation, or removal of the source material in order to successfully break the SPR linkage adjacent to WS30, TP33, WS34, and WS39. On the basis of the above, further assessment is required.

Outcome: Further assessment is required.

7.2 Source – Offsite/Onsite Sources – contamination at depth

As identified in the initial CSM, migration of contamination from adjacent property's historic chassis works, historic omnibus works, historic tramway and depots would not be considered a potential source of current contaminants based on age and the historic site use for military operations and residential construction and demolition activities.

The deepest identified contamination was found at TP40 at 3 to 3.2mbgl and consisted of TPH C10-C12. TPH exceedances will require additional modelling, mitigation, or removal of the source material in order to successfully break the SPR linkage adjacent at TP40.

Outcome: Further assessment required.

7.3 Source – Ground Gas

Ground gas assessment showed low levels of ground gases and a site characterisation of CS1 which has a hazard potential of Very Low.

Based on the above, additional evaluation and assessment is not required.

Outcome: No further assessment required.

7.4 Source – Groundwater

PAHs and arsenic exceeded the GAC values used to evaluate the groundwater results. Some of the exceedances are likely to reflect historical onsite sources such as an old tank located between WS34 and WS43.

The Polycyclic aromatic hydrocarbons (PAHs) are a class of chemicals that occur naturally in coal, crude oil, and gasoline. They also are produced when coal, oil, gas, wood, garbage, and tobacco are burned. Arsenic sources can occur naturally on soils and waterbodies or in a variety of industrial processes.

However, this contamination likely represents small scale groundwater contamination resulting from soil contamination associated with past site use. Contaminated soil removal will be undertaken as part of bulk excavation for site redevelopment which thereby reducing sources of potential contamination to groundwater. As such, long-term risk associated with impacted groundwater in the areas of WS34 and WS43 are not deemed significant.

Based on the above, additional evaluation and assessment is not required.

7.5 Source – Groundwater Vapour Risk

The risk from the material in terms of the Generic Assessment Criteria for Groundwater Vapours 'Residential' and 'Commercial' scenarios are acceptable with the exclusion of:

- TPH in 1No. sample exceeded the SoBRA 2017 Residential Development GACs, with a concentration of 248 ug/l in WS34.

However, this contamination likely represents small scale groundwater contamination resulting from soil contamination associated with past site use. Some contaminated soil removal will be undertaken as part of excavation for site redevelopment which thereby reducing sources of potential contamination to groundwater. As such, long-term risk associated with impacted groundwater in the areas of WS34 are not deemed significant.

Outcome: No further assessment required.

7.6 Source – Former Halting Site

The former halting site within the site area, located directly east of the Pigeon Club, was not accessible during the site investigation. This area was bounded by stone walls and contained large boulders, shrubs, trees and fly-tipped waste. Any potential

contamination with this area is unknown and would require an additional site investigation when the obstructions are removed to assess the potential risk with the former halting site.

Outcome: Further assessment required.

7.7 Refined CSM

Table 7.1 Summary Revised Conceptual Site Model

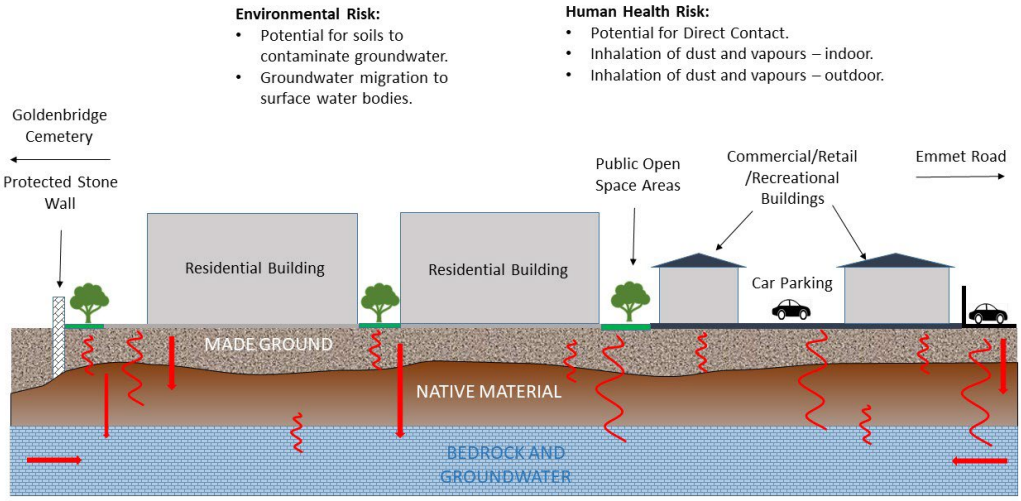
SOURCE	PATHWAY	RECEPTOR	POTENTIAL POLLUTANT LINKAGE Y/N	RISK
Environmental				
Migration of contamination from adjacent properties	Perched groundwater flow into and through the site	Groundwater in the bedrock aquifer	Y	Low Risk
Potential contamination from historical usage (former military operations, former fuel storage tanks, construction and demolition works, former use as a halting site, and PACM)	Leaching contaminants from made ground.	Perched Groundwater	Y	Low Risk
	Perched groundwater leaching and transporting contaminants from made ground	Groundwater in the bedrock aquifer.	Y	Low Risk
Potential contamination from historical usage (former military operations, former fuel storage tanks, construction and demolition works, former use as a halting site, and PACM)	Surface deposition	Soils	Y	Medium Risk
Human Health				
Potential contamination from a) Imported made ground b) Past site usage including former military operations, former fuel storage tanks, construction and demolition works, former use as a halting site, and PACM	Vapour migration to indoor and outdoor air	Residential occupants onsite and offsite	Y	Low Risk
Migration of contamination from adjacent properties	Inhalation/ dermal contact/	Residential occupants	Y	Low Risk

SOURCE	PATHWAY	RECEPTOR	POTENTIAL POLLUTANT LINKAGE Y/N	RISK
Potential contamination from a) Imported made ground b) Past site usage including former military operations, former fuel storage tanks, construction and demolition works, former use as a halting site, and PACM	ingestion of soils/ dusts.	onsite and offsite	Y	Medium Risk
Potential contamination within groundwater.	Migration of contaminants in the bedrock aquifer.	Groundwater users	Y	Low Risk

Note: Generic risk assessments do not assess risks to construction workers who are managed under the Safety and Welfare at Work Regulations.

A simple pictorial illustration of the revised CSM following the development is included in Figure 7.1.

Figure 7.1 Revised Conceptual Site Model



8 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

- The site for assessment is on Emmet Road at Inchicore, Dublin 8 and currently comprises of a vacant grass field (demolished former St. Michael's residential estate), a former halting site, a recreational club building, an employment building centre, and a health community centre. The surrounding area is a mixture of residential, commercial/industrial/retail and recreational land use.
- The proposed development includes the provision of residential buildings in addition to commercial, retail and community facilities and all associated with new infrastructure, including roads, footpaths, services and landscaping.
- Fly-tipped waste was visible throughout the site during the site walkover and site investigation visits. Evidence of burning of waste and material on site was also observed.
- The former halting site, located directly east of the Pigeon Club, was not accessible during the site investigation and was bounded by stone walls and inside contained large boulders, shrubs, trees and fly-tipped waste.
- A window sampling, trial pit, and borehole investigation was completed in October 2020. A total of 221No. soil samples were collected and submitted to Element and IOM laboratories for analysis.
- A Generic Quantitative Risk Assessment identified that the risk from the material in terms of 'Residential', 'Commercial' and 'Public Open Space (Resi)' scenarios are acceptable with the following exclusions: 20No. of the 221No. samples contained concentrations in excess of their GACs.
    - TPH CWG Aliphatics in 9No. samples exceeded the Residential GAC.
    - TPH CWG Aromatics in 1No. sample exceeded the Residential GAC.
    - Dibenzo(ah)anthracene in 1No. sample exceeded the Residential GAC.
    - Arsenic in 7No. samples exceeded the Residential GAC.
    - Arsenic in 2No. samples also exceeded the POS (Resi) GAC.
    - Lead in 2No. samples exceeded the Residential GAC.
- WS15, WS16, WS17, TP19, WS20, WS37 and WS49 had exceedances above the GACs for arsenic. WS38 and WS47 had exceedances above the GACs for lead. WS13 had an exceedance above the GAC for dibenzo(ah)anthracene. WS30, TP33, WS34, WS39, and TP40 had exceedances above the GACs for TPH CWG Aliphatics (C10-C12). WS34 and WS39 had exceedances above the GACs for TPH CWG Aliphatics (C12-C16), and WS34 had a GAC exceedance for TPH CWG Aromatics (EC10-EC12).
- As part of the design it will be possible to break the Source Pathway Receptor linkage using the proposed buildings and hardstanding. This is particularly relevant for arsenic, lead and dibenzo(ah)anthracene exceedances. However, TPH exceedances will require additional modelling, mitigation, or removal of the material to successfully break the SPR linkage adjacent to WS30, TP33, WS34, WS39, and TP40.
- Asbestos was detected in WS13 (0-1mbgl) at 0.176% asbestos from ACM and in TP19 (2-3mbgl) at 0.003% asbestos as unbound fibres.

- Gas monitoring was undertaken on 7No. occasions from November 2020 to December 2020 from 10No. monitoring wells on-site by an OCSC Environmental Consultant during rising and falling barometric conditions. Methane was detected at BH08 during two events with 0.1% on 3rd December 2020 and 0.4% on 16th December 2020. Methane was also detected at WS34 during four events with the highest stable concentration of 0.5% on 17th November 2020. Methane was not detected in any other boreholes. Carbon dioxide was detected in all wells monitored and the highest peak concentration was observed in WS44 at 3.9% (stable CO2). Concentrations in this well fluctuated from 2.6 % to 3.9%. All detections outside of WS44 were between 0% to 3.4%, with WS43 having the next highest concentration of stable carbon dioxide. A gas risk assessment completed indicated that the risk from ground gas as CS1 which represents a Very low risk.
- A groundwater assessment was carried in January 2021 and three (3No.) groundwater samples were collected and submitted for analysis. Concentrations of PAHs and arsenic exceeded their respective GACs. Some of the exceedances are likely to reflect historical onsite sources such as an old tank located close to WS34 and WS43. However, this contamination likely represents small scale groundwater contamination resulting from soil contamination associated with past site use. Contaminated soil removal will be undertaken as part of bulk excavation for site redevelopment which thereby reducing sources of potential contamination to groundwater. As such, long-term risk associated with impacted groundwater in the areas of WS34 and WS43 are not deemed significant.
- The 3No. groundwater samples were assessed compared with Society of Brownfield Risk Assessment (SoBRA) GAC for Assessing Vapour Risks to Human Health from Volatile Contaminants in Groundwater. The only GAC exceedance for 'Residential' and 'Commercial' scenarios was TPH at WS34.

8.1 Recommendations

- Remove any fly-tipped waste on-site and ensure that there is no asbestos or hazardous debris within the waste on site prior to bulk excavation.
- Consider undertaking additional site investigation of the former halting site.
- An asbestos survey should be completed in the buildings to be demolished or refurbished prior to the demolition of any buildings or removal of material.
- It is recommended that a watching brief is undertaken for asbestos containing materials or observed contamination to ensure the most appropriate disposal.
- As part of the design, it will be possible to break the Source Pathway Receptor linkage using the proposed buildings and hardstanding. This is particularly relevant for arsenic, lead and dibenzo(ah)anthracene exceedances. Break the Source Pathway Receptors at WS15 (0.03-1mbgl), WS16 (0-1mbgl), WS17 (0-1mbgl), TP19 (0-1mbgl), WS20 (0-1mbgl), WS37 (0-1mbgl), WS38 (0-1mbgl), WS47 (0.8-1.0mbgl), WS49 (0-0.9mbgl), and WS13 (0-1mbgl) areas if material

is not removed as part of construction. This can take the form of hardstanding or capping with 1m of clean material.

- TPH exceedances will require additional modelling, mitigation, or removal of impacted material to successfully break the SPR linkage adjacent to WS30, TP33, WS34, WS39, and TP40.
- PAHs exceedances will require additional modelling, mitigation, or removal of impacted material to successfully break the SPR linkage adjacent to WS34, and TP43.
- Overall, once developed, all of the SPR linkages will be addressed by engineering methods such as hardstanding or building construction along with the removal of contaminated soil.

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Tables

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

		GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Res) (1% SOM)	GAC S4UL Public Open Space (Res) (2.5% SOM)	GAC S4UL Public Open Space (Res) (6% SOM)				Commercial																				
													Lab Ref#	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733
													Sample ID	WS05	WS05	WS05	WS05	WS01	WS01	WS01	WS01	WS09	WS09	WS09	WS09	WS02	WS02	WS02	WS02	WS13	WS13	WS10	WS10	WS10	WS10	WS14	WS14	WS14
													Surface Elevation	24.25	24.25	24.25	24.25	24.29	24.29	24.29	24.29	24.51	24.51	24.51	24.51	23.81	23.81	23.81	23.81	24.83	24.83	24.28	24.28	24.28	24.28	24.71	24.71	24.71
													Depth (mbgl)	0.075-1.00	1.00-2.00	2.00-2.90	2.70-2.90	0.02-1.00	1.00-2.00	2.00-2.70	2.50-2.70	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.30	0.085-1.00	1.00-2.00	2.00-2.75	2.50-2.75	0.00-1.00	1.00-2.00	0.09-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.13-1.00	1.00-2.00	2.00-3.00
													Depth (mAOD)	24.17 to 23.25	23.25 to 22.25	22.25 to 21.35	21.55 to 21.35	24.27 to 23.29	23.29 to 22.29	22.29 to 21.59	21.79 to 21.59	24.51 to 23.51	23.51 to 22.51	22.51 to 21.51	21.51 to 21.21	23.72 to 22.81	22.81 to 21.81	21.81 to 21.06	21.31 to 21.06	24.83 to 23.83	23.83 to 22.83	24.19 to 23.28	23.28 to 22.28	22.28 to 21.28	21.28 to 20.88	24.58 to 23.71	23.71 to 22.71	22.71 to 21.71
													Sampled Date	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020
CAS Number	Test										Method	Units	LOD																						
TOC	Total Organic Carbon										TM27/PM24	%	<0.02	0.42	0.4	0.56	0.74	2.39	0.37	0.55	0.65	2.46	0.44	0.56	0.67	0.81	0.42	0.57	0.72	1.88	1.06	0.93	0.33	0.74	0.74	1.7	0.34	0.75
	Soil Organic Matter											**%**		**0.72**	**0.69**	**0.96**	**1.27**	**4.11**	**0.64**	**0.95**	**1.12**	**4.23**	**0.76**	**0.96**	**1.15**	**1.39**	**0.72**	**0.98**	**1.24**	**3.23**	**1.82**	**1.60**	**0.57**	**1.27**	**1.27**	**2.92**	**0.58**	**1.29**
7440-36-0	Antimony		550			7,500					SOLPHA/TM30/PM40	mg/kg	<1	3	3	2	2	3	3	2	3	4	2	2	3	3	2	2	3	4	3	3	2	2	2	2	2	2
7440-38-2	Arsenic		40			640			79		SOLPHA/TM30/PM40	mg/kg	<0.5	9.5	11.4	13.2	11.3	14.2	12.7	11	11.9	15.5	10.4	12.2	9.8	10.1	11.4	13.6	11.8	15	8.7	9	10.2	12.2	11.6	8	9.4	13.8
7440-39-3	Barium		1,300			22,000					SOLPHA/TM30/PM40	mg/kg	<1	80	90	76	89	91	76	87	168	165	65	105	84	89	52	86	102	206	127	98	84	75	83	94	49	187
7440-43-9	Cadmium		85			190			120		SOLPHA/TM30/PM40	mg/kg	<0.1	1.7	2.2	2.7	2.6	1.5	2.7	2.5	2.4	2.6	2.3	2.6	1.8	1.9	2.3	2	2.8	2.5	1.7	1.6	2.3	2.8	2.6	1.9	2.1	3
7440-47-3	Chromium					190					SOLPHA/TM30/PM40	mg/kg	<0.5	30.4	49.1	47.4	30	55.4	37.4	36	29.9	61.4	29.5	55.2	58.1	37.4	33.6	39.4	32.6	25.5	17.2	76.7	54.2	57.7	60.9	76	59.2	54.7
7440-50-8	Copper		7,100			68,000			12,000		SOLPHA/TM30/PM40	mg/kg	<1	35	36	36	35	55	41	38	37	52	29	39	35	35	38	36	37	75	41	35	32	43	41	26	33	44
7439-92-1	Lead		310*			2,300*			610*		SOLPHA/TM30/PM40	mg/kg	<5	82	15	15	17	84	20	17	19	137	13	16	16	69	16	15	17	213	136	64	14	20	17	76	13	18
7439-97-6	Mercury		56			1,100			120		SOLPHA/TM30/PM40	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
7439-98-7	Molybdenum		670			17,000					SOLPHA/TM30/PM40	mg/kg	<0.1	2.9	6.1	5.8	4.8	6.7	5.2	5.9	5.3	6.5	4	7	5.9	3.9	4.5	4.8	5.4	5.2	1.5	6.1	5.6	6.7	7.5	6.7	6.1	7
7440-02-0	Nickel		180			980			210		SOLPHA/TM30/PM40	mg/kg	<0.7	28.9	43.1	36.8	43.2	35.8	55.1	45.6	49.4	47.6	35.1	48.2	41.1	32.7	37.9	45.6	47.5	47.4	36	36	38.8	49	45.5	31.4	34.8	59.6
7782-49-2	Selenium		430			12,000			1,100		SOLPHA/TM30/PM40	mg/kg	<1	1	2	5	3	1	1	5	10	1	1	6	5	2	2	4	9	2	<1	1	2	4	3	<1	1	5
3E1104S	Total Sulphate										TM30/PM20/PM20	mg/kg	<50	606	284	308	375	523	238	213	239	1067	257	214	462	696	350	283	387	1127	978	1099	602	3032	3092	583	358	1375
7440-42-8	Water Soluble Boron										TM29/PM20/PM40	mg/kg	<0.1	0.5	0.9	0.7	0.4	1	0.4	0.3	0.4	1.2	0.4	0.8	0.6	0.5	0.5	0.4	0.4	1.8	0.8	1.2	0.5	0.5	0.4	0.7	0.4	0.5
7440-66-6	Zinc		40,000			730,000			81,000		TM30/PM20/PM40	mg/kg	<5	92	81	87	90	102	115	87	106	218	83	93	82	108	90	86	93	281	265	124	94	106	90	109	70	116
	PAH MS																																				
91-20-3	Naphthalene	2.3	5.6	13	190	460	1100	4,900	4,900	4,900	TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
208-96-8	Acenaphthylene	2,900	4,600	6,000	83,000	97,000	100,000	15,000	15,000	15,000	TM4/PM8	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	0.07	<0.03	<0.03	<0.03	0.07	<0.03	<0.03	<0.03	<0.03	0.03	<0.03	<0.03	0.37	0.1	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
83-32-9	Acenaphthene	3,000	4,700	6,000	84,000	97,000	100,000	15,000	15,000	15,000	TM4/PM8	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
86-73-7	Fluorene	2,800	3,800	4,500	63,000	68,000	71,000	9,900	9,900	9,900	TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.18	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
85-01-8	Phenanthrene	1,300	1,500	1,500	22,000	22,000	23,000	3,100	3,100	3,100	TM4/PM8	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	0.07	0.27	<0.03	<0.03	<0.03	0.49	<0.03	<0.03	<0.03	0.27	<0.03	<0.03	1.58	0.57	0.13	0.06	0.07	0.07	0.09	<0.03	<0.03
120-12-7	Anthracene	31,000	35,000	37,000	520,000	540,000	540,000	74,000	74,000	74,000	TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	0.09	<0.04	<0.04	<0.04	0.15	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	1.03	0.23	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
206-44-0	Fluoranthene	1,500	1,600	1,600	23,000	23,000	23,000	3,100	3,100	3,100	TM4/PM8	mg/kg	<0.03	0.05	<0.03	<0.03	<0.03	0.52	<0.03	<0.03	<0.03	1.17	<0.03	<0.03	<0.03	0.54	<0.03	<0.03	<0.03	4.41	1.36	0.28	<0.03	<0.03	<0.03	0.21	<0.03	<0.03
129-00-0	Pyrene	3,700	3,800	3,800	54,000	54,000	54,000	7,400	7,400	7,400	TM4/PM8	mg/kg	<0.03	0.05	<0.03	<0.03	<0.03	0.7	<0.03	<0.03	<0.03	1.06	<0.03	<0.03	<0.03	0.48	<0.03	<0.03	<0.03	3.88	1.28	0.27	<0.03	<0.03	<0.03	0.2	<0.03	<0.03
56-55-3	Benzo(a)anthracene	11	14	15	170	170	180	29	29	29	TM4/PM8	mg/kg	<0.06	<0.06	<0.06	<0.06	<0.06	0.42	<0.06	<0.06	<0.06	0.66	<0.06	<0.06	<0.06	0.31	<0.06	<0.06	<0.06	2.43	0.78	0.22	<0.06	<0.06	<0.06	0.14	<0.06	<0.06
218-01-9	Chrysene	30	31	32	350	350	350	57	57	57	TM4/PM8	mg/kg	<0.02	0.05	<0.02	<0.02	0.03	0.49	<0.02	<0.02	<0.02	0.69	<0.02	<0.02	0.04	0.33	<0.02	<0.02	0.04	2.57	0.84	0.18	<0.02	0.04	0.03	0.14	<0.02	<0.02
BEN-BK-FLUORAN	Benzo(b&k)fluoranthene										TM4/PM8	mg/kg	<0.07	0.11	<0.07	<0.07	<0.07	1.25	<0.07	<0.07	<0.07	1.31	<0.07	<0.07	<0.07	0.59	<0.07	<0.07	<0.07	4.54	1.38	0.32	<0.07	<0.07	<0.07	0.26	<0.07	<0.07
50-32-8	Benzo(a)pyrene	3.2	3.2	3.2	35	35	36	5.7	5.7	5.7	TM4/PM8	mg/kg	<0.04	0.06	<0.04	<0.04	<0.04	0.78	<0.04	<0.04	<0.04	0.7	<0.04	<0.04	<0.04	0.31	<0.04	<0.04	<0.04	2.6	0.79	0.18	<0.04	<0.04	<0.04	0.13	<0.04	<0.04
193-39-5	Indeno(123cd)pyrene	45	46	46	500	510	510	82	82	82	TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	0.57	<0.04	<0.04	<0.04	0.43	<0.04	<0.04	<0.04	0.19	<0.04	<0.04	<0.04	1.45	0.44	0.11	<0.04	<0.04	<0.04	0.09	<0.04	<0.04
53-70-3	Dibenzo(ah)anthracene	0.31	0.32	0.32	3.5	3.6	3.6	0.57	0.57	0.58	TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.34	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
191-24-2	Benzo(ghi)perylene	360	360	360	3,900	4,000	4,000	640	640	640	TM4/PM8	mg/kg	<0.04	0.07	<0.04	<0.04	<0.04	0.61	<0.04	<0.04	<0.04	0.48	<0.04	<0.04	<0.04	0.21	<0.04	<0.04	<0.04	1.63	0.46	0.12	<0.04	<0.04	<0.04	0.1	<0.04	<0.04
191-07-1	Coronene										TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.25	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
PAH_6_TOTAL	PAH 6 Total										TM4/PM8	mg/kg	<0.22	0.29	<0.22	<0.22	<0.22	3.73	<0.22	<0.22	<0.22	4.09	<0.22	<0.22	<0.22	1.84	<0.22	<0.22	<0.22	14.65	4.43	1.01	<0.22	<0.22	<0.22	0.79	<0.22	<0.22
PAH_17_TOTAL	PAH 17 Total										TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	5.98	<0.04	<0.04	<0.04	7.34	<0.04	<0.04	<0.04	3.32	<0.04	<0.04	<0.04	27.43	8.45	1.81	<0.04	<0.04	<0.04	1.36	<0.04	<0.04
205-99-2	Benzo(b)fluoranthene	3.9	4	4	44	44	45	7.1	7.2	7.2	TM4/PM8	mg/kg	<0.05	0.08	<0.05	<0.05	<0.05	0.9	<0.05	<0.05	<0.05	0.94	<0.05	<0.05	<0.05	0.42	<0.05	<0.05	<0.05	3.27	0.99	0.23	<0.05	<0.05	<0.05	0.19	<0.05	<0.05
207-08-9	Benzo(k)fluoranthene	110	110	110	1,200	1,200	1,200	190	190	190	TM4/PM8	mg/kg	<0.02	0.03	<0.02	<0.02	<0.02	0.35	<0.02	<0.02	<0.02	0.37	<0.02	<0.02	<0.02	0.17	<0.02	<0.02	<0.02	1.27	0.39	0.09	<0.02	<0.02	<0.02	0.07	<0.02	<0.02
205-82-3	Benzo(j)fluoranthene										TM4/PM8	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1
INTERPRETATION	EPH CWG Interpretation										TM5/PM16	None		Trace of possible lubricating oil	No interpretation possible	No interpretation possible	No interpretation possible	Possible PAH's	No interpretation possible	No interpretation possible	No interpretation possible	PAH's & Trace of possible lubricating oil	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	Naturally occurring compounds	No interpretation possible	PAH's	PAH's	No interpretation possible	No interpretation possible	Trace of possible degraded diesel	No interpretation possible	No interpretation possible	Not interpretation possible	Not interpretation possible
MINOIL_10-40	Mineral Oil (C10-C40)										TM5/PM16	mg/kg	<30	<30	<30	<30	<30	<30	<30	<30	<30	48	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	93	<30	<30	<30	<30
	TPH CWG																																					
	Aliphatics																																					
GTC05C06AL	>C5-C6	42	78	160	3,200	5,900	12,000	570,000	590,000	600,000	TM36/PM21	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC06C08AL	>C6-C8	100	230	510	7,800	17,000	40,000	600,000	610,000	620,000	TM36/PM21	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC08C10AL	>C8-C10	27	65	150	2,000	4,800	11,000	13,000	13,000	13,000	TM36/PM21	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC10C12AL	>C10-C12	130	330	770	9,700	23,000	47,000	13,000	13,000	13,000	TM5/PM16	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
GTC12C16AL	>C12-C16	1,100	2,400	4,400	59,000	82,000	90,000	13,000	13,000	13,000	TM5/PM16	mg/kg	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	6	<4	<4	<4	<4
GTC16C21AL	>C16-C21										TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
GTC21C35AL	>C21-C35										TM5/PM16	mg/kg	<7	16	<7	<7	<7	<7	<7	<7	<7	48	<7	<7	<7	<7	<7	<7	<7	25	<7	<7	<7	99	<7	<7	<7	<7
GTC35C40AL	>C35-C40 +	65,000	92,000	110,000	1,600,000	1,700,000	1,800,000	250,000	250,000	250,000	TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
GTC05C40AL	Total aliphatics C5-40	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM21/PM40	mg/kg	<26	<26	<26	<26	<26	<26	<26	<26	<26	48	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26
GTC06C10AL	>C6-C10										TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC10C25AL	>C10-C25										TM5/PM16	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<10	14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	41	<10	<10	<10	<10
GTC25C35AL	>C25-C35										TM5/PM16	mg/kg	<10	15	<10	<10	<10	<10	<10	<10	<10	36	<10	<10	<10	<10	<10	<10	<10	33	<10	<10	<10	52	<10	<10	<10	<10

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

CAS Number	Test	GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Resi) (1% SOM)	GAC S4UL Public Open Space (Resi) (2.5% SOM)	GAC S4UL Public Open Space (Resi) (6% SOM)	Method	Units	LOD	Commercial																							
	Lab Cert													20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12733	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904
	Sample ID													W505	W505	W505	W505	W501	W501	W501	W501	W509	W509	W509	W509	W502	W502	W502	W502	W513	W513	W510	W510	W510	W510	W510	W514	W514	W514
	Surface Elevation													24.25	24.25	24.25	24.25	24.29	24.29	24.29	24.29	24.51	24.51	24.51	24.51	23.81	23.81	23.81	23.81	24.83	24.83	24.28	24.28	24.28	24.28	24.28	24.71	24.71	24.71
	Depth (mbgl)													0.075-1.00	1.00-2.00	2.00-2.90	2.70-2.90	0.02-1.00	1.00-2.00	2.00-2.70	2.50-2.70	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.30	0.085-1.00	1.00-2.00	2.00-2.75	2.50-2.75	0.00-1.00	1.00-2.00	0.09-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.13-1.00	1.00-2.00	2.00-3.00
	Depth [mAOD]													**24.17 to 23.25**	**23.25 to 22.25**	**22.25 to 21.35**	**21.55 to 21.35**	**24.27 to 23.29**	**23.29 to 22.29**	**22.29 to 21.59**	**21.79 to 21.59**	**24.51 to 23.51**	**23.51 to 22.51**	**22.51 to 21.51**	**21.51 to 21.21**	**23.72 to 22.81**	**22.81 to 21.81**	**21.81 to 21.06**	**21.31 to 21.06**	**24.83 to 23.83**	**23.83 to 22.83**	**24.19 to 23.28**	**23.28 to 22.28**	**22.28 to 21.28**	**21.28 to 20.88**	**24.58 to 23.71**	**23.71 to 22.71**	**22.71 to 21.71**
	Sampled Date													16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	16/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020
	Aromatics																																					
GTEC05EC07AR	>EC5-EC7	370	690	1,400	26,000	46,000	86,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC07EC08AR	>EC7-EC8	860	1,800	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC08EC10AR	>EC8-EC10	47	110	270	3,500	8,100	17,000	5,000	5,000	5,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC10EC12AR	>EC10-EC12	250	590	1,200	16,000	28,000	34,000	5,000	5,000	5,000	TM5/PM16	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
GTEC12EC16AR	>EC12-EC16	1,800	2,300	2,500	36,000	37,000	38,000	5,100	5,100	5,000	TM5/PM16	mg/kg	<4	<4	<4	<4	<4	<4	<4	<4	<4	7	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
GTEC16EC21AR	>EC16-EC21	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7	<7	<7	<7	<7	13	<7	<7	<7	23	<7	<7	<7	11	<7	16	13	<7	<7	<7	<7	<7	<7	<7	<7	<7
GTEC21EC35AR	>EC21-EC35	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7	<7	<7	<7	<7	71	<7	<7	<7	113	<7	<7	<7	208	<7	78	73	<7	<7	<7	<7	<7	<7	<7	<7	<7
GTEC35EC40AR	>EC35-EC40	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7	<7	<7	<7	<7	12	<7	<7	<7	15	<7	<7	<7	17	<7	13	8	<7	<7	<7	<7	<7	<7	<7	<7	<7
GTEC05EC40AR	Total aromatics C5-40										TM5/TM36/PM12/PM16	mg/kg	<26	<26	<26	<26	<26	96	<26	<26	<26	158	<26	<26	<26	<26	<26	246	<26	107	100	<26	<26	<26	<26	<26	<26	<26
GTC05C40ALAR	Total aliphatics and aromatics(>C5-40)	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM12/PM16	mg/kg	<52	<52	<52	<52	<52	96	<52	<52	<52	206	<52	<52	<52	<52	<52	246	<52	107	100	<52	<52	63	<52	<52	<52	<52
GTEC06EC10AR	>EC6-EC10										TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC10EC25AR	>EC10-EC25										TM5/PM16	mg/kg	<10	<10	<10	<10	<10	28	<10	<10	<10	64	<10	<10	<10	<10	<10	<10	94	<10	40	34	<10	<10	<10	<10	<10	<10
GTEC25EC35AR	>EC25-EC35										TM5/PM16	mg/kg	<10	<10	<10	<10	<10	49	<10	<10	<10	87	<10	<10	<10	<10	<10	<10	126	<10	61	50	<10	<10	<10	<10	<10	<10
1634-04-4	MTBE										TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
71-43-2	Benzene	0.38	0.7	1.4	27	47	90	72	72	73	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
108-88-3	Toluene	880	1900	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
100-41-4	Ethylbenzene	83	190	440	5,700	13,000	27,000	24,000	24,000	25,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P_M_XYLENE	m/p-Xylene	79	180	430	5,900	14,000	30,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
95-47-6	o-Xylene	88	210	480	6,600	15,000	33,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
7012-37-5	PCB 28										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35693-99-3	PCB 52										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
37680-73-2	PCB 101										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
3150E-00-6	PCB 118										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35065-28-2	PCB 153										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35065-27-1	PCB 153										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35065-29-3	PCB 180										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
PCB_7_CON_TOTAL	Total 7 PCBs		1,000^			1,000^			1,000^		TM17/PM8	mg/kg	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
108-95-2	Phenol	750	1,300	2,300	760	1,500	3,200	760	1,500	3,200	TM26/PM21	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOIST_CONT_DRY	Natural Moisture Content										PM4/PM0	%	<0.1	14.5	13.6	10.5	9.6	16	14.4	10.6	10	17	12.2	10.3	12	11.5	12.5	10.7	9.5	17	21.2	17.4	11.6	9	10.1	11.5	11.7	16.9
MOIST_CONT_WET	(Moisture Content (% Wet Weight))										PM4/PM0	%	<0.1	12.7	12	9.5	8.8	13.8	12.6	9.6	9.1	14.6	10.8	9.3	10.7	10.3	11.1	9.7	8.7	14.5	17.5	14.8	10.4	8.2	9.2	10.3	10.5	14.5
JE11006	(Moisture Content 105C (% Dry Weight))										PM4/PM0	%	<0.1	16.4	16.4	9.1	11.2	16.2	13.7	11.8	11.2	16	11.3	12.3	10.9	14.7	15	10.1	9.4	21.2	21.3	22.4	12.2	7.1	11.8	13.9	14	9
JE11007	Dry Matter Content Ratio (105°C)										NONE/PM4	%	<0.1	85.9	85.9	91.7	90	86.1	87.9	89.5	89.9	86.2	89.9	89.1	90.2	87.2	86.9	90.8	91.4	82.5	82.4	81.7	88.8	93.4	89.5	87.8	87.7	91.7
18540-29-9	Hexavalent Chromium		6			33			7.7		TM38/PM20	mg/kg	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
CHROMIUM_III	Chromium III		910			8,600			1,500		NONE/NONE	mg/kg	<0.5	30.4	49.1	47.4	30	55.4	37.4	36	29.9	61.4	29.5	55.2	58.1	37.4	33.6	39.4	32.6	25.5	17.2	76.7	54.2	57.7	60.9	76	59.2	54.7
57-12-5	Total Cyanide										TM89/PM45	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SULPHIDE	Sulphide										TM106/PM45	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
ALKALI_RES	Alkali Reserve										TM160/PM110	pH units	<0.000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ELEM_SULPH	Elemental Sulphur										TM106/PM110/PM45	mg/kg	<1	3	1	2	1	23	<1	<1	<1	<1	1	<1	3	<1	<1	1	<1	<1	<1	7	<1	4	2	9	<1	2
JE1559/LOI	Loss on Ignition										TM22/PM0	%	<1.0	1.7	2	2.1	2	4.3	2	2.1	2.8	5.3	2.1	2.6	2.1	2.3	1.9	2.2	2.3	2.7	1.7	2.5	1.6	1.8	1.9	3.3	1.5	1.8
PH	pH										TM73/PM11	pH units	<0.01	8.68	8.62	8.44	8.64	8.29	8.42	8.38	8.42	8.4	8.61	8.59	8.41	8.44	8.53	8.66	8.6	8.47	8.3	8.32	8.6	8.33	8.39	8.26	8.45	8.49
	IOM Asbestos Analysis													NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	**Chrysotile - 0.176% Asbestos from ACM**	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD

Notes:
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Data columns shown light grey are samples of soils that will be removed during construction.
*Indicates GAC values from SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination - Policy Companion Document published in 2014.
NAD = No Asbestos Detected.
NA/- = Not Available.
EIC/AGS/CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment published in 2010.
+ GAC S4ULs EC >35- 44 were used in the absense of suitable for use levels for EC>35-40
^ Indicates Intervention Values taken from **DUTCH INTERVENTION 2009**
& Since xylenes are reported as m&p xylene, hence the GAC limit was taken as the lower limit for the individual xylene type as a conservative approach.

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

		GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Res) (1% SOM)	GAC S4UL Public Open Space (Res) (2.5% SOM)	GAC S4UL Public Open Space (Res) (6% SOM)			
											Lab Ref		20/12904
											Sample ID		WS14
											Surface Elevation		24.71
											Depth (mbgl)		3.00-3.40
											Depth (mAOD)		21.71 to 21.31
											Sampled Date		17/09/2020
CAS Number	Test										Method	Units	LOD
TOC	Total Organic Carbon										TM27/PM24	%	<0.02
	Soil Organic Matter											**%**	
7440-36-0	Antimony		550			7,500					TMS/PM16/TMS/PM6	mg/kg	<1
7440-38-2	Arsenic		40			640			79		TMS/PM16/TMS/PM6	mg/kg	<0.5
7440-39-3	Barium		1,300			22,000					TMS/PM16/TMS/PM6	mg/kg	<1
7440-43-9	Cadmium		85			190			120		TMS/PM16/TMS/PM6	mg/kg	<0.1
7440-47-3	Chromium										TMS/PM16/TMS/PM6	mg/kg	<0.5
7440-50-8	Copper		7,100			68,000			12,000		TMS/PM16/TMS/PM6	mg/kg	<1
7439-92-1	Lead		310*			2,300*			610*		TMS/PM16/TMS/PM6	mg/kg	<5
7439-97-6	Mercury		56			1,100			120		TMS/PM17/TMS/PM6	mg/kg	<0.1
7439-98-7	Molybdenum		670			17,000					TMS/PM16/TMS/PM6	mg/kg	<0.1
7440-02-0	Nickel		180			980			210		TMS/PM16/TMS/PM6	mg/kg	<0.7
7782-49-2	Selenium		430			12,000			1,100		TMS/PM16/TMS/PM6	mg/kg	<1
3E1104S	Total Sulphate										TM30/PM20/PM120	mg/kg	<50
7440-42-8	Water Soluble Boron										TM29/PM20/PM6	mg/kg	<0.1
7440-66-6	Zinc		40,000			730,000			81,000		TM30/PM16/PM6	mg/kg	<5
	PAH MS												
91-20-3	Naphthalene	2.3	5.6	13	190	460	1100	4,900	4,900	4,900	TM4/PM8	mg/kg	<0.04
208-96-8	Acenaphthylene	2,900	4,600	6,000	83,000	97,000	100,000	15,000	15,000	15,000	TM4/PM8	mg/kg	<0.03
83-32-9	Acenaphthene	3,000	4,700	6,000	84,000	97,000	100,000	15,000	15,000	15,000	TM4/PM8	mg/kg	<0.05
86-73-7	Fluorene	2,800	3,800	4,500	63,000	68,000	71,000	9,900	9,900	9,900	TM4/PM8	mg/kg	<0.04
85-01-8	Phenanthrene	1,300	1,500	1,500	22,000	22,000	23,000	3,100	3,100	3,100	TM4/PM8	mg/kg	<0.03
120-12-7	Anthracene	31,000	35,000	37,000	520,000	540,000	540,000	74,000	74,000	74,000	TM4/PM8	mg/kg	<0.04
206-44-0	Fluoranthene	1,500	1,600	1,600	23,000	23,000	23,000	3,100	3,100	3,100	TM4/PM8	mg/kg	<0.03
129-00-0	Pyrene	3,700	3,800	3,800	54,000	54,000	54,000	7,400	7,400	7,400	TM4/PM8	mg/kg	<0.03
56-55-3	Benzo(a)anthracene	11	14	15	170	170	180	29	29	29	TM4/PM8	mg/kg	<0.06
218-01-9	Chrysene	30	31	32	350	350	350	57	57	57	TM4/PM8	mg/kg	<0.02
BEN-B4-FLUORAN	Benzo(b)fluoranthene										TM4/PM8	mg/kg	<0.07
50-32-8	Benzo(a)pyrene	3.2	3.2	3.2	35	35	36	5.7	5.7	5.7	TM4/PM8	mg/kg	<0.04
193-39-5	Indeno(123-cd)pyrene	45	46	46	500	510	510	82	82	82	TM4/PM8	mg/kg	<0.04
53-70-3	Dibenzo(ah)anthracene	0.31	0.32	0.32	3.5	3.6	3.6	0.57	0.57	0.58	TM4/PM8	mg/kg	<0.04
191-24-2	Benzo(ghi)perylene	360	360	360	3,900	4,000	4,000	640	640	640	TM4/PM8	mg/kg	<0.04
191-07-1	Coronene										TM4/PM8	mg/kg	<0.04
PAH_6_TOTAL	PAH 6 Total										TM4/PM8	mg/kg	<0.22
PAH_17_TOTAL	PAH 17 Total										TM4/PM8	mg/kg	<0.64
205-99-2	Benzo(b)fluoranthene	3.9	4	4	44	44	45	7.1	7.2	7.2	TM4/PM8	mg/kg	<0.05
207-08-9	Benzo(k)fluoranthene	110	110	110	1,200	1,200	1,200	190	190	190	TM4/PM8	mg/kg	<0.02
205-82-3	Benzo(j)fluoranthene										TM4/PM8	mg/kg	<1
INTERPRETATION	EPH CWG Interpretation										TMS/PM16	None	
MINOIL_10-40	Mineral Oil (C10-C40)										TMS/PM16	mg/kg	<30
	TPH CWG												
	Aliphatics												
GTC05C06AL	>C5-C6	42	78	160	3,200	5,900	12,000	570,000	590,000	600,000	TM36/PM12	mg/kg	<0.1
GTC06C08AL	>C6-C8	100	230	510	7,800	17,000	40,000	600,000	610,000	620,000	TM36/PM12	mg/kg	<0.1
GTC08C10AL	>C8-C10	27	65	150	2,000	4,800	11,000	13,000	13,000	13,000	TM36/PM12	mg/kg	<0.1
GTC10C12AL	>C10-C12	130	330	770	9,700	23,000	47,000	13,000	13,000	13,000	TM5/PM16	mg/kg	<0.2
GTC12C16AL	>C12-C16	1,100	2,400	4,400	59,000	82,000	90,000	13,000	13,000	13,000	TM5/PM16	mg/kg	<4
GTC16C21AL	>C16-C21										TM5/PM16	mg/kg	<7
GTC21C35AL	>C21-C35										TM5/PM16	mg/kg	<7
GTC35C40AL	>C35-C40 +	65,000	92,000	110,000	1,600,000	1,700,000	1,800,000	250,000	250,000	250,000	TM5/PM16	mg/kg	<7
GTC05C40AL	Total aliphatics C5-40	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM12/PM16	mg/kg	<26
GTC06C10AL	>C6-C10										TM36/PM12	mg/kg	<0.1
GTC10C25AL	>C10-C25										TM5/PM16	mg/kg	<10
GTC25C35AL	>C25-C35										TM5/PM16	mg/kg	<10

20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992
WS04	WS04	WS04	WS04	WS04	WS15	WS15	WS15	WS15	WS18	WS18	WS18	WS18	WS17	WS17	WS17	WS 16	WS 16	WS 16	WS 20	WS 20	WS 20	WS 20	WS 20	WS 20	WS 20	WS 20	WS 20	WS 20	WS 20	WS 20	WS 20	WS 20	WS 20	WS 20	WS 20	WS 21
24.71	23.56	23.56	23.56	23.56	24.41	24.41	24.41	24.41	24.63	24.63	24.63	24.63	24.73	24.73	24.73	25.03	25.03	25.03	25.03	25.31	25.31	25.31	25.31	25.31	25.31	25.31	25.31	25.31	25.31	25.31	25.31	25.31	25.31	25.31	25.31	24.97
0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.03-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.30	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.30	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.30	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.30	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.30	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.30	0.00-1.00
21.71 to 21.31	23.56 to 22.56	22.56 to 21.56	21.56 to 20.56	20.56 to 20.16	24.38 to 23.41	23.41 to 22.41	22.41 to 21.41	21.41 to 21.01	24.63 to 23.63	23.63 to 22.63	22.63 to 21.63	21.63 to 21.23	24.73 to 23.73	23.73 to 22.73	22.73 to 21.73	21.73 to 21.33	25.03 to 24.03	24.03 to 23.03	23.03 to 22.03	25.31 to 24.31	24.31 to 23.31	23.31 to 22.31	22.31 to 22.01	24.97 to 23.97												
17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020												
0.69	1.4	0.35	0.21	0.54	1.57	0.38	0.84	0.77	0.86	0.32	0.5	0.65	0.44	0.26	0.58	0.85	0.63	0.41	0.78	0.43	0.14	0.51	0.62	0.44												
1.19	**2.41**	**0.60**	**0.36**	**0.93**	**2.70**	**0.65**	**1.10**	**1.32**	**1.48**	**0.55**	**0.86**	**1.12**	**0.76**	**0.45**	**1.00**	**1.46**	**1.08**	**0.71**	**1.34**	**0.74**	**0.24**	**0.88**	**1.07**	**0.76**												
<1	2	2	2	1	2	2	2	2	2	1	2	2	2	1	3	3	2	2	2	1	<1	3	2	<1												
<0.5	12.2	11.1	8.3	6.3	11.8	68.3	11.6	13.4	10.7	20.7	8	9.8	9.6	6.5	2.4	10.5	11.9	73.3	12.4	12.2	84.7	13	14.4	11	12.7											
<1	80	98	46	59	136	170	130	142	61	128	70	51	63	65	36	110	105	90	74	83	65	65	70	63	50											
<0.1	2.3	1.3	1.8	1.8	3.2	0.9	2.6	2.7	3	3.5	1.6	2.1	2.4	2	2.2	5.8	3.1	1.4	2.7	2.6	1.1	1.3	2.7	3	0.9											
<0.5	52.4	68.9	54.1	70	57.2	72.1	59.4	58.4	55.3	70.8	56.5	52.1	49.7	75.3	96.4	55.6	56.4	59.7	38.5	55.1	68.5	85.8	53.9	49.5	58.8											
<1	38	42	26	21	40	33	37	40	34	32	21	31	42	30	16	35	46	33	44	43	31	22	42	37	23											
<5	17	97	13	11	17	29	16	16	15	41	8	13	18	18	7	17	19	60	17	20	24	12	20	19	24											
<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1											
<0.7	45.1	30.1	32.6	25	46	28	46.2	45.2	37.9	37.6	27.7	36	40.9	38.6	20.9	41.1	50.6	33	48.8	48.3	40.2	32.1	42.8	40.6	20											
<1	3	1	<1	<1	1	1	1	4	3	1	1	3	3	<1	<1	3	4	2	2	7	1	<1	4	4	1											
<50	2373	579	239	235	280	647	309	857	2511	633	408	336	2777	401	274	762	3687	971	275	2364	350	324	318	593	402											
<0.1	0.5	0.9	0.6	0.5	0.6	1	0.6	0.5	0.6	1	0.6	0.7	0.8	0.6	0.5	0.5	0.5	0.7	0.8	0.6	0.5	0.4	0.6	0.6	0.5											
<5	86	128	68	49	92	111	91	112	82	107	59	83	93	89	54	221	99	102	121	109	95	67	97	116	58											
<0.04	<0.04	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04											
<0.03	<0.03	0.13	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.45	<0.03	<0.03	<0.03											
<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05											
<0.04	<0.04	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04											
<0.03	0.05	0.76	<0.03	<0.03	0.06	<0.03	<0.03	0.04	0.05	<0.03	<0.03	<0.03	0.06	<0.03	<0.03	0.09	0.15	<0.03	0.08	0.09	0.5	<0.03	<0.03	<0.03	0.09											
<0.04	<0.04	0.21	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.75	<0.04	<0.04	<0.04											
<0.03	<0.03	1.5	0.03	<0.03	<0.03	0.11	<0.03	<0.03	<0.03	0.08	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.19	<0.03	<0.03	0.13	3.02	<0.03	<0.03	0.1											
<0.03	<0.03	1.45	<0.03	<0.03	<0.03	0.11	<0.03	<0.03	<0.03	0.08	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.19	<0.03	<0.03	0.12	4.65	<0.03	<0.03	0.09											
<0.06	<0.06	1.03	<0.06	<0.06	<0.06	0.11	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.14	<0.06	<0.06	0.11	3.56	<0.06	<0.06	0.07											
<0.02	0.03	1	0.03	<0.02	<0.02	0.08	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	0.04	0.14	<0.02	0.04	0.09	3.48	<0.02	<0.02	0.07											
<0.07	<0.07	1.77	<0.07	<0.07	<0.07	0.15	<0.07	<0.07	<0.07	0.1	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.2	<0.07	<0.07	0.13	3.9	<0.07	<0.07	0.1											
<0.04	<0.04	1.02	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.11	<0.04	<0.04	0.07	2.41	<0.04	<0.04	0.04											
<0.04	<0.04	0.6	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	1.1	<0.04	<0.04	<0.04											
<0.04	<0.04	0.13	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.29	<0.04	<0.04	<0.04											
<0.04	<0.04	0.65	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	0.04	1.3	<0.04	<0.04	<0.04	<0.04											
<0.04	<0.04	0.11	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.15	<0.04	<0.04	<0.04	<0.04											
<0.22	<0.22	5.54	<0.22	<0.22	<0.22	0.45	<0.22	<0.22	<0.22	0.24	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	0.64	<0.22	<0.22	0.37	11.73	<0.22	<0.22	0.24											
<0.64	<0.64	10.16	<0.64	<0.64	<0.64	0.81	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	1.26	<0.64	<0.64	0.78	25.63	<0.64	<0.64	<0.64	<0.64											
<0.05	<0.05	1.27	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05	0.09	2.81	<0.05	<0.05	<0.05	0.07											
<0.02	<0.02	0.5	<0.02	<0.02	<0.02	0.04	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	0.04	1.09	<0.02	<0.02	0.03											
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1											
	No interpretation possible	PAH's	No interpretation possible	No interpretation possible	No interpretation possible	Possible trace of PAH's	No interpretation possible	No interpretation possible	No interpretation possible	Lubricating oil	No interpretation possible	No interpretation possible	No interpretation possible	Possible trace Mineral	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	Possible lubricating oil											
<30	<30	<30	<30	<30	<30	<30	<30	<30	83	<30	<30	<30	59	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30											
<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1											
<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1											
<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1											
<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2											
<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4											
<7	<7	<7	<7	<7	<7	<7	<7	10	<7	<7	<7	<7	9	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	17											
<7	<7	<7	<7	<7	<7	<7	<7	73	<7	<7	<7	<7	39	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	11											
<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	11	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7											
<26	<26	<26	<26	<26	<26	<26	<26	83	<26	<26	<26	<26	59	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	28											
<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	0.1	0.2	<0.1											
<10	<10	<10	<10	<10	<10	<10	<10	25	<10	<10	<10	<10	31	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	18											
<10	<10	<10	<10	<10	<10	<10	<10	56	<10	<10	<10	<10	40	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10											

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

CAS Number	Test	GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Resi) (1% SOM)	GAC S4UL Public Open Space (Resi) (2.5% SOM)	GAC S4UL Public Open Space (Resi) (6% SOM)	Method	Units	LOD
	Aromatics												
GTEC05EC07AR	>EC5-EC7	370	690	1,400	26,000	46,000	86,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1
GTEC07EC08AR	>EC7-EC8	860	1,800	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1
GTEC08EC10AR	>EC8-EC10	47	110	270	3,500	8,100	17,000	5,000	5,000	5,000	TM36/PM12	mg/kg	<0.1
GTEC10EC12AR	>EC10-EC12	250	590	1,200	16,000	28,000	34,000	5,000	5,000	5,000	TM5/PM16	mg/kg	<0.2
GTEC12EC16AR	>EC12-EC16	1,800	2,300	2,500	36,000	37,000	38,000	5,100	5,100	5,000	TM5/PM16	mg/kg	<4
GTEC16EC21AR	>EC16-EC21	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC21EC35AR	>EC21-EC35	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC35EC40AR	>EC35-EC40	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC05EC40AR	Total aromatics C5-40										TM5/TM36/PM12	mg/kg	<26
GTC05C40ALAR	Total aliphatics and aromatics(>C5-40)	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM12/PM16	mg/kg	<52
GTEC08EC10AR	>EC8-EC10										TM36/PM12	mg/kg	<0.1
GTEC10EC25AR	>EC10-EC25										TM5/PM16	mg/kg	<10
GTEC25EC35AR	>EC25-EC35										TM5/PM16	mg/kg	<10
1634-04-4	MTBE										TM36/PM12	mg/kg	<0.005
71-43-2	Benzene	0.38	0.7	1.4	27	47	90	72	72	73	TM36/PM12	mg/kg	<0.005
108-88-3	Toluene	880	1900	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.005
100-41-4	Ethylbenzene	83	190	440	5,700	13,000	27,000	24,000	24,000	25,000	TM36/PM12	mg/kg	<0.005
P_M_XYLENE	m/p-Xylene	79	180	430	5,900	14,000	30,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005
95-47-6	o-Xylene	88	210	480	6,600	15,000	33,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005
7012-37-5	PCB 28										TM17/PM8	mg/kg	<0.005
35693-99-3	PCB 52										TM17/PM8	mg/kg	<0.005
37680-73-2	PCB 101										TM17/PM8	mg/kg	<0.005
3150E-00-6	PCB 118										TM17/PM8	mg/kg	<0.005
35065-28-2	PCB 153										TM17/PM8	mg/kg	<0.005
35065-27-1	PCB 153										TM17/PM8	mg/kg	<0.005
35065-29-3	PCB 180										TM17/PM8	mg/kg	<0.005
PCB_7_CON_TOTAL	Total 7 PCBs		1,000^			1,000^			1,000^		TM17/PM8	mg/kg	<0.035
108-95-2	Phenol	750	1,300	2,300	760	1,500	3,200	760	1,500	3,200	TM26/PM21	mg/kg	<0.01
MOIST_CONT_DRY	Natural Moisture Content										PM4/PM0	%	<0.1
MOIST_CONT_WET	Moisture Content (% Wet Weight)										PM4/PM0	%	<0.1
JEL1D06	Moisture Content 105C (% Dry Weight)										PM4/PM0	%	<0.1
JEL1D07	Dry Matter Content Ratio (UG^)										NONE/PM4	%	<0.1
18540-29-9	Hexavalent Chromium		6			33			7.7		TM38/PM20	mg/kg	<0.3
CHROMIUM_III	Chromium III		910			8,600			1,500		NONE/NONE	mg/kg	<0.5
57-12-5	Total Cyanide										TM89/PM45	mg/kg	<0.5
SULPHIDE	Sulphide										TM106/PM45	mg/kg	<10
ALKALI_RES	Alkali Reserve										TM160/PM110	shortchain	<0.000
ELEM_SULPH	Elemental Sulphur										TM306/PM114/PM8	mg/kg	<1
JEL559/LOI	Loss on Ignition										TM22/PM0	%	<1.0
PH	pH										TM73/PM11	pH units	<0.01
	IOM Asbestos Analysis												

Lab Ref	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12904	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992
Sample ID	WS14	WS04	WS04	WS04	WS04	WS15	WS15	WS15	WS25	WS18	WS18	WS18	WS18	WS17	WS17	WS17	WS17	WS 16	WS 16	WS 16	WS 20	WS 20	WS 20	WS 20	WS 21	WS 21
Surface Elevation	24.71	23.56	23.56	23.56	23.56	24.41	24.41	24.41	24.41	24.63	24.63	24.63	24.63	24.73	24.73	24.73	24.73	25.03	25.03	25.03	25.31	25.31	25.31	25.31	24.97	
Depth (mbgl)	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.03-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.30	0.00-1.00	
Depth (mAOD)	**21.71 to 21.31**	**23.56 to 22.56**	**22.56 to 21.56**	**21.56 to 20.56**	**20.56 to 20.16**	**24.38 to 23.41**	**23.41 to 22.41**	**22.41 to 21.41**	**21.41 to 21.01**	**24.63 to 23.63**	**23.63 to 22.63**	**22.63 to 21.63**	**21.63 to 21.23**	**24.73 to 23.73**	**23.73 to 22.73**	**22.73 to 21.73**	**21.73 to 21.33**	**25.03 to 24.03**	**24.03 to 23.03**	**23.03 to 22.03**	**25.31 to 24.31**	**24.31 to 23.31**	**23.31 to 22.31**	**22.31 to 22.01**	**24.97 to 23.97**	
Sampled Date	17/09/2020	17/09/2020	17/09/2020	17/09/2020	17/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	18/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	
TM36/PM12	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TM36/PM12	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TM36/PM12	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TM5/PM16	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TM5/PM16	<4	<4	<4	<4	<4	<4	<4	<4	<6	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
TM5/PM16	<7	<7	23	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
TM5/PM16	<7	<7	131	<7	<7	<7	<7	55	<7	<7	<7	<7	<7	<7	<7	<7	83	<7	<7	<7	<7	<7	<7	<7	<7	<7
TM5/PM16	<7	<7	21	<7	<7	<7	<7	21	<7	<7	<7	<7	<7	<7	<7	<7	34	<7	<7	<7	<7	<7	<7	<7	<7	<7
TM5/TM36/PM12/PM16	<26	<26	175	<26	<26	<26	76	<26	<26	<26	<26	<26	<26	<26	<26	<26	97	<26	<26	<26	<26	<26	<26	<26	<26	<26
TM5/TM36/PM12/PM16	<52	<52	175	<52	<52	<52	76	<52	<52	<52	<52	83	<52	<52	<52	<52	156	<52	<52	<52	<52	<52	<52	<52	<52	<52
TM36/PM12	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TM5/PM16	<10	<10	60	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
TM5/PM16	<10	<10	96	<10	<10	<10	<10	55	<10	<10	<10	<10	<10	<10	<10	<10	66	<10	<10	<10	<10	<10	<10	<10	<10	<10
TM36/PM12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TM36/PM12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TM36/PM12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TM36/PM12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TM36/PM12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TM36/PM12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TM17/PM8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TM17/PM8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TM17/PM8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TM17/PM8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TM17/PM8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TM17/PM8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TM17/PM8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
TM17/PM8	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
TM26/PM21	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
PM4/PM0	8.7	14.7	15.1	18	10.3	19.1	15.2	11.7	10	14.6	10.2	10.8	11.1	10.2	9.2	13.6	9.5	13.6	10.9	9.4	9.6	10.2	13.2	12.7	12.4	
PM4/PM0	8	12.8	13.1	15.2	9.3	16	13.2	10.4	9.1	12.7	9.3	9.8	10	9.3	8.4	11.9	8.7	12	9.8	8.6	8.8	9.2	11.6	11.3	11	
PM4/PM0	10.5	16.8	17.6	21.9	11.2	20.8	16.1	11.5	11.9	14.1	9.9	13.4	10	12.7	11.6	15.9	8.3	11.2	11.4	8.8	10.8	8.1	12.6	14.9	12.1	
NONE/PM4	90.5	85.6	85.1	82.1	90	82.8	86.2	89.7	89.4	87.7	91	88.2	90.9	88.7	89.6	86.3	92.3	89.9	89.8	91.9	90.2	92.5	88.8	87	89.2	
TM38/PM20	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	
NONE/NONE	52.4	68.9	54.1	70	57.2	72.1	59.4	58.4	55.3	70.8	56.5	52.1	49.7	75.3	96.4	55.6	56.4	59.7	38.5	55.1	68.5	85.8	53.9	49.5	58.8	
TM89/PM45	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
TM106/PM45	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
TM160/PM110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
TM306/PM114/PM8	2	2	<1	1	<1	13	3	3	2	3	<1	1	4	1	3	3	3	<1	<1	3	5	1	1	3	2	
TM22/PM0	1.7	3.4	2	1.1	2.3	5.4	2.3	2.1	1.8	2.9	1.3	1.9	1.9	1.9	<1.0	1.3	1.9	2.6	2	1.5	1.9	1.1	2.5	1.5	1.4	
TM73/PM11	8.45	8.4	8.45	8.55	8.58	8.12	8.39	8.26	8.39	8.43	8.62	8.5	8.19	8.07	8.57	8.44	8.32	9.67	8.78	8.42	8.66	8.68	8.57	8.61	8.61	
	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	

Notes:
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Data colums shown light grey are samples of soils that will be removed during construction.
*Indicates GAC values from SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination - Policy Companion Document published in 2014.
NAD = No Asbestos Detected.
NA/- = Not Available.
EIC/AGS/CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment published in 2010.
+ GAC S4ULs EC >35- 44 were used in the absense of suitable for use levels for EC>35-40
^ Indicates Intervention Values taken from **DUTCH INTERVENTION 2009**
& Since xylenes are reported as m&p xylene, hence the GAC limit was taken as the lower limit for the individual xylene type as a conservative approach.

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

		GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Res) (1% SOM)	GAC S4UL Public Open Space (Res) (2.5% SOM)	GAC S4UL Public Open Space (Res) (6% SOM)				Lab Ref.	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13184	20/13184
														Sample ID	WS 21	WS 21	WS 21	WS 22	WS 22	WS 22	WS 22	WS23	WS23	WS23	WS23	WS08	WS08	WS08	WS08	WS06	WS06	WS06	WS06	WS07	WS07	WS07	WS07	WS11	WS11
														Surface Elevation	24.97	24.97	24.97	24.65	24.65	24.65	24.65	24.51	24.51	24.51	24.51	23.42	23.42	23.42	23.42	23.49	23.49	23.49	23.49	23.50	23.50	23.50	23.50	23.92	23.92
														Depth (mbgl)	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.15-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	2.70-3.00	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.12-1.00	1.00-2.00
														Depth (mAOD)	23.97 to 22.97	22.97 to 21.97	21.97 to 21.57	24.65 to 23.65	23.65 to 22.65	22.65 to 21.65	21.65 to 21.25	24.51 to 23.51	23.51 to 22.51	22.51 to 21.51	21.51 to 21.11	23.27 to 22.42	22.42 to 21.42	21.42 to 20.42	20.42 to 20.02	23.49 to 22.49	22.49 to 21.49	21.49 to 20.49	20.79 to 20.49	23.50 to 22.50	22.50 to 21.50	21.50 to 20.50	20.50 to 20.10	23.80 to 22.92	22.92 to 21.92
														Sampled Date	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	23/09/2020	23/09/2020
CAS Number	Test											Method	Units	LOD																								
TOC	Total Organic Carbon											TM27/PM24	%	<0.02	0.44	0.83	0.6	NDP	1.86	0.72	0.69	1.77	0.83	0.68	0.54	1.44	0.31	0.36	0.47	0.45	0.32	0.7	0.82	0.61	0.46	0.76	0.74	0.25	0.18
	Soil Organic Matter												**%**		**0.76**	**1.43**	**1.03**	**NA**	**3.20**	**1.24**	**1.19**	**3.04**	**1.43**	**1.17**	**0.93**	**2.48**	**0.53**	**0.62**	**0.81**	**0.77**	**0.55**	**1.20**	**1.41**	**1.05**	**0.79**	**1.31**	**1.27**	**0.43**	**0.31**
7440-36-0	Antimony		550			7,500							mg/kg	<1	2	3	2	2	4	2	2	2	3	2	2	1	2	2	2	2	1	2	2	<1	3	2	2	1	1
7440-38-2	Arsenic		40			640			79				mg/kg	<0.5	11.9	11.6	12.1	24.5	19.2	10.9	10.2	20.1	14.4	8.1	6.6	6.7	9.9	9.6	17.9	6.7	17.4	8.8	11.9	7.2	14.7	11.3	10.9	10.7	3.5
7440-39-3	Barium		1,300			22,000							mg/kg	<1	143	72	78	105	80	51	64	106	125	35	27	72	54	87	72	68	38	58	85	43	86	90	97	283	35
7440-43-9	Cadmium		85			190			120				mg/kg	<0.1	2.5	2.6	2.2	1.4	0.9	1.9	2.3	1.6	2.5	1.9	1.9	1.2	1.9	2.3	1.3	1.4	1.4	2	2.6	1.8	3	3.1	2.4	0.9	1.3
7440-47-3	Chromium					190							mg/kg	<0.5	47.5	46.5	42.1	19.5	21.4	48.2	51.5	18.7	67	46.8	49.1	62.7	44.1	50.6	45.1	80.3	33.1	46.3	42.8	9	54.6	44.1	45.4	66.1	58.5
7440-50-8	Copper		7,100			68,000			12,000				mg/kg	<1	35	37	28	46	33	27	36	46	43	31	23	24	31	29	20	27	15	27	43	20	46	36	37	18	11
7439-92-1	Lead		310*			2,300*			610*				mg/kg	<5	15	16	16	108	97	17	16	129	85	14	14	33	15	16	12	17	11	14	20	25	21	18	17	11	9
7439-97-6	Mercury		56			1,100			120				mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
7439-98-7	Molybdenum		670			17,000							mg/kg	<0.1	6.5	6.7	5.5	2.5	1.5	5.8	5.2	3	6.5	5.4	4.8	4.6	4.5	5.6	4.8	6	3.4	5.8	6.2	1.8	6.4	6.2	6.1	5.1	4.4
7440-02-0	Nickel		180			980			210				mg/kg	<0.7	44	42.5	31.7	34.9	31.5	30	19.8	42.8	46.4	30.2	31.4	26.9	33.4	37.9	24.7	27.5	20.9	34	49.9	24.1	53.7	46.8	45.8	22.3	14.8
7782-49-2	Selenium		430			12,000			1,100				mg/kg	<1	2	4	3	2	<1	5	3	<1	1	24	4	<1	<1	2	4	1	1	3	4	<1	1	3	4	<1	<1
JE1104S	Total Sulphate											TM30/PM20/PM20	mg/kg	<50	285	2191	2459	12073	11058	1534	2224	561	541	427	1215	621	881	294	422	317	1042	1473	2120	531	251	2182	2348	696	295
7440-42-8	Water Soluble Boron											TM29/PM20/PM45	mg/kg	<0.1	0.6	0.6	0.6	1	3.6	1.2	0.8	0.9	0.7	0.6	0.6	1	0.6	0.5	0.4	0.5	0.5	0.5	0.4	0.3	0.5	0.5	0.4	0.7	0.4
7440-66-6	Zinc		40,000			730,000			81,000			TM30/PM20/PM62	mg/kg	<5	93	87	66	174	139	70	86	164	124	74	66	74	75	91	66	82	48	69	97	75	111	87	92	50	41
	PAH MS																																						
91-20-3	Naphthalene	2.3	5.6	13	190	460	1100	4,900	4,900	4,900		TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.40	<0.04	0.35	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
208-96-8	Acenaphthylene	2,900	4,600	6,000	83,000	97,000	100,000	15,000	15,000	15,000		TM4/PM8	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.07	0.35	<0.03	0.11	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	<0.03	<0.03	<0.03	<0.03	<0.03
83-32-9	Acenaphthene	3,000	4,700	6,000	84,000	97,000	100,000	15,000	15,000	15,000		TM4/PM8	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.50	<0.05	0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
86-73-7	Fluorene	2,800	3,800	4,500	63,000	68,000	71,000	9,900	9,900	9,900		TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.18	0.73	<0.04	0.27	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
85-01-8	Phenanthrene	1,300	1,500	1,500	22,000	22,000	23,000	3,100	3,100	3,100		TM4/PM8	mg/kg	<0.03	<0.03	0.04	0.04	0.38	0.14	0.05	<0.03	0.11	0.32	1.46	0.04	1.49	<0.03	<0.03	<0.03	<0.03	0.07	0.04	0.07	0.25	<0.03	0.08	0.07	<0.03	<0.03
120-12-7	Anthracene	31,000	35,000	37,000	520,000	540,000	540,000	74,000	74,000	74,000		TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	0.14	0.06	<0.04	<0.04	<0.04	<0.04	<0.40	<0.04	0.34	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
206-44-0	Fluoranthene	1,500	1,600	1,600	23,000	23,000	23,000	3,100	3,100	3,100		TM4/PM8	mg/kg	<0.03	<0.03	<0.03	<0.03	0.88	0.32	<0.03	<0.03	0.18	0.11	<0.30	<0.03	1.66	<0.03	<0.03	<0.03	0.05	<0.03	<0.03	<0.03	0.35	<0.03	<0.03	<0.03	<0.03	<0.03
129-00-0	Pyrene	3,700	3,800	3,800	54,000	54,000	54,000	7,400	7,400	7,400		TM4/PM8	mg/kg	<0.03	<0.03	<0.03	<0.03	0.77	0.31	<0.03	<0.03	0.16	0.11	<0.30	<0.03	1.61	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.3	<0.03	<0.03	<0.03	<0.03	<0.03
56-55-3	Benzo(a)anthracene	11	14	15	170	170	180	29	29	29		TM4/PM8	mg/kg	<0.06	<0.06	<0.06	<0.06	0.51	0.18	<0.06	<0.06	0.11	0.07	<0.60	<0.06	0.66	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.19	<0.06	<0.06	<0.06	<0.06	<0.06
218-01-9	Chrysene	30	31	32	350	350	350	57	57	57		TM4/PM8	mg/kg	<0.02	<0.02	0.03	<0.02	0.44	0.19	0.03	<0.02	0.12	0.08	<0.20	<0.02	0.86	<0.02	<0.02	<0.02	0.04	0.03	0.03	<0.02	0.21	<0.02	0.04	0.03	<0.02	<0.02
BEN-BK-FLUORAN	Benzo(b&k)fluoranthene											TM4/PM8	mg/kg	<0.07	<0.07	<0.07	<0.07	0.83	0.36	<0.07	<0.07	0.19	0.11	<0.70	<0.07	1.19	<0.07	<0.07	<0.07	0.09	<0.07	<0.07	<0.07	0.36	<0.07	<0.07	<0.07	<0.07	<0.07
50-32-8	Benzo(a)pyrene	3.2	3.2	3.2	35	35	36	5.7	5.7	5.7		TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	0.41	0.18	<0.04	<0.04	0.09	0.05	<0.40	<0.04	0.53	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.19	<0.04	<0.04	<0.04	<0.04	<0.04
193-39-5	Indeno(123cd)pyrene	45	46	46	500	510	510	82	82	82		TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	0.26	0.11	<0.04	<0.04	0.05	<0.04	<0.40	<0.04	0.27	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.11	<0.04	<0.04	<0.04	<0.04	<0.04
53-70-3	Dibenzo(ah)anthracene	0.31	0.32	0.32	3.5	3.6	3.6	0.57	0.57	0.58		TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.40	<0.04	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
191-24-2	Benzo(ghi)perylene	360	360	360	3,900	4,000	4,000	640	640	640		TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	0.3	0.14	<0.04	<0.04	0.06	<0.04	<0.40	<0.04	0.31	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.12	<0.04	<0.04	<0.04	<0.04	<0.04
191-07-1	Coronene											TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.40	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
PAH_6_TOTAL	PAH 6 Total											TM4/PM8	mg/kg	<0.22	<0.22	<0.22	<0.22	2.68	1.11	<0.22	<0.22	0.57	0.27	<2.20	<0.22	3.96	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	1.13	<0.22	<0.22	<0.22	<0.22	<0.22
PAH_17_TOTAL	PAH 17 Total											TM4/PM8	mg/kg	<0.64	<0.64	<0.64	<0.64	4.97	1.99	<0.64	<0.64	1.07	1.1	<6.40	<0.64	9.92	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	2.19	<0.64	<0.64	<0.64	<0.64	<0.64
205-99-2	Benzo(b)fluoranthene	3.9	4	4	44	44	45	7.1	7.2	7.2		TM4/PM8	mg/kg	<0.05	<0.05	<0.05	<0.05	0.6	0.26	<0.05	<0.05	0.14	0.08	<0.50	<0.05	0.86	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	0.26	<0.05	<0.05	<0.05	<0.05	<0.05
207-08-9	Benzo(k)fluoranthene	110	110	110	1,200	1,200	1,200	190	190	190		TM4/PM8	mg/kg	<0.02	<0.02	<0.02	<0.02	0.23	0.1	<0.02	<0.02	0.05	0.03	<0.20	<0.02	0.33	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	0.1	<0.02	<0.02	<0.02	<0.02	<0.02
205-82-3	Benzo(j)fluoranthene											TM4/PM8	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
INTERPRETATION	EPH CWG Interpretation											TMS/PM16	None		No interpretation possible	No interpretation possible	No interpretation possible	Semi-Aromatic (>EC16-EC21)	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	Degraded diesel	Degraded diesel	No interpretation possible	No interpretation possible	No interpretation possible	Lubricating oil & Aromatic (>EC16-EC21)	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible
MINOIL_10-40	Mineral Oil (C10-C40)											TMS/PM16	mg/kg	<30	<30	<30	<30	107	99	<30	<30	125	655	1297	57	900	<30	<30	<30	102	<30	<30	<30	<30	<30	<30	<30	<30	<30
	TPH CWG																																						
	Aliphatics																																						
GTC05C06AL	>C5-C6	42	78	160	3,200	5,900	12,000	570,000	590,000	600,000		TM36/PM21	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC06C08AL	>C6-C8	100	230	510	7,800	17,000	40,000	600,000	610,000	620,000		TM36/PM21	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC08C10AL	>C8-C10	27	65	150	2,000	4,800	11,000	13,000	13,000	13,000		TM36/PM21	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.7	5.1	0.6	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2
GTC10C12AL	>C10-C12	130	330	770	9,700	23,000	47,000	13,000	13,000	13,000		TMS/PM16	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	4.8	51.1	118.5	<0.2	74.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
GTC12C16AL	>C12-C16	1,100	2,400	4,400	59,000	82,000	90,000	13,000	13,000	13,000		TMS/PM16	mg/kg	<4	<4	<4	<4	<4	<4	<4	<4	<4	35	234	473	10	353	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
GTC16C21AL	>C16-C21							<7	<7	<7	<7	<7	<7	<7	51	246	501	19	346	<7	<7	<7	<7	8	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
GTC21C35AL	>C21-C35							<7	<7	<7	<7	76	85	<7	34	124	204	28	127	<7	<7	<7	<7	79	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
GTC35C40AL	>C35-C40 +	65,000	92,000	110,000	1,600,000	1,700,000	1,800,000	250,000	250,000	250,000		TMS/PM16	mg/kg	<7	<7	<7	<7	18	14	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	15	<7	<7	<7	<7	<7	<7	<7	<7	<7
GTC05C40AL	Total aliphatics C5-40	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions		TMS/TM36/PM21 calculation	mg/kg	<26	<26	<26	<26	107	99	<26	<26	125	657	1302	57	901	<26	<26	<26	102	<26	<26	<26	102	<26	<26	<26	<26	<26
GTC06C10AL	>C6-C10											TM36/PM21	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1.7	5.4	<0.1	0.6	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2
GTC10C25AL	>C10-C25											TMS/PM16	mg/kg	<10	<10	<10	<10	18	23	<10	<10	118	628	1258	42	891	<10	<10	<10	24	<10	<10	<10	<10	<10	<10	<10	<10	<10
GTC25C35AL	>C25-C35											TMS/PM16	mg/kg	<10	<10	<10	<10	60	89	<10	<10	15	24	26	12	23	<10	<10	<10	67	<10	<10	<10	<10	<10	<10	<10	<10	<10

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

CAS Number	Test	GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Resi) (1% SOM)	GAC S4UL Public Open Space (Resi) (2.5% SOM)	GAC S4UL Public Open Space (Resi) (6% SOM)	Method	Units	LOD
	Aromatics												
GTEC05EC07AR	>EC5-EC7	370	690	1,400	26,000	46,000	86,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1
GTEC07EC08AR	>EC7-EC8	860	1,800	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1
GTEC08EC10AR	>EC8-EC10	47	110	270	3,500	8,100	17,000	5,000	5,000	5,000	TM36/PM12	mg/kg	<0.1
GTEC10EC12AR	>EC10-EC12	250	590	1,200	16,000	28,000	34,000	5,000	5,000	5,000	TM5/PM16	mg/kg	<0.2
GTEC12EC16AR	>EC12-EC16	1,800	2,300	2,500	36,000	37,000	38,000	5,100	5,100	5,000	TM5/PM16	mg/kg	<4
GTEC16EC21AR	>EC16-EC21	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC21EC35AR	>EC21-EC35	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC35EC40AR	>EC35-EC40	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC05EC40AR	Total aromatics C5-40										TM5/TM36/PM12	mg/kg	<26
GTC05C40ALAR	Total aliphatics and aromatics(>C5-40)	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM12	mg/kg	<52
GTEC08EC10AR	>EC8-EC10										TM36/PM12	mg/kg	<0.1
GTEC10EC25AR	>EC10-EC25										TM5/PM16	mg/kg	<10
GTEC25EC35AR	>EC25-EC35										TM5/PM16	mg/kg	<10
1634-04-4	MTBE										TM36/PM12	mg/kg	<0.005
71-43-2	Benzene	0.38	0.7	1.4	27	47	90	72	72	73	TM36/PM12	mg/kg	<0.005
108-88-3	Toluene	880	1900	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.005
100-41-4	Ethylbenzene	83	190	440	5,700	13,000	27,000	24,000	24,000	25,000	TM36/PM12	mg/kg	<0.005
P_M_XYLENE	m/p-Xylene	79	180	430	5,900	14,000	30,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005
95-47-6	o-Xylene	88	210	480	6,600	15,000	33,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005
7012-37-5	PCB 28										TM17/PM8	mg/kg	<0.005
35693-99-3	PCB 52										TM17/PM8	mg/kg	<0.005
37680-73-2	PCB 101										TM17/PM8	mg/kg	<0.005
3150E-00-6	PCB 118										TM17/PM8	mg/kg	<0.005
35065-28-2	PCB 153										TM17/PM8	mg/kg	<0.005
35065-27-1	PCB 153										TM17/PM8	mg/kg	<0.005
35065-29-3	PCB 180										TM17/PM8	mg/kg	<0.005
PCB_7_CON_TOTAL	Total 7 PCBs		1,000^			1,000^			1,000^		TM17/PM8	mg/kg	<0.035
108-95-2	Phenol	750	1,300	2,300	760	1,500	3,200	760	1,500	3,200	TM26/PM21	mg/kg	<0.01
MOIST_CONT_DRY	Natural Moisture Content										PM4/PM0	%	<0.1
MOIST_CONT_WET	Moisture Content (% Wet Weight)										PM4/PM0	%	<0.1
JEL1D06	Moisture Content 105C (% Dry Weight)										PM4/PM0	%	<0.1
JEL1D07	Dry Matter Content Ratio (UG^2)										NONE/PM4	%	<0.1
18540-29-9	Hexavalent Chromium		6			33			7.7		TM38/PM20	mg/kg	<0.3
CHROMIUM_III	Chromium III		910			8,600			1,500		NONE/NONE	mg/kg	<0.5
57-12-5	Total Cyanide										TM89/PM45	mg/kg	<0.5
SULPHIDE	Sulphide										TM106/PM45	mg/kg	<10
ALKALI_RES	Alkali Reserve										TM160/PM110	g/kg CaCO3	<0.100
ELEM_SULPH	Elemental Sulphur										TM106/PM114/PM8	mg/kg	<1
JEL559/LOI	Loss on Ignition										TM22/PM0	%	<1.0
PH	pH										TM73/PM11	pH units	<0.01
	IOM Asbestos Analysis												

Lab Ref	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/12992	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13079	20/13184	20/13184
Sample ID	WS 21	WS 21	WS 21	WS 22	WS 22	WS 22	WS 22	WS23	WS23	WS23	WS23	WS08	WS08	WS08	WS06	WS06	WS06	WS06	WS07	WS07	WS07	WS07	WS07	WS11	WS11		
Surface Elevation	24.97	24.97	24.97	24.65	24.65	24.65	24.65	24.51	24.51	24.51	24.51	23.42	23.42	23.42	23.49	23.49	23.49	23.49	23.50	23.50	23.50	23.50	23.50	23.92	23.92		
Depth (mbgl)	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.15-1.00	1.00-2.00	2.00-3.00	0.00-1.00	1.00-2.00	2.00-3.00	2.70-3.00	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.12-1.00	1.00-2.00			
Depth (mAOD)	**23.97 to 22.97**	**22.97 to 21.97**	**21.97 to 21.57**	**24.65 to 23.65**	**23.65 to 22.65**	**22.65 to 21.65**	**21.65 to 21.25**	**24.51 to 23.51**	**23.51 to 22.51**	**22.51 to 21.51**	**21.51 to 21.11**	**23.27 to 22.42**	**22.42 to 21.42**	**21.42 to 20.42**	**20.42 to 20.02**	**23.49 to 22.49**	**22.49 to 21.49**	**21.49 to 20.49**	**20.79 to 20.49**	**23.50 to 22.50**	**22.50 to 21.50**	**21.50 to 20.50**	**20.50 to 20.10**	**23.80 to 22.92**	**22.92 to 21.92**		
Sampled Date	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	21/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	22/09/2020	23/09/2020	23/09/2020		
<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	6	22.5	58.7	7.9	34	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
<4	<4	<4	<4	<4	<4	<4	<4	27	138	283	10	169	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
<7	<7	<7	<7	<7	<7	<7	<7	69	219	395	<7	250	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
<7	<7	<7	<7	107	87	<7	<7	98	162	178	<7	183	<7	<7	<7	37	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
<7	<7	<7	<7	44	23	<7	<7	18	17	<7	<7	25	<7	<7	<7	15	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
<26	<26	<26	<26	151	110	<26	<26	218	559	915	<26	661	<26	<26	<26	52	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26
<52	<52	<52	<52	258	209	<52	<52	343	1216	2217	57	1562	<52	<52	<52	154	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52
<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<10	<10	<10	<10	15	<10	<10	<10	159	484	887	21	566	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
<10	<10	<10	<10	97	85	<10	<10	61	83	46	<10	82	<10	<10	<10	38	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.011	0.037	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.03	0.098	<0.005	0.016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.01	0.04	<0.005	0.015	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
<0.1	11	10	10.1	15.2	27.4	13.2	10.1	16.9	14.8	11.3	11	17.4	13.7	14.8	10.9	7.6	11.5	11.6	11.3	12.5	13.7	10.6	9.1	9.7	7.3		
<0.1	9.9	9.1	9.2	13.2	21.5	11.7	9.1	14.4	12.9	10.2	9.9	14.8	12.1	12.9	9.8	7.1	10.3	10.4	10.2	11.1	12	9.6	8.3	8.8	6.8		
<0.1	7.1	8	12.7	14	22	13.6	8.3	13.5	15.8	9.8	11.5	16.8	12.9	11.4	14.6	8.3	11.4	10.2	9.5	13.1	13.3	10.9	7.5	12.3	6.8		
<0.1	93.3	92.6	88.7	87.7	82	88	92.3	88.1	86.4	91.1	89.7	85.6	88.6	89.8	87.2	92.3	89.8	90.7	91.3	88.4	88.3	90.1	93	89	93.7		
<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3		
<0.5	47.5	46.5	42.1	19.5	21.4	48.2	51.5	18.7	67	46.8	49.1	62.7	44.1	50.6	45.1	80.3	33.1	46.3	42.8	9	54.6	44.1	45.4	66.1	58.5		
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		
<10	<10	<10	<10	<10	101	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10		
<0.100	NA	NA	NA	NA	NA	NA	NA	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
<1	<1	4	2	<1	215	46	16	<1	48	89	10	28	1	1	2	1	7	3	4	<1	<1	12	5	3	3		
<1.0	2.2	2.3	1.5	NDP	4.5	1.6	1.2	4.3	2.7	2	<1.0	1.7	2.1	1.4	1.3	1.4	<1.0	1.1	1.4	1.8	1.1	1.1	1.5	<1.0			
<0.01	8.57	8.53	8.54	7.67	7.73	8.1	8.45	8.33	8.18	8.27	8.33	8.32	8.55	8.77	8.82	8.75	8.55	8.47	8.4	8.7	8.66	8.35	8.28	10.7	9.04		
	NAD	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

Notes:
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Data colums shown light grey are samples of soils that will be removed during construction.
*Indicates GAC values from SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination - Policy Companion Document published in 2014.
NAD = No Asbestos Detected.
NA/- = Not Available.
EIC/AGS/CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment published in 2010.
+ GAC S4ULs EC >35- 44 were used in the absense of suitable for use levels for EC>35-40
^ Indicates Intervention Values taken from **DUTCH INTERVENTION 2009**
& Since xylenes are reported as m&p xylene, hence the GAC limit was taken as the lower limit for the individual xylene type as a conservative approach.

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

		GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Res) (1% SOM)	GAC S4UL Public Open Space (Res) (2.5% SOM)	GAC S4UL Public Open Space (Res) (6% SOM)			
CAS Number	Test										Method	Units	LOD
TOC	Total Organic Carbon										TM021/PM014	%	<0.02
	Soil Organic Matter											**%**	
7440-36-0	Antimony		550			7,500					TM24/PM41/TM42/PM40	mg/kg	<1
7440-38-2	Arsenic		40			640			79		TM24/PM41/TM42/PM40	mg/kg	<0.5
7440-39-3	Barium		1,300			22,000					TM24/PM41/TM42/PM40	mg/kg	<1
7440-43-9	Cadmium		85			190			120		TM24/PM41/TM42/PM40	mg/kg	<0.1
7440-47-3	Chromium										TM24/PM41/TM42/PM40	mg/kg	<0.5
7440-50-8	Copper		7,100			68,000			12,000		TM24/PM41/TM42/PM40	mg/kg	<1
7439-92-1	Lead		310*			2,300*			610*		TM24/PM41/TM42/PM40	mg/kg	<5
7439-97-6	Mercury		56			1,100			120		TM24/PM41/TM42/PM40	mg/kg	<0.1
7439-98-7	Molybdenum		670			17,000					TM24/PM41/TM42/PM40	mg/kg	<0.1
7440-02-0	Nickel		180			980			230		TM24/PM41/TM42/PM40	mg/kg	<0.7
7782-49-2	Selenium		430			12,000			1,100		TM24/PM41/TM42/PM40	mg/kg	<1
3E1104S	Total Sulphate										TM20/PM20/PM220	mg/kg	<50
7440-42-8	Water Soluble Boron										TM29/PM20/PM40	mg/kg	<0.1
7440-66-6	Zinc		40,000			730,000			81,000		TM30/PM41/PM40	mg/kg	<5
	PAH MS												
91-20-3	Naphthalene	2.3	5.6	13	190	460	1100	4,900	4,900	4,900	TM4/PM8	mg/kg	<0.04
208-96-8	Acenaphthylene	2,900	4,600	6,000	83,000	97,000	100,000	15,000	15,000	15,000	TM4/PM8	mg/kg	<0.03
83-32-9	Acenaphthene	3,000	4,700	6,000	84,000	97,000	100,000	15,000	15,000	15,000	TM4/PM8	mg/kg	<0.05
86-73-7	Fluorene	2,800	3,800	4,500	63,000	68,000	71,000	9,900	9,900	9,900	TM4/PM8	mg/kg	<0.04
85-01-8	Phenanthrene	1,300	1,500	1,500	22,000	22,000	23,000	3,100	3,100	3,100	TM4/PM8	mg/kg	<0.03
120-12-7	Anthracene	31,000	35,000	37,000	520,000	540,000	540,000	74,000	74,000	74,000	TM4/PM8	mg/kg	<0.04
206-44-0	Fluoranthene	1,500	1,600	1,600	23,000	23,000	23,000	3,100	3,100	3,100	TM4/PM8	mg/kg	<0.03
129-00-0	Pyrene	3,700	3,800	3,800	54,000	54,000	54,000	7,400	7,400	7,400	TM4/PM8	mg/kg	<0.03
56-55-3	Benzo(a)anthracene	11	14	15	170	170	180	29	29	29	TM4/PM8	mg/kg	<0.06
218-01-9	Chrysene	30	31	32	350	350	350	57	57	57	TM4/PM8	mg/kg	<0.02
BEN-BK-FLUORAN	Benzo(bk)fluoranthene										TM4/PM8	mg/kg	<0.07
50-32-8	Benzo(a)pyrene	3.2	3.2	3.2	35	35	36	5.7	5.7	5.7	TM4/PM8	mg/kg	<0.04
193-39-5	Indeno(123-cd)pyrene	45	46	46	500	510	510	82	82	82	TM4/PM8	mg/kg	<0.04
53-70-3	Dibenzo(ah)anthracene	0.31	0.32	0.32	3.5	3.6	3.6	0.57	0.57	0.58	TM4/PM8	mg/kg	<0.04
191-24-2	Benzo(ghi)perylene	360	360	360	3,900	4,000	4,000	640	640	640	TM4/PM8	mg/kg	<0.04
191-07-1	Coronene										TM4/PM8	mg/kg	<0.04
PAH_6_TOTAL	PAH 6 Total										TM4/PM8	mg/kg	<0.22
PAH_17_TOTAL	PAH 17 Total										TM4/PM8	mg/kg	<0.64
205-99-2	Benzo(b)fluoranthene	3.9	4	4	44	44	45	7.1	7.2	7.2	TM4/PM8	mg/kg	<0.05
207-08-9	Benzo(k)fluoranthene	110	110	110	1,200	1,200	1,200	190	190	190	TM4/PM8	mg/kg	<0.02
205-82-3	Benzo(j)fluoranthene										TM4/PM8	mg/kg	<1
INTERPRETATION	EPH CWG Interpretation										TM5/PM16	None	
MINOIL_10-40	Mineral Oil (C10-C40)										TM5/PM16	mg/kg	<30
	TPH CWG												
	Aliphatics												
GTC05C06AL	>C5-C6	42	78	160	3,200	5,900	12,000	570,000	590,000	600,000	TM36/PM12	mg/kg	<0.1
GTC06C08AL	>C6-C8	100	230	530	7,800	17,000	40,000	600,000	610,000	620,000	TM36/PM12	mg/kg	<0.1
GTC08C10AL	>C8-C10	27	65	150	2,000	4,800	11,000	13,000	13,000	13,000	TM36/PM12	mg/kg	<0.1
GTC10C12AL	>C10-C12	130	330	770	9,700	23,000	47,000	13,000	13,000	13,000	TM5/PM16	mg/kg	<0.2
GTC12C16AL	>C12-C16	1,100	2,400	4,400	59,000	82,000	90,000	13,000	13,000	13,000	TM5/PM16	mg/kg	<4
GTC16C21AL	>C16-C21										TM5/PM16	mg/kg	<7
GTC21C35AL	>C21-C35										TM5/PM16	mg/kg	<7
GTC35C40AL	>C35-C40 +	65,000	92,000	110,000	1,600,000	1,700,000	1,800,000	250,000	250,000	250,000	TM5/PM16	mg/kg	<7
GTC05C40AL	Total aliphatics C5-40	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM16/PM12	mg/kg	<26
GTC06C10AL	>C6-C10										TM5/PM12	mg/kg	<0.1
GTC10C25AL	>C10-C25										TM5/PM16	mg/kg	<10
GTC25C35AL	>C25-C35										TM5/PM16	mg/kg	<10

Lab Ref																														
Sample ID																														
Surface Elevation																														
Depth (mbgl)																														
Depth (mAOD)																														
Sampled Date																														
		20/11184	20/11184	20/11184	20/11184	20/11184	20/11184	20/11184	20/11184	20/11184	20/11184	20/11184	20/11184	20/11184	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299
		WS11	WS11	W527	W527	W526	W526	W526	W525	W525	W525	W525	W524	W524	W524	W524	W524	W528	W528	W529	W529	W529	W530	W530	W530	W530	W530	W530	W530	W530
		23.92	23.92	24.57	24.57	24.83	24.83	24.83	25.25	25.25	25.25	25.25	25.42	25.42	25.42	25.42	25.42	25.71	25.71	25.45	25.45	25.45	25.17	25.17	25.17	25.17	25.17	25.17	25.17	25.17
		2.00-3.00	3.00-3.40	0.00-1.00	1.00-1.50	0.00-1.00	1.00-2.00	2.00-2.80	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.20	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	0.80-1.00	0.00-1.00	1.00-2.00	3.00-3.40	0.00-1.00	0.80-1.00	1.00-2.00	3.00-3.40				
		21.92 to 20.92	**20.92 to 20.52**	**24.57 to 23.57**	**23.57 to 23.07**	**24.83 to 23.83**	**23.83 to 22.83**	**22.83 to 22.03**	**25.25 to 24.25**	**24.25 to 23.25**	**23.25 to 22.25**	**22.25 to 22.05**	**25.42 to 24.42**	**24.62 to 24.42**	**24.42 to 23.42**	**23.42 to 22.42**	**22.42 to 22.02**	**25.71 to 24.71**	**24.51 to 24.71**	**25.45 to 24.45**	**24.45 to 23.45**	**22.45 to 22.05**	**25.17 to 24.17**	**24.37 to 24.17**	**24.17 to 23.17**	**23.17 to 21.77**				
		23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020				
		1.24	**1.27**	**4.30**	**0.67**	**1.82**	**1.38**	**1.10**	**1.14**	**0.69**	**1.46**	**1.29**	**0.98**	**0.53**	**0.57**	**0.86**	**1.44**	**2.60**	**2.13**	**3.16**	**0.52**	**0.91**	**1.93**	**0.65**	**0.58**	**1.08**				
		2	2	2	2	2	2	2	2	2	2	2	1	<1	2	1	2	3	2	2	1	2	2	1	1	1				
		10.7	10.5	15.7	8	33.6	34	9.2	11.4	11.5	9.9	10	10.1	9.1	10.2	7	11.8	14	11.6	15.2	6	8.9	12.1	7.7	5.5	6.5				
		<1	59	77	149	114	130	110	70	100	74	80	66	68	102	91	47	63	138	114	116	93	259	122	102	69	29			
		<0.1	2.9	2.3	1.8	2.3	0.7	1.8	2	1.6	2.3	2.5	2.2	1.3	2.5	2.4	1.5	2.6	2.2	1.5	1.7	1.8	1.8	1.7	1.5	1.6	1.9			
		<0.5	47.1	37	19.5	39.2	64	37.9	49.8	69.4	43	40.6	41.1	55.5	49.3	44.4	72.8	41.7	56.1	51.3	66.7	42.1	49.9	56.6	44.6	45.9	46.9			
		<1	34	34	52	28	39	30	31	28	35	38	33	28	18	32	23	35	51	33	34	21	27	31	16	17	25			
		<5	16	17	171	16	52	28	16	23	16	19	17	32	13	15	10	18	82	110	54	11	14	51	11	7	12			
		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.9	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
		<0.1	6.3	5.7	2.2	4.5	2.8	4.7	6	5.8	6.2	5.4	6	3.7	4.6	5.1	6.7	6	5.4	5	5.1	4.1	5.5	4.4	4.5	4.2	5.4			
		<0.7	41.8	43.2	42.2	38.8	44.1	31.7	40.9	35.2	42.6	43.7	42.3	27.1	35.2	38.3	27.2	48	41.4	30.1	36.1	29	31.7	32.5	23.4	21.5	29.7			
		<1	3	3	1	2	1	2	3	1	1	4	3	1	<1	1	2	4	2	1	2	<1	2	1	1	<1	3			
		<50	1422	1417	1085	342	536	566	1860	414	222	1629	1189	402	409	533	1230	4268	1034	1565	662	365	2779	549	295	286	2253			
		<0.1	0.4	0.6	1.3	0.7	0.7	0.6	0.4	1.2	0.6	0.5	0.5	0.9	0.9	0.6	0.5	0.5	1.5	2.1	1.8	0.5	0.7	1.5	0.6	0.4	0.5			
		<5	95	84	205	82	158	81	97	80	102	95	85	78	53	82	51	89	118	110	108	58	68	94	53	50	59			
		<0.04	<0.04	<0.04	0.09	<0.04	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04			
		<0.03	<0.03	<0.03	0.13	<0.03	0.07	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	0.06	<0.03	<0.03	<0.03	<0.03	<0.03	0.2	<0.03			
		<0.05	<0.05	<0.05	0.09	<0.05	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.23	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05			
		<0.04	<0.04	<0.04	0.08	0.09	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.18	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	0.31	<0.04			
		<0.03	0.04	0.08	0.92	0.07	0.81	0.1	0.07	0.07	<0.03	0.04	0.06	0.13	<0.03	<0.03	<0.03	0.08	1.81	0.6	0.08	<0.03	<0.03	0.14	<0.03	0.45	<0.03			
		<0.04	<0.04	<0.04	0.35	<0.04	0.27	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.34	0.16	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04			
		<0.03	<0.03	<0.03	1.75	<0.03	1.53	0.16	<0.03	0.12	<0.03	<0.03	<0.03	0.2	<0.03	<0.03	<0.03	<0.03	2.14	1.1	0.14	<0.03	<0.03	0.21	<0.03	<0.03	<0.03			
		<0.03	<0.03	<0.03	1.57	0.06	1.31	0.15	<0.03	0.11	<0.03	<0.03	<0.03	0.18	<0.03	<0.03	<0.03	<0.03	1.86	0.98	0.11	<0.03	<0.03	0.19	<0.03	<0.03	<0.03			
		<0.06	<0.06	<0.06	1.05	<0.06	0.84	0.13	<0.06	0.1	<0.06	<0.06	<0.06	0.15	<0.06	<0.06	<0.06	<0.06	1.06	0.64	0.11	<0.06	<0.06	0.16	<0.06	<0.06	<0.06			
		<0.02	<0.02	0.04	1.01	<0.02	0.86	0.11	0.04	0.07	<0.02	0.03	0.03	0.12	<0.02	<0.02	<0.02	0.05	0.93	0.57	0.09	<0.02	<0.02	0.13	<0.02	<0.02	<0.02			
		<0.07	<0.07	<0.07	1.7	<0.07	1.63	0.19	<0.07	0.11	<0.07	<0.07	<0.07	0.22	<0.07	<0.07	<0.07	<0.07	1.67	1.06	0.14	<0.07	<0.07	0.21	<0.07	<0.07	<0.07			
		<0.04	<0.04	<0.04	0.9	<0.04	0.89	0.1	<0.04	0.06	<0.04	<0.04	<0.04	0.12	<0.04	<0.04	<0.04	<0.04	0.88	0.55	0.07	<0.04	<0.04	0.1	<0.04	<0.04	<0.04			
		<0.04	<0.04	<0.04	0.58	<0.04	0.65	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	<0.04	<0.04	0.51	0.31	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04			
		<0.04	<0.04	<0.04	0.14	<0.04	0.11	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.13	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04			
		<0.04	<0.04	<0.04	0.59	<0.04	0.7	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	0.09	<0.04	<0.04	<0.04	<0.04	0.51	0.3	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04			
		<0.04	<0.04	<0.04	0.12	<0.04	0.1	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.08	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04			
		<0.22	<0.22	<0.22	5.52	<0.22	5.4	0.61	<0.22	0.29	<0.22	<0.22	<0.22	0.71	<0.22	<0.22	<0.22	<0.22	5.71	3.32	0.35	<0.22	<0.22	0.65	<0.22	<0.22	<0.22			
		<0.64	<0.64	<0.64	11.07	<0.64	9.98	1.1	<0.64	0.64	<0.64	<0.64	<0.64	1.29	<0.64	<0.64	<0.64	<0.64	12.44	6.58	0.74	<0.64	<0.64	1.27	<0.64	1.02	<0.64			
		<0.05	<0.05	<0.05	1.22	<0.05	1.17	0.14	<0.05	0.08	<0.05	<0.05	<0.05	0.16	<0.05	<0.05	<0.05	<0.05	1.2	0.76	0.1	<0.05	<0.05	0.15	<0.05	<0.05	<0.05			
		<0.02	<0.02	<0.02	0.48	<0.02	0.46	0.05	<0.02	0.03	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.02	<0.02	0.47	0.3	0.04	<0.02	<0.02	0.06	<0.02	<0.02	<0.02			
		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			
			No interpretation possible	No interpretation possible	Degraded diesel & EMO	Degraded diesel	No interpretation possible	Possible MO & cooking oil	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	Possible MO & cooking oil	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	Mainly MO & cooking oil	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	Degraded diesel	No interpretation possible			
		<30	<30	<30	92	514	90	<30	<30	<30	<30	<30	<30	63	<30	<30	<30	40	71	<30	65	<30	<30	<30	<30	1289	<30			
		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
		<0.1	<0.1	<0.1	1.7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	6	<0.1			
		<0.2	<0.2	<0.2	<0.2	46	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	153.8	<0.2			
		<4	<4	<4	31	185	<4	<4	<4	<4	<4	<4	<4	8	<4	<4	<4	8	6	<4	<4	<4	<4	<4	<4	485	<4			
		<7	<7	<7	49	208	<7	<7	<7	<7	<7	<7	<7	18	<7	<7	<7	14	16	<7	<7	<7	<7	<7	<7	484	<7			
		<7	<7	<7	12	75	66	18	<7	<7	<7	<7	<7	37	<7	<7	<7	17	49	<7	<7	<7	<7	<7	<7	166	<7			
		<7	<7	<7	<7	24	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	21	<7	<7	<7	<7	<7	<7			
		<26	<26	<26	92	516	90	<26	<26	<26	<26	<26	<26	63	<26	<26	<26	40	71	<26	65	<26	<26	<26	<26	1295	<26			
		<0.1	<0.1	<0.1	<0.1	1.7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	6	<0.1			
		<10	<10	<10	101	520	<10	<10	<10	<10	<10	<10	<10	45	<10	<10	<10	30	26	<10	<10	<10	<10	<10	<10	1266	<10			
		<10	<10	<10	<10	<10	58	19	<10	<10	<10	<10	<10	13	<10	<10	<10	<10	16	<10	59	<10	<10	<10	<10	22	<10			

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

CAS Number	Test	GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Resi) (1% SOM)	GAC S4UL Public Open Space (Resi) (2.5% SOM)	GAC S4UL Public Open Space (Resi) (6% SOM)	Method	Units	LOD
	Aromatics												
GTEC05EC07AR	>EC5-EC7	370	690	1,400	26,000	46,000	86,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1
GTEC07EC08AR	>EC7-EC8	860	1,800	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1
GTEC08EC10AR	>EC8-EC10	47	110	270	3,500	8,100	17,000	5,000	5,000	5,000	TM36/PM12	mg/kg	<0.1
GTEC10EC12AR	>EC10-EC12	250	590	1,200	16,000	28,000	34,000	5,000	5,000	5,000	TM5/PM16	mg/kg	<0.2
GTEC12EC16AR	>EC12-EC16	1,800	2,300	2,500	36,000	37,000	38,000	5,100	5,100	5,000	TM5/PM16	mg/kg	<4
GTEC16EC21AR	>EC16-EC21	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC21EC35AR	>EC21-EC35	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC35EC40AR	>EC35-EC40	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC05EC40AR	Total aromatics C5-40										TM5/TM36/PM12	mg/kg	<26
GTC05C40ALAR	Total aliphatics and aromatics(>C5-40)	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM12/PM16	mg/kg	<52
GTEC08EC10AR	>EC8-EC10										TM36/PM12	mg/kg	<0.1
GTEC10EC25AR	>EC10-EC25										TM5/PM16	mg/kg	<10
GTEC25EC35AR	>EC25-EC35										TM5/PM16	mg/kg	<10
1634-04-4	MTBE										TM36/PM12	mg/kg	<0.005
71-43-2	Benzene	0.38	0.7	1.4	27	47	90	72	72	73	TM36/PM12	mg/kg	<0.005
108-88-3	Toluene	880	1900	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.005
100-41-4	Ethylbenzene	83	190	440	5,700	13,000	27,000	24,000	24,000	25,000	TM36/PM12	mg/kg	<0.005
P_M_XYLENE	m/p-Xylene	79	180	430	5,900	14,000	30,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005
95-47-6	o-Xylene	88	210	480	6,600	15,000	33,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005
7012-37-5	PCB 28										TM17/PM8	mg/kg	<0.005
35693-99-3	PCB 52										TM17/PM8	mg/kg	<0.005
37680-73-2	PCB 101										TM17/PM8	mg/kg	<0.005
3150E-00-6	PCB 118										TM17/PM8	mg/kg	<0.005
35065-28-2	PCB 153										TM17/PM8	mg/kg	<0.005
35065-27-1	PCB 153										TM17/PM8	mg/kg	<0.005
35065-29-3	PCB 180										TM17/PM8	mg/kg	<0.005
PCB_7_CON_TOTAL	Total 7 PCBs		1,000^			1,000^			1,000^		TM17/PM8	mg/kg	<0.035
108-95-2	Phenol	750	1,300	2,300	760	1,500	3,200	760	1,500	3,200	TM26/PM21	mg/kg	<0.01
MOIST_CONT_DRY	Natural Moisture Content										PM4/PM0	%	<0.1
MOIST_CONT_WET	Moisture Content (% Wet Weight)										PM4/PM0	%	<0.1
JEL1006	Moisture Content 105C (% Dry Weight)										PM4/PM0	%	<0.1
JEL1007	Dry Matter Content Retro 105°C										NONE/PM4	%	<0.1
18540-29-9	Hexavalent Chromium		6			33			7.7		TM38/PM20	mg/kg	<0.3
CHROMIUM_III	Chromium III		910			8,600			1,500		NONE/NONE	mg/kg	<0.5
57-12-5	Total Cyanide										TM89/PM45	mg/kg	<0.5
SULPHIDE	Sulphide										TM106/PM45	mg/kg	<10
ALKALI_RES	Alkali Reserve										TM160/PM110	as no CaCO3	<0.000
ELEM_SULPH	Elemental Sulphur										TM166/PM154/PM8	mg/kg	<1
JEL559/LOI	Loss on Ignition										TM22/PM0	%	<1.0
PH	pH										TM73/PM11	pH units	<0.01
	IOM Asbestos Analysis												

Lab Ref	20/13184	20/13184	20/13184	20/13184	20/13184	20/13184	20/13184	20/13184	20/13184	20/13184	20/13184	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299
Sample ID	WS11	WS11	WS27	WS27	WS26	WS26	WS26	WS25	WS25	WS25	WS25	WS24	WS24	WS24	WS24	WS28	WS28	WS29	WS29	WS29	WS30	WS30	WS30	WS30	WS30
Surface Elevation	23.92	23.92	24.57	24.57	24.83	24.83	24.83	25.25	25.25	25.25	25.25	25.42	25.42	25.42	25.42	25.42	25.42	25.71	25.71	25.45	25.45	25.45	25.17	25.17	25.17
Depth (mbgl)	2.00-3.00	3.00-3.40	0.00-1.00	1.00-1.50	0.00-1.00	1.00-2.00	2.00-2.80	0.00-1.00	1.00-2.00	2.00-3.00	3.00-3.20	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	0.80-1.00	0.00-1.00	1.00-2.00	3.00-3.40	0.00-1.00	0.80-1.00	1.00-2.00	3.00-3.40
Depth (mAOD)	21.92 to 20.92	20.92 to 20.52	24.57 to 23.57	23.57 to 23.07	24.83 to 23.83	23.83 to 22.83	22.83 to 22.03	25.25 to 24.25	24.25 to 23.25	23.25 to 22.25	22.25 to 22.05	25.42 to 24.42	24.62 to 24.42	24.42 to 23.42	23.42 to 22.42	22.42 to 22.02	25.71 to 24.71	24.51 to 24.71	25.45 to 24.45	24.45 to 23.45	22.45 to 22.05	25.17 to 24.17	24.37 to 24.17	24.17 to 23.17	23.17 to 21.77
Sampled Date	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	23/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020
	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1
	<0.2	<0.2	<0.2	<0.2	7.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	52.9	<0.2
	<4	<4	<4	13	95	<4	<4	<4	<6	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	294	<4
	<7	<7	<7	40	154	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	13	<7	<7	<7	<7	<7	<7	409	<7
	<7	<7	<7	52	49	139	37	<7	<7	<7	<7	<7	<7	<7	37	<7	82	45	118	<7	<7	<7	<7	194	<7
	<7	<7	<7	<7	<7	83	17	<7	<7	<7	<7	<7	<7	<7	16	<7	<7	9	90	<7	<7	<7	<7	<7	<7
	<26	<26	105	306	202	54	<26	<26	<26	<26	<26	53	<26	<26	<26	<26	90	54	208	<26	<26	<26	<26	950	<26
	<52	<52	197	822	292	54	<52	<52	<52	<52	<52	116	<52	<52	<52	<52	161	54	273	<52	<52	<52	<52	2245	<52
	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1
	<10	<10	77	317	18	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	17	17	<10	<10	<10	<10	<10	905	<10
	<10	<10	35	<10	134	29	<10	<10	<10	<10	<10	26	<10	<10	<10	<10	38	38	110	<10	<10	<10	<10	43	<10
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.025	<0.005
	<0.005	<0.005	<0.005	<0.005	0.026	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.12	<0.005
	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.09	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	0.048	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	9.7	9.4	15.6	13.6	12.2	14.1	9.6	12.9	11.1	9.4	11.6	11.6	9.6	13.6	11.3	8.5	13.9	14.8	14.9	11.6	10.6	16.6	12.2	10.5	8.7
	8.8	8.6	13.5	12	10.9	12.3	8.7	11.4	10	8.6	10.4	10.4	8.7	12	10.2	7.8	12.2	12.9	12.9	10.4	9.6	14.2	10.9	9.5	8
	13	13.5	18.2	16.5	14.1	16.7	11.2	15.3	8.3	12.4	14.8	10.2	8.4	8.1	10.5	9.7	23.3	17.7	11.2	13.2	9.9	16	11.3	11.3	9.6
	88.5	88.1	84.6	85.9	87.6	85.7	89.3	86.7	92.4	89	87.1	90.7	92.3	92.5	90.5	91.2	81.1	84.9	89.9	88.4	91	86.2	89.9	89.9	91.2
	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
	47.1	37	19.5	39.2	64	37.9	49.8	69.4	43	40.6	41.1	55.5	49.3	44.4	72.8	41.7	56.1	51.3	66.7	42.1	49.9	56.6	44.6	45.9	46.9
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	<10	<10	<10	12	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	NA	NA	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	3.564	NDP	NDP	NDP
	5	4	22	160	3	2	4	3	1	11	6	14	3	4	5	5	21	39	3	3	<1	4	4	12	6
	1.3	1.7	3.8	1.7	3.1	2.3	1.7	2.8	1.9	2	1.7	2.1	1.7	1.7	1.2	1.9	3.6	2.7	4.8	1.3	1.9	4.2	1.5	1.2	1.3
	8.43	8.32	8.03	8.14	8.55	8.39	8.31	8.47	8.52	8.45	8.43	8.44	8.63	8.49	8.31	8.29	8.09	8.27	9.2	9.45	9.5	8.5	8.39	7.94	8.42
	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD

Notes:
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Data colums shown light grey are samples of soils that will be removed during construction.
*Indicates GAC values from SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination - Policy Companion Document published in 2014.
NAD = No Asbestos Detected.
NA/- = Not Available.
EIC/AGS/CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment published in 2010.
+ GAC S4ULs EC >35- 44 were used in the absense of suitable for use levels for EC>35-40
^ Indicates Intervention Values taken from **DUTCH INTERVENTION 2009**
& Since xylenes are reported as m&p xylene, hence the GAC limit was taken as the lower limit for the individual xylene type as a conservative approach.

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

		GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Res) (1% SOM)	GAC S4UL Public Open Space (Res) (2.5% SOM)	GAC S4UL Public Open Space (Res) (6% SOM)				Commercial																				
													Lab Ref#	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13350	20/13350	20/13350	20/13350	20/13350	20/13350	20/13350
													Sample ID	WS03	WS01	WS03	WS03	WS03	WS31	WS31	WS34	WS34	WS34	WS34	WS34	WS32	WS32	WS32	WS30	WS 36	WS 36	WS 36	WS 36	WS 37	WS 37	WS 38
													Surface Elevation	23.37	23.37	23.37	23.37	23.37	24.78	24.78	25.53	25.53	25.53	25.53	25.53	25.53	25.69	25.69	25.69	25.17	26.03	26.03	26.03	25.95	25.95	25.79
													Depth (mbgl)	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-1.60	0.00-1.00	0.80-1.00	1.30-1.50	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	2.00-3.00	0.8-1.0	0.0-1.0	1.0-2.0	2.0-2.5	0.8-1.0	0.0-1.0	0.0-1.0
													Depth (mAOD)	**23.37 to 22.37**	**22.17 to 22.37**	**22.37 to 21.37**	**21.37 to 20.37**	**20.37 to 19.97**	**24.78 to 23.78**	**23.78 to 23.18**	**25.53 to 24.53**	**24.73 to 24.53**	**24.23 to 24.03**	**24.53 to 23.53**	**23.53 to 22.53**	**22.53 to 22.13**	**25.69 to 24.69**	**24.89 to 24.69**	**24.69 to 23.69**	**23.69 to 22.69**	**23.17 to 22.17**	**25.03 to 25.03**	**26.03 to 25.03**	**25.03 to 24.03**	**24.03 to 23.53**	**25.15 to 24.95**	**25.95 to 24.95**	**25.79 to 24.79**
													Sampled Date	24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020
CAS Number	Test										Method	Units	LOD																						
TOC	Total Organic Carbon										TM27/PM24	%	<0.02	1.16	0.36	0.44	0.57	0.74	0.82	0.45	2.24	1.23	0.53	0.5	0.51	0.68	0.53	0.38	0.39	0.4	0.53	0.29	1.01	0.38	0.4	0.53	0.61	1.31
	Soil Organic Matter											**%**		**2.00**	**0.62**	**0.76**	**0.98**	**1.27**	**1.41**	**0.77**	**3.85**	**2.12**	**0.91**	**0.86**	**0.88**	**1.17**	**0.91**	**0.55**	**0.67**	**0.69**	**0.91**	**0.50**	**1.74**	**0.65**	**0.69**	**0.91**	**1.05**	**2.25**
7440-36-0	Antimony		550			7,500					TM5/PM16/TM32/PM40	mg/kg	<1	2	<1	2	2	2	7	1	2	2	2	3	2	2	2	2	2	1	2	2	2	2	<1	2	2	4
7440-38-2	Arsenic		40			640			79		TM5/PM16/TM32/PM40	mg/kg	<0.5	10.9	3.4	13.1	10.5	10.6	7.5	4.5	13	10.5	8.6	8.4	12.9	7.6	13.5	12.5	10.6	5.6	7.8	9.8	20.1	8.5	5.9	46.5	133.9	17
7440-39-3	Barium		1,300			22,000					TM5/PM16/TM32/PM40	mg/kg	<1	166	23	68	68	52	62	31	86	103	121	121	68	49	178	75	78	26	34	48	184	50	33	104	114	122
7440-43-9	Cadmium		85			190			120		TM5/PM16/TM32/PM40	mg/kg	<0.1	2.5	0.9	2.5	2.2	2.4	1.1	1.5	1.6	1.9	0.5	1.3	2	2.7	3.1	2.6	2.3	1.4	2.1	1.9	1.6	2.2	0.7	1.6	1	1.2
7440-47-3	Chromium					640					TM5/PM16/TM32/PM40	mg/kg	<0.5	65.8	21.1	45.8	35	35.2	65.2	56	59.9	57.6	74.3	46.9	40.8	36	48.8	43.4	42.5	52.9	45.2	34.3	45.4	36.7	24.4	18.1	56.7	56.9
7440-50-8	Copper		7,100			68,000			12,000		TM5/PM16/TM32/PM40	mg/kg	<1	31	11	45	34	41	35	20	43	33	24	19	30	33	34	37	36	17	25	25	30	29	19	30	36	37
7439-92-1	Lead		310*			2,300*			610*		TM5/PM16/TM32/PM40	mg/kg	<5	193	6	18	16	18	39	13	73	35	16	17	14	18	34	15	16	10	11	14	58	11	8	73	41	100
7439-97-6	Mercury		56			1,100			120		TM5/PM16/TM32/PM40	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
7439-98-7	Molybdenum		670			17,000					TM5/PM16/TM32/PM40	mg/kg	<0.1	5.5	1.9	5.6	5.1	5.2	5.3	3.8	4.6	5	6.4	3.7	5.5	2.2	5.8	6.1	5.1	4.3	4.4	5.6	3.5	5.1	2.6	1.6	4.1	3.4
7440-02-0	Nickel		180			980			210		TM5/PM16/TM32/PM40	mg/kg	<0.7	37.5	17.6	52.3	39.7	44	27.9	20.7	10.1	35.5	39.2	29.9	39.3	39.6	47.6	40.3	40.5	21.4	29.2	28.9	32.3	32.7	33	28.9	40.5	36.3
7782-49-2	Selenium		430			12,000			1,100		TM5/PM16/TM32/PM40	mg/kg	<1	2	<1	1	3	4	<1	1	1	2	1	1	4	5	2	2	<1	2	8	1	2	2	1	<1	2	2
JE1104S	Total Sulphate										TM30/PM20/PM20	mg/kg	<50	709	334	192	310	4097	447	361	451	780	267	423	182	535	489	390	332	984	630	1017	1650	383	446	278	427	577
7440-42-8	Water Soluble Boron										TM5/PM20/PM45	mg/kg	<0.1	1.5	0.6	0.4	0.5	0.3	0.6	0.6	1.5	2.3	0.8	0.9	0.6	0.5	1.2	0.8	0.6	0.4	0.7	0.8	0.8	0.6	1	0.7	1.1	1
7440-66-6	Zinc		40,000			730,000			81,000		TM5/PM16/PM40	mg/kg	<5	118	29	95	75	80	74	57	99	99	49	65	82	112	87	86	81	47	75	73	103	83	35	166	107	156
	PAH MS																																					
91-20-3	Naphthalene	2.3	5.6	13	190	460	1100	4,900	4,900	4,900	TM4/PM8	mg/kg	<0.04	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.49	1.67	<0.40	<0.40	0.14	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
208-96-8	Acenaphthylene	2,900	4,600	6,000	83,000	97,000	100,000	15,000	15,000	15,000	TM4/PM8	mg/kg	<0.03	0.1	<0.03	<0.03	<0.03	<0.03	<0.03	0.13	0.5	1.45	0.51	0.52	0.07	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
83-32-9	Acenaphthene	3,000	4,700	6,000	84,000	97,000	100,000	15,000	15,000	15,000	TM4/PM8	mg/kg	<0.05	0.13	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	<0.50	0.94	<0.50	<0.50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
86-73-7	Fluorene	2,800	3,800	4,500	63,000	68,000	71,000	9,900	9,900	9,900	TM4/PM8	mg/kg	<0.04	0.13	<0.04	<0.04	<0.04	<0.04	<0.04	0.45	1.57	3.73	1.66	1.24	0.21	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04	<0.04
85-01-8	Phenanthrene	1,300	1,500	1,500	22,000	22,000	23,000	3,100	3,100	3,100	TM4/PM8	mg/kg	<0.03	1.9	<0.03	<0.03	<0.03	<0.03	0.09	0.15	0.84	3.09	7.62	3.28	2.46	0.39	<0.03	0.07	<0.03	<0.03	<0.03	0.07	<0.03	0.14	<0.03	<0.03	0.28	0.1	0.39
120-12-7	Anthracene	31,000	35,000	37,000	520,000	540,000	540,000	74,000	74,000	74,000	TM4/PM8	mg/kg	<0.04	0.49	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.40	<0.40	<0.40	<0.40	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	0.11
206-44-0	Fluoranthene	1,500	1,600	1,600	23,000	23,000	23,000	3,100	3,100	3,100	TM4/PM8	mg/kg	<0.03	3.22	<0.03	<0.03	<0.03	<0.03	0.19	0.06	<0.30	<0.30	<0.30	<0.30	<0.03	<0.03	0.09	<0.03	<0.03	<0.03	<0.03	<0.03	0.24	<0.03	0.15	0.52	0.17	0.74
129-00-0	Pyrene	3,700	3,800	3,800	54,000	54,000	54,000	7,400	7,400	7,400	TM4/PM8	mg/kg	<0.03	2.63	<0.03	<0.03	<0.03	<0.03	0.21	0.08	0.36	<0.30	<0.30	<0.30	<0.03	<0.03	0.08	<0.03	<0.03	<0.03	<0.03	<0.03	0.23	<0.03	0.13	0.42	0.14	0.61
56-55-3	Benzo(a)anthracene	11	14	15	170	170	180	29	29	29	TM4/PM8	mg/kg	<0.06	1.65	<0.06	<0.06	<0.06	<0.06	0.13	<0.06	<0.60	<0.60	<0.60	<0.60	<0.06	<0.06	0.08	<0.06	<0.06	<0.06	<0.06	<0.06	0.14	<0.06	<0.06	0.21	0.09	0.45
218-01-9	Chrysene	30	31	32	350	350	350	57	57	57	TM4/PM8	mg/kg	<0.02	1.54	<0.02	<0.02	<0.02	0.07	0.11	0.03	<0.20	<0.20	<0.20	<0.20	<0.02	<0.02	0.06	<0.02	<0.02	<0.02	<0.02	<0.02	0.17	<0.02	0.05	0.28	0.1	0.45
BEN-B4-FLUORAN	Benzo(b)fluoranthene										TM4/PM8	mg/kg	<0.07	2.87	<0.07	<0.07	<0.07	<0.07	<0.07	0.15	<0.07	<0.70	<0.70	<0.70	<0.07	<0.07	0.08	<0.07	<0.07	<0.07	<0.07	<0.07	0.27	<0.07	<0.07	0.36	0.14	0.68
50-32-8	Benzo(a)pyrene	3.2	3.2	3.2	35	35	36	5.7	5.7	5.7	TM4/PM8	mg/kg	<0.04	1.48	<0.04	<0.04	<0.04	<0.04	0.08	<0.04	<0.40	<0.40	<0.40	<0.40	<0.04	<0.04	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	0.14	<0.04	<0.04	0.17	0.07	0.36
193-39-5	Indeno(123cd)pyrene	45	46	46	500	510	510	82	82	82	TM4/PM8	mg/kg	<0.04	0.91	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.40	<0.40	<0.40	<0.40	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	0.08	<0.04	0.2
53-70-3	Dibenzo(ah)anthracene	0.31	0.32	0.32	3.5	3.6	3.6	0.57	0.57	0.58	TM4/PM8	mg/kg	<0.04	0.17	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.40	<0.40	<0.40	<0.40	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
191-24-2	Benzo(ghi)perylene	360	360	360	3,900	4,000	4,000	640	640	640	TM4/PM8	mg/kg	<0.04	0.83	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	<0.40	<0.40	<0.40	<0.40	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	0.08	<0.04	0.2
191-07-1	Coronene										TM4/PM8	mg/kg	<0.04	0.1	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.40	<0.40	<0.40	<0.40	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
PAH_6_TOTAL	PAH 6 Total										TM4/PM8	mg/kg	<0.22	9.31	<0.22	<0.22	<0.22	<0.22	0.48	<0.22	<2.20	<2.20	<2.20	<2.20	<0.22	<0.22	0.22	<0.22	<0.22	<0.22	<0.22	<0.22	0.78	<0.22	<0.22	1.21	0.38	2.18
PAH_17_TOTAL	PAH 17 Total										TM4/PM8	mg/kg	<0.64	18.22	<0.64	<0.64	<0.64	<0.64	1.08	1.76	<6.40	15.41	<6.40	<6.40	0.81	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	1.46	<0.64	<0.64	2.47	0.81	4.19
205-99-2	Benzo(b)fluoranthene	3.9	4	4	44	44	45	7.1	7.2	7.2	TM4/PM8	mg/kg	<0.05	2.07	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.50	<0.50	<0.50	<0.50	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	0.19	<0.05	<0.05	0.26	0.1	0.49
207-08-9	Benzo(k)fluoranthene	110	110	110	1,200	1,200	1,200	190	190	190	TM4/PM8	mg/kg	<0.02	0.8	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	<0.20	<0.20	<0.20	<0.20	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.08	<0.02	<0.02	0.1	0.04	0.19
205-82-3	Benzo(j)fluoranthene										TM4/PM8	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<10	<10	<10	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
INTERPRETATION	EPH CWG Interpretation										TM5/PM16	None		PAH's	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	Degraded diesel	Degraded diesel	Degraded diesel	Degraded diesel	Degraded diesel	Degraded diesel	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	Degraded diesel	No interpretation possible	No interpretation possible	No interpretation possible	Degraded diesel	PAH's	No interpretation possible	Hmm a reasonable eg
MINOIL_10-40	Mineral Oil (C10-C40)										TM5/PM16	mg/kg	<30	<30	<30	<30	<30	<30	<30	819	1583	4454	3091	2974	606	<30	<30	<30	<30	<30	126	<30	<30	<30	340	<30	<30	52
	TPH CWG																																					
	Aliphatics																																					
GTC05C06AL	>C5-C6	42	78	160	3,200	5,900	12,000	570,000	590,000	600,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC06C08AL	>C6-C8	100	230	510	7,800	17,000	40,000	600,000	610,000	620,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.2	2.7	3.5	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC08C10AL	>C8-C10	27	65	150	2,000	4,800	11,000	13,000	13,000	13,000	TM36/PM12	mg/kg	<0.1	<0.1	0.1	<0.1	0.1	<0.1	<0.1	<0.1	1.4	4.6	24.9	25.5	1.4	<0.1	1.3	<0.1	<0.1	<0.1	1.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC10C12AL	>C10-C12	130	330	770	9,700	23,000	47,000	13,000	13,000	13,000	TM5/PM16	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	91.7	196.7	588.7	400.2	402.1	67.7	<0.2	<0.2	<0.2	<0.2	19.2	<0.2	<0.2	<0.2	20.6	<0.2	<0.2	<0.2
GTC12C16AL	>C12-C16	1,100	2,400	4,400	59,000	82,000	90,000	13,000	13,000	13,000	TM5/PM16	mg/kg	<4	<4	<4	<4	<4	<4	4	292	583	1602	1120	1080	225	<4	<4	<4	<4	<4	47	<4	<4	<4	114	<4	<4	<4
GTC16C21AL	>C16-C21										TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	17	323	593	1660	1157	1106	233	<7	<7	<7	<7	<7	47	<7	<7	<7	141	<7	<7	<7
GTC21C35AL	>C21-C35										TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	<7	8	112	210	603	414	386	80	<7	<7	<7	<7	13	<7	<7	<7	64	<7	<7	44
GTC35C40AL	>C35-C40 +	65,000	92,000	110,000	1,600,000	1,700,000	1,800,000	250,000	250,000	250,000	TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	8
GTC05C40AL	Total aliphatics C5-40	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM12/PM40	mg/kg	<26	<26	<26	<26	<26	<26	<26	29	820	1588	4481	3120	2882	607	<26	<26	<26	<26	128	<26	<26	<26	340	<26	<26	52
GTC06C10AL	>C6-C10										TM36/PM12	mg/kg	<0.1	<0.1	0.1	<0.1	0.1	<0.1	<0.1	1.5	4.8	27.6	29	7.9	0.8	<0.1	<0.1	<0.1	<0.1	<0.1	1.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC10C25AL	>C10-C25										TM5/PM16	mg/kg	<10	<10	<10	<10	<10	<10	31	804	1569	4389	3021	2935	605	<10	<10	<10	<10	<10	126	<10	<10	<10	313	<10	<10	15
GTC25C35AL	>C25-C35										TM5/PM16	mg/kg	<10	<10	<10	<10	<10	<10	<10	14	31	77	65	54	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	15	<10	<10	45

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

CAS Number	Test	GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Resi) (1% SOM)	GAC S4UL Public Open Space (Resi) (2.5% SOM)	GAC S4UL Public Open Space (Resi) (6% SOM)	Method	Units	LOD	Commercial																									
	Lab Cert													20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13299	20/13350	20/13350	20/13350	20/13350	20/13350	20/13350	20/13350	20/13350
	Sample ID													WS03	WS03	WS03	WS03	WS03	WS31	WS31	WS34	WS34	WS34	WS34	WS34	WS32	WS32	WS32	WS30	WS 36	WS 36	WS 36	WS 36	WS 37	WS 37	WS 38
	Surface Elevation													23.37	23.37	23.37	23.37	23.37	24.78	24.78	25.53	25.53	25.53	25.53	25.53	25.69	25.69	25.69	25.17	26.03	26.03	26.03	26.03	25.95	25.95	25.79
	Depth (mbgl)													0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	1.00-1.60	0.00-1.00	0.80-1.00	1.30-1.50	1.00-2.00	2.00-3.00	3.00-3.40	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	2.00-3.00	0.8-1.0	0.0-1.0	1.0-2.0	2.0-2.5	0.8-1.0	0.0-1.0	0.0-1.0
	Depth (mAOD)													**23.37 to 22.37**	**22.17 to 22.37**	**22.37 to 21.37**	**21.37 to 20.37**	**20.37 to 19.97**	**24.78 to 23.78**	**23.78 to 23.18**	**25.53 to 24.53**	**24.73 to 24.53**	**24.23 to 24.03**	**24.53 to 23.53**	**23.53 to 22.53**	**22.53 to 22.13**	**25.69 to 24.69**	**24.89 to 24.69**	**24.69 to 23.69**	**23.69 to 22.69**	**23.17 to 22.17**	**25.23 to 25.03**	**26.03 to 25.03**	**25.03 to 24.03**	**24.03 to 23.53**	**25.15 to 24.95**	**25.95 to 24.95**	**25.79 to 24.79**
	Sampled Date													24/09/2020	24/09/2020	24/09/2020	24/09/2020	24/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	25/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020
	Aromatics																																						
GTEC05EC07AR	>EC5-EC7	370	690	1,400	26,000	46,000	86,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC07EC08AR	>EC7-EC8	860	1,800	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC08EC10AR	>EC8-EC10	47	110	270	3,500	8,100	17,000	5,000	5,000	5,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	1	1.1	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC10EC12AR	>EC10-EC12	250	590	1,200	16,000	28,000	34,000	5,000	5,000	5,000	TM5/PM16	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	10.7	110.5	300.6	186.7	202.2	32.7	<0.2	<0.2	<0.2	8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
GTEC12EC16AR	>EC12-EC16	1,800	2,300	2,500	36,000	37,000	38,000	5,100	5,100	5,000	TM5/PM16	mg/kg	<4	<4	<4	<4	<4	<4	<4	181	520	1237	879	888	153	<4	<4	<4	<4	27	<4	<4	<4	41	<4	<4	<4	<4	<4
GTEC16EC21AR	>EC16-EC21	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7	13	<7	<7	<7	<7	10	248	600	1420	1028	1017	175	<7	<7	<7	<7	32	<7	<7	<7	94	21	<7	<7	<7	<7
GTEC21EC35AR	>EC21-EC35	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7	96	<7	<7	<7	<7	8	84	247	572	402	392	53	<7	<7	<7	<7	15	<7	<7	<7	28	145	<7	<7	123	
GTEC35EC40AR	>EC35-EC40	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7	19	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	72	<7	58		
GTEC05EC40AR	Total aromatics C5-40										TM5/TM36/PM12/PM16	mg/kg	<26	128	<26	<26	<26	<26	<26	544	1478	3531	2497	2500	414	<26	<26	<26	<26	82	<26	<26	<26	163	238	<26	181		
GTC05C40ALAR	Total aliphatics and aromatics(>C5-40)	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM12/PM16	mg/kg	<52	128	<52	<52	<52	<52	<52	1364	3066	8012	5617	5482	1021	<52	<52	<52	<52	210	<52	<52	<52	503	238	<52	233		
GTEC08EC10AR	>EC8-EC10										TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	1	1.1	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC10EC25AR	>EC10-EC25										TM5/PM16	mg/kg	<10	40	<10	<10	<10	<10	18	538	1425	3416	2427	2432	410	<10	<10	<10	<10	82	<10	<10	<10	169	64	<10	27		
GTEC25EC35AR	>EC25-EC35										TM5/PM16	mg/kg	<10	75	<10	<10	<10	<10	<10	<10	52	111	68	66	<10	<10	<10	<10	<10	<10	<10	<10	<10	126	<10	108		
	BTEX																																						
1634-04-4	MTBE										TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.025	0.101	0.018	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
71-43-2	Benzene	0.38	0.7	1.4	27	47	90	72	72	73	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
108-88-3	Toluene	880	1900	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
100-41-4	Ethylbenzene	83	190	440	5,700	13,000	27,000	24,000	24,000	25,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	0.026	0.161	0.149	0.041	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P_M_XYLENE	m/p-Xylene	79	180	430	5,900	14,000	30,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.032	0.107	0.598	0.678	0.18	0.023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.035	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
95-47-6	o-Xylene	88	210	480	6,600	15,000	33,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	0.051	0.297	0.339	0.098	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	PCBs																																						
7012-37-5	PCB 28										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35693-99-3	PCB 52										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
37680-73-2	PCB 101										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
31508-00-6	PCB 118										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35065-28-2	PCB 153										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35065-27-1	PCB 153										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35065-29-3	PCB 180										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
PCB_7_CON_TOTAL	Total 7 PCBs		1,000^			1,000^			1,000^		TM17/PM8	mg/kg	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
	Phenols																																						
108-95-2	Phenol	750	1,300	2,300	760	1,500	3,200	760	1,500	3,200	TM26/PM21	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOIST_CONT_DRY	Natural Moisture Content										PM4/PM0	%	<0.1	21.6	18.5	14.9	13.5	9.8	12.3	15.3	16.1	29.1	23.3	20.5	15.3	15.8	14.4	11.4	12.3	11.3	14.2	12.2	15.8	9.5	15	12.9	12.8	19	
MOIST_CONT_WET	(Moisture Content in Wet Weight)										PM4/PM0	%	<0.1	17.7	15.6	12.9	11.9	8.9	10.9	13.3	13.9	22.6	18.9	17	13.3	13.7	12.6	10.2	10.9	10.1	12.4	10.9	13.6	8.7	13	11.4	11.4	15.9	
JEL1006	(Moisture Content 105C (% Dry Weight))										PM4/PM0	%	<0.1	23.6	12.7	12.9	13.7	10.9	12.3	20.3	18.2	25.3	20.8	21	13.7	14.9	10.6	8.6	12.9	11.5	11.6	15.4	14.4	9.7	15.1	16.8	17.8	20.2	
JEL1007	Dry Matter Content Ratio (105°C)										NONE/PM4	%	<0.1	80.9	88.7	88.5	88	90.2	89.1	83.1	84.6	79.8	82.8	82.6	87.9	87.1	90.4	92.1	88.6	89.7	89.6	86.6	87.4	91.2	86.9	85.6	84.9	83.2	
18540-29-9	Hexavalent Chromium		6			33			7.7		TM38/PM20	mg/kg	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
CHROMIUM_III	Chromium III		910			8,600			1,500		NONE/NONE	mg/kg	<0.5	65.8	21.1	45.8	35	35.2	65.2	56	59.9	57.6	74.3	46.9	40.8	36	48.8	43.4	42.5	52.9	45.2	34.3	45.4	36.7	24.4	18.1	56.7	56.9	
57-12-5	Total Cyanide										TM89/PM45	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SULPHIDE	Sulphide										TM106/PM45	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
ALKALI_RES	Alkali Reserve										TM160/PM110	g/kg CaCO3 eq	<0.000	NA	NA	NA	NA	NA	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	0.569	NDP	NDP	NDP	NDP	NDP	NDP	NDP
ELEM_SULPH	Elemental Sulphur										TM106/PM110/PM45	g/kg CaCO3 eq	<1	<1	2	<1	<1	7	16	41	9	24	6	24	12	7	4	1	<1	10	3	2	1	1	104	<1	1	2	
JEL559/LOI	Loss on Ignition										TM22/PM0	%	<1.0	3.8	1.1	2.2	2.1	2.1	2.2	1.3	4.7	4.4	3.2	2.6	1.9	1.8	2.8	2.1	1.9	<1.0	1.3	1.6	3.1	1.6	1.9	2.5	2.8	4.2	
PH	pH										TM73/PM11	pH units	<0.01	9	8.59	8.5	8.54	8.3	8.33	7.98	8.05	7.65	7.72	7.86	8	8.09	8.5	8.51	8.44	8.39	8.29	10.77	9.79	8.79	8.45	9.16	8.51	8.08	
	IOM Asbestos Analysis													NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD

Notes:
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Data columns shown light grey are samples of soils that will be removed during construction.
*Indicates GAC values from SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination - Policy Companion Document published in 2014.
NAD = No Asbestos Detected.
NA/- = Not Available.
EIC/AGS/CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment published in 2010.
+ GAC S4ULs EC >35- 44 were used in the absense of suitable for use levels for EC>35-40
^ Indicates Intervention Values taken from **DUTCH INTERVENTION 2009**
& Since xylenes are reported as m&p xylene, hence the GAC limit was taken as the lower limit for the individual xylene type as a conservative approach.

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

		GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Res) (1% SOM)	GAC S4UL Public Open Space (Res) (2.5% SOM)	GAC S4UL Public Open Space (Res) (6% SOM)				Lab Ref.	20/13350	20/13350	20/13350	20/13350	20/13350	20/13350	20/13350	20/13350	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444
														Sample ID	WS 38	WS 38	WS 39	WS 39	WS 39	WS 39	WS 39	WS 39	WS43	WS43	WS43	WS43	WS42	WS42	WS42	WS42	WS41	WS41	WS41	WS40	WS40	WS40	WS40	WS44
														Surface Elevation	25.79	25.79	25.36	25.36	25.36	25.36	25.36	25.36	25.56	25.56	25.56	25.56	25.58	25.58	25.58	25.58	26.09	26.09	26.09	26.23	26.23	26.23	26.23	26.70
														Depth (mbgl)	2.0-3.0	0.8-1.0	0.8-1.0	1.0-2.0	2.0-3.0	3.0-3.2	1.20-1.45	0.0-1.0	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.50	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.50	0.00-1.00	0.80-1.00	1.00-1.50	2.00-2.50	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.40	0.00-1.00
														Depth (mAOD)	23.79 to 22.79	24.99 to 24.79	24.56 to 24.36	24.36 to 23.36	23.36 to 22.36	22.36 to 22.16	24.16 to 23.91	25.36 to 24.36	25.56 to 24.56	24.76 to 24.56	24.56 to 23.56	23.56 to 23.06	25.58 to 24.58	24.78 to 24.58	24.58 to 23.58	23.58 to 23.08	26.09 to 25.09	25.29 to 25.09	25.09 to 24.59	24.09 to 23.59	26.23 to 25.23	25.43 to 25.23	25.23 to 24.23	24.23 to 23.83	26.70 to 25.70
														Sampled Date	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020
CAS Number	Test										Method	Units	LOD																							
TOC	Total Organic Carbon										TM27/PM24	%	<0.02		0.33	7	0.38	0.5	0.53	0.33	0.54	1.13	2.03	6.04	0.74	0.68	0.42	0.29	0.44	0.88	0.76	0.33	0.29	0.45	1.88	0.74	0.46	0.35	12.92
	Soil Organic Matter											%			**0.57**	**12.04**	**0.65**	**0.86**	**0.91**	**0.57**	**0.93**	**1.94**	**3.49**	**10.39**	**1.27**	**1.17**	**0.72**	**0.50**	**0.76**	**1.51**	**1.31**	**0.57**	**0.50**	**0.77**	**3.23**	**1.27**	**0.79**	**0.60**	**22.22**
7440-36-0	Antimony		550			7,500					TM5/PM16/TM30/PM40	mg/kg	<1		1	14	1	2	2	1	2	2	2	2	2	1	2	2	2	2	1	2	1	2	1	2	1	2
7440-38-2	Arsenic		40			640			79		TM5/PM16/TM30/PM40	mg/kg	<0.5		8.3	31.2	2.4	8.5	10.6	6.8	9.2	8	19.9	8.6	10.1	6.7	9.8	12.2	8.4	9.5	19.9	5.7	7.1	9.5	13.4	10.2	7.6	8.9	15.7
7440-39-3	Barium		1,300			22,000					TM5/PM16/TM30/PM40	mg/kg	<1		28	562	56	53	107	66	49	303	108	68	80	47	55	91	99	41	63	39	102	30	160	150	53	42	74
7440-43-9	Cadmium		85			190			120		TM5/PM16/TM30/PM40	mg/kg	<0.1		1.5	2.2	1.3	2.2	1.9	1.5	1.7	0.9	1.6	1.5	1.9	1.3	2.1	2.1	1.9	1.4	1.3	1.3	1.8	1.2	2.1	2.3	1.9	1.8	1.5
7440-47-3	Chromium										TM5/PM16/TM30/PM40	mg/kg	<0.5		41.1	78.7	63.3	41.1	59.9	51	59.1	40.5	61.7	57.8	46.2	38.4	41.8	44.5	37	27.3	57	53.6	51.2	27.1	55.3	48.2	40.3	43	47.9
7440-50-8	Copper		7,100			68,000			12,000		TM5/PM16/TM30/PM40	mg/kg	<1		22	119	20	24	33	16	26	17	67	24	34	22	27	31	28	29	26	16	18	19	38	19	23	26	34
7439-92-1	Lead		310*			2,300*			610*		TM5/PM16/TM30/PM40	mg/kg	<5		13	402	18	12	16	9	14	40	57	25	47	26	15	13	11	14	21	8	12	10	204	27	15	12	63
7439-97-6	Mercury		56			1,100			120		TM5/PM16/TM30/PM40	mg/kg	<0.1		<0.1	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
7439-98-7	Molybdenum		670			17,000					TM5/PM16/TM30/PM40	mg/kg	<0.1		3.8	6.6	4.8	5.3	5.9	4.8	6.3	3.8	5.3	5.2	5.1	4.2	3.4	5.3	4.7	3.9	3.9	4.3	5.4	2.4	4.9	5.1	4.4	5.3	4.3
7440-02-0	Nickel		180			980			210		TM5/PM16/TM30/PM40	mg/kg	<0.7		23.6	59.6	36.4	31.1	45.7	21.9	28	18.9	39.5	27.1	38.4	28.5	32	41.3	39	44.1	28.4	20.7	31.8	25.6	36.8	33.9	33.5	36.3	31.8
7782-49-2	Selenium		430			12,000			1,100		TM5/PM16/TM30/PM40	mg/kg	<1		<1	3	<1	2	3	2	<1	1	1	<1	3	3	<1	1	1	3	<1	<1	1	4	2	<1	<1	1	<1
1E1104S	Total Sulphate										TM30/PM20/PM220	mg/kg	<50		794	1079	496	221	544	226	258	776	580	278	1067	1374	372	418	242	834	606	559	297	2385	949	437	406	258	605
7440-42-8	Water Soluble Boron										TM5/PM20/PM45	mg/kg	<0.1		0.5	1.8	0.6	0.5	0.8	0.5	0.6	0.7	1.3	0.6	0.8	0.7	0.5	0.5	0.5	0.7	1	0.5	0.4	0.8	1.7	1.2	0.7	0.7	1.6
7440-66-6	Zinc		40,000			730,000			81,000		TM30/PM45/PM40	mg/kg	<5		75	660	65	77	97	53	67	57	136	76	99	61	83	88	69	64	84	52	75	52	112	88	80	78	107
	PAH MS																																					
91-20-3	Naphthalene	2.3	5.6	13	190	460	1100	4,900	4,900	4,900	TM4/PM8	mg/kg	<0.04		<0.04	0.12	<0.04	<0.40	0.18	0.24	<0.40	0.07	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
208-96-8	Acenaphthylene	2,900	4,600	6,000	83,000	97,000	100,000	15,000	15,000	15,000	TM4/PM8	mg/kg	<0.03		<0.03	0.17	<0.03	0.85	0.11	0.07	0.65	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
83-32-9	Acenaphthene	3,000	4,700	6,000	84,000	97,000	100,000	15,000	15,000	15,000	TM4/PM8	mg/kg	<0.05		<0.05	0.1	<0.05	<0.50	0.06	0.06	<0.50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
86-73-7	Fluorene	2,800	3,800	4,500	63,000	68,000	71,000	9,900	9,900	9,900	TM4/PM8	mg/kg	<0.04		<0.04	0.11	<0.04	2.4	0.29	0.25	2.35	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
85-01-8	Phenanthrene	1,300	1,500	1,500	22,000	22,000	23,000	3,100	3,100	3,100	TM4/PM8	mg/kg	<0.03		<0.03	2.14	0.05	4.53	0.53	0.45	4.48	0.28	0.23	<0.03	0.19	0.17	<0.03	<0.03	<0.03	<0.03	0.14	<0.03	<0.03	<0.03	0.09	0.06	<0.03	<0.03	0.07
120-12-7	Anthracene	31,000	35,000	37,000	520,000	540,000	540,000	74,000	74,000	74,000	TM4/PM8	mg/kg	<0.04		<0.04	0.52	<0.04	<0.40	<0.04	<0.04	<0.40	0.08	0.06	<0.04	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
206-44-0	Fluoranthene	1,500	1,600	1,600	23,000	23,000	23,000	3,100	3,100	3,100	TM4/PM8	mg/kg	<0.03		<0.03	4.12	<0.03	<0.30	<0.03	<0.03	<0.30	0.46	0.32	<0.03	0.35	0.14	<0.03	<0.03	<0.03	<0.03	0.19	<0.03	<0.03	<0.03	0.15	0.07	<0.03	<0.03	0.12
129-00-0	Pyrene	3,700	3,800	3,800	54,000	54,000	54,000	7,400	7,400	7,400	TM4/PM8	mg/kg	<0.03		<0.03	3.31	<0.03	<0.30	<0.03	<0.03	<0.30	0.42	0.31	<0.03	0.29	0.13	<0.03	<0.03	<0.03	<0.03	0.18	<0.03	<0.03	<0.03	0.14	0.06	<0.03	<0.03	0.12
56-55-3	Benzo(a)anthracene	11	14	15	170	170	180	29	29	29	TM4/PM8	mg/kg	<0.06		<0.06	2.24	<0.06	<0.60	<0.06	<0.06	<0.60	0.22	0.23	<0.06	0.21	0.09	<0.06	<0.06	<0.06	<0.06	0.15	<0.06	<0.06	<0.06	0.11	<0.06	<0.06	<0.06	0.12
218-01-9	Chrysene	30	31	32	350	350	350	57	57	57	TM4/PM8	mg/kg	<0.02		<0.02	2.37	<0.02	<0.20	<0.02	<0.02	<0.20	0.24	0.22	<0.02	0.18	0.07	<0.02	<0.02	<0.02	<0.02	0.12	<0.02	<0.02	<0.02	0.11	0.04	<0.02	<0.02	0.08
BEN-B4-FLUORAN	Benzo(b)fluoranthene										TM4/PM8	mg/kg	<0.07		<0.07	3.76	<0.07	<0.70	<0.07	<0.07	<0.70	0.39	0.37	<0.07	0.26	0.09	<0.07	<0.07	<0.07	<0.07	0.19	<0.07	<0.07	<0.07	0.2	<0.07	<0.07	<0.07	0.15
50-32-8	Benzo(a)pyrene	3.2	3.2	3.2	35	35	36	5.7	5.7	5.7	TM4/PM8	mg/kg	<0.04		<0.04	1.99	<0.04	<0.40	<0.04	<0.04	<0.40	0.21	0.21	<0.04	0.14	0.05	<0.04	<0.04	<0.04	<0.04	0.1	<0.04	<0.04	<0.04	0.11	<0.04	<0.04	<0.04	0.08
193-39-5	Indeno(123cd)pyrene	45	46	46	500	510	510	82	82	82	TM4/PM8	mg/kg	<0.04		<0.04	1.18	<0.04	<0.40	<0.04	<0.04	<0.40	0.11	0.13	<0.04	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	0.06
53-70-3	Dibenzo(ah)anthracene	0.31	0.32	0.32	3.5	3.6	3.6	0.57	0.57	0.58	TM4/PM8	mg/kg	<0.04		<0.04	0.25	<0.04	<0.40	<0.04	<0.04	<0.40	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
191-24-2	Benzo(ghi)perylene	360	360	360	3,900	4,000	4,000	640	640	640	TM4/PM8	mg/kg	<0.04		<0.04	1.11	<0.04	<0.40	<0.04	<0.04	<0.40	0.13	0.15	<0.04	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	0.06
191-07-1	Coronene										TM4/PM8	mg/kg	<0.04		<0.04	0.15	<0.04	<0.40	<0.04	<0.04	<0.40	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
PAH_6_TOTAL	PAH 6 Total										TM4/PM8	mg/kg	<0.22		<0.22	12.16	<0.22	<2.20	<0.22	<0.22	<2.20	1.3	1.18	<0.22	0.91	0.28	<0.22	<0.22	<0.22	<0.22	0.63	<0.22	<0.22	<0.22	0.6	<0.22	<0.22	<0.22	0.47
PAH_17_TOTAL	PAH 17 Total										TM4/PM8	mg/kg	<0.64		<0.64	23.64	<0.64	7.78	1.17	1.07	7.48	2.61	2.23	<0.64	1.83	0.82	<0.64	<0.64	<0.64	<0.64	1.22	<0.64	<0.64	<0.64	1.05	<0.64	<0.64	<0.64	0.86
205-99-2	Benzo(b)fluoranthene	3.9	4	4	44	44	45	7.1	7.2	7.2	TM4/PM8	mg/kg	<0.05		<0.05	2.71	<0.05	<0.50	<0.05	<0.05	<0.50	0.28	0.27	<0.05	0.19	0.06	<0.05	<0.05	<0.05	<0.05	0.14	<0.05	<0.05	<0.05	0.14	<0.05	<0.05	<0.05	0.11
207-08-9	Benzo(k)fluoranthene	110	110	110	1,200	1,200	1,200	190	190	190	TM4/PM8	mg/kg	<0.02		<0.02	1.05	<0.02	<0.20	<0.02	<0.02	<0.20	0.11	0.1	<0.02	0.07	0.03	<0.02	<0.02	<0.02	<0.02	0.05	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.02	0.04
205-82-3	Benzo(j)fluoranthene										TM4/PM8	mg/kg	<1		<1	<1	<1	<10	<1	<1	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
INTERPRETATION	EPH CWG Interpretation										TM5/PM16	None			No interpretation possible	Interp. Insufficient sample for interpretation	Degraded diesel	Degraded diesel	Degraded diesel	Degraded diesel	Degraded diesel	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	Degraded kerosene
MINOIL_10-40	Mineral Oil (C10-C40)										TM5/PM16	mg/kg	<30		<30	33	537	2448	1004	732	3728	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	35
	TPH CWG																																					
	Aliphatics																																					
GTC05C06AL	>C5-C6	42	78	160	3,200	5,900	12,000	570,000	590,000	600,000	TM36/PM21	mg/kg	<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC06C08AL	>C6-C8	100	230	510	7,800	17,000	40,000	600,000	610,000	620,000	TM36/PM21	mg/kg	<0.1		<0.1	<0.1	<0.1	<0.1	0.5	0.3	0.5	0.9	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC08C10AL	>C8-C10	27	65	150	2,000	4,800	11,000	13,000	13,000	13,000	TM36/PM21	mg/kg	<0.1		<0.1	<0.1	0.4	6.6	2.7	2.4	7.8	3.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC10C12AL	>C10-C12	130	330	770	9,700	23,000	47,000	13,000	13,000	13,000	TM5/PM16	mg/kg	<0.2		<0.2	<0.2	<0.2	11.4	225.2	87.2	63.1	379.8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	10.5
GTC12C16AL	>C12-C16	1,100	2,400	4,400	59,000	82,000	90,000	13,000	13,000	13,000	TM5/PM16	mg/kg	<4		<4	<4	<4	161	882	366	240	1384	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	24
GTC16C21AL	>C16-C21										TM5/PM16	mg/kg	<7		<7	<7	<7	259	981	413	308	1468	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
GTC21C35AL	>C21-C35										TM5/PM16	mg/kg	<7		<7	<7	33	105	360	138	121	496	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
GTC35C40AL	>C35-C40 +	65,000	92,000	110,000	1,600,000	1,700,000	1,800,000	250,000	250,000	250,000	TM5/PM16	mg/kg	<7		<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
GTC05C40AL	Total aliphatics C5-40	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM16/PM21/PM40	mg/kg	<26		<26	33	538	2455	1007	735	3737	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	35
GTC06C10AL	>C6-C10										TM36/PM12	mg/kg	<0.1		<0.1	<0.1	<0.1	0.4	7.1	3	2.9	8.7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC10C25AL	>C10-C25										TM5/PM16	mg/kg	<10		<10	<10	<10	527	2401	992	680	3678	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	25
GTC25C35AL	>C25-C35										TM5/PM16	mg/kg	<10		<10	33	<10	47	12	<10	50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

CAS Number	Test	GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Resi) (1% SOM)	GAC S4UL Public Open Space (Resi) (2.5% SOM)	GAC S4UL Public Open Space (Resi) (6% SOM)	Method	Units	LOD
	Aromatics												
GTEC056EC07AR	>EC5-EC7	370	690	1,400	26,000	46,000	86,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1
GTEC07EC08AR	>EC7-EC8	860	1,800	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1
GTEC08EC10AR	>EC8-EC10	47	110	270	3,500	8,100	17,000	5,000	5,000	5,000	TM36/PM12	mg/kg	<0.1
GTEC10EC12AR	>EC10-EC12	250	590	1,200	16,000	28,000	34,000	5,000	5,000	5,000	TM5/PM16	mg/kg	<0.2
GTEC12EC16AR	>EC12-EC16	1,800	2,300	2,500	36,000	37,000	38,000	5,100	5,100	5,000	TM5/PM16	mg/kg	<4
GTEC16EC21AR	>EC16-EC21	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC21EC35AR	>EC21-EC35	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC35EC40AR	>EC35-EC40	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC05EC40AR	Total aromatics C5-40										TM5/TM36/PM12	mg/kg	<26
GTC05C40ALAR	Total aliphatics and aromatics(>C5-40)	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM12/PM16	mg/kg	<52
GTEC06EC10AR	>EC6-EC10										TM36/PM12	mg/kg	<0.1
GTEC10EC25AR	>EC10-EC25										TM5/PM16	mg/kg	<10
GTEC25EC35AR	>EC25-EC35										TM5/PM16	mg/kg	<10
1634-04-4	MTBE										TM36/PM12	mg/kg	<0.005
71-43-2	Benzene	0.38	0.7	1.4	27	47	90	72	72	73	TM36/PM12	mg/kg	<0.005
108-88-3	Toluene	880	1900	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.005
100-41-4	Ethylbenzene	83	190	440	5,700	13,000	27,000	24,000	24,000	25,000	TM36/PM12	mg/kg	<0.005
P_M_XYLENE	m/p-Xylene	79	180	430	5,900	14,000	30,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005
95-47-6	o-Xylene	88	210	480	6,600	15,000	33,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005
7012-37-5	PCB 28										TM17/PM8	mg/kg	<0.005
35693-99-3	PCB 52										TM17/PM8	mg/kg	<0.005
37680-73-2	PCB 101										TM17/PM8	mg/kg	<0.005
31508-00-6	PCB 118										TM17/PM8	mg/kg	<0.005
35065-28-2	PCB 153										TM17/PM8	mg/kg	<0.005
35065-27-1	PCB 153										TM17/PM8	mg/kg	<0.005
35065-29-3	PCB 180										TM17/PM8	mg/kg	<0.005
PCB_7_CON_TOTAL	Total 7 PCBs		1,000^			1,000^			1,000^		TM17/PM8	mg/kg	<0.035
108-95-2	Phenol	750	1,300	2,300	760	1,500	3,200	760	1,500	3,200	TM26/PM21	mg/kg	<0.01
MOIST_CONT_DRY	Natural Moisture Content										PM4/PM0	%	<0.1
MOIST_CONT_WET	Moisture Content (% Wet Weight)										PM4/PM0	%	<0.1
JEL1D06	Moisture Content 105C (% Dry Weight)										PM4/PM0	%	<0.1
JEL1D07	Dry Matter Content Ratio (105°C)										NONE/PM4	%	<0.1
18540-29-9	Hexavalent Chromium		6			33			7.7		TM38/PM20	mg/kg	<0.3
CHROMIUM_III	Chromium III		910			8,600			1,500		NONE/NONE	mg/kg	<0.5
57-12-5	Total Cyanide										TM89/PM45	mg/kg	<0.5
SULPHIDE	Sulphide										TM106/PM45	mg/kg	<10
ALKALI_RES	Alkali Reserve										TM160/PM110	eq.conc/kg	<0.000
ELEM_SULPH	Elemental Sulphur										TM106/PM114/PM8	mg/kg	<1
JEL559/LOI	Loss on Ignition										TM22/PM0	%	<1.0
PH	pH										TM73/PM11	pH units	<0.01
	IOM Asbestos Analysis												

Lab Ref	20/13350	20/13350	20/13350	20/13350	20/13350	20/13350	20/13350	20/13350	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444	20/13444
Sample ID	WS 38	WS 38	WS 39	WS 39	WS 39	WS 39	WS 39	WS 39	WS43	WS43	WS43	WS43	WS42	WS42	WS42	WS42	WS42	WS42	WS41	WS41	WS41	WS41	WS40	WS40	WS40	WS44
Surface Elevation	25.79	25.79	25.36	25.36	25.36	25.36	25.36	25.36	25.56	25.56	25.56	25.56	25.58	25.58	25.58	25.58	26.09	26.09	26.09	26.09	26.23	26.23	26.23	26.23	26.23	26.70
Depth (mbgl)	2.0-3.0	0.8-1.0	0.8-1.0	1.0-2.0	2.0-3.0	3.0-3.2	1.20-1.45	0.0-1.0	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.50	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.50	0.00-1.00	0.80-1.00	1.00-1.50	2.00-2.50	0.00-1.00	0.80-1.00	1.00-2.00	2.00-2.40	0.00-1.00	
Depth [mAOD]	23.79 to 22.79	24.99 to 24.79	24.56 to 24.36	24.36 to 23.36	23.36 to 22.36	22.36 to 22.16	24.16 to 23.91	25.36 to 24.36	25.56 to 24.56	24.76 to 24.56	24.56 to 23.56	23.56 to 23.06	25.58 to 24.58	24.78 to 24.58	24.58 to 23.58	23.58 to 23.08	26.09 to 25.09	25.29 to 25.09	25.09 to 24.59	24.09 to 23.59	26.23 to 25.23	25.43 to 25.23	25.23 to 24.23	24.23 to 23.83	26.70 to 25.70	
Sampled Date	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	28/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	29/09/2020	
	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	<0.2	<0.2	<0.2	0.4	104.6	44.4	33.3	166.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	<4	<4	<4	51	659	241	152	1020	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
	<7	<7	28	256	886	327	213	1351	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
	<7	<7	161	209	347	123	72	533	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
	<7	<7	42	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
	<26	<26	231	516	1997	735	470	3071	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26
	<52	<52	264	1054	4452	1742	1205	6808	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52
	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	<10	<10	68	469	1955	727	462	3007	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	<10	<10	128	46	40	<10	<10	64	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	<0.005	<0.005	<0.005	<0.005	<0.005	0.014	0.027	0.011	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	0.037	0.019	0.021	0.034	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	0.007	0.109	0.04	0.029	0.118	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	0.073	0.025	0.012	0.08	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	9.5	20.9	9.4	9	13.2	17.5	7.7	14.6	15.1	9.6	14.5	15	14.1	9.3	14.2	14.9	13.2	9.7	14.9	18	24.2	17.1	16.1	13	15.5	
	8.7	17.3	8.6	8.2	11.7	14.9	7.2	12.8	13.2	8.8	12.7	13	12.4	8.5	12.4	12.9	11.6	8.8	12.9	15.3	19.5	14.6	13.9	11.5	13.4	
	11.7	22.6	14	11.4	14.8	11.3	10.8	14.4	15	7.7	21.2	14.9	16.1	12.3	17.1	15.5	17.3	10.6	8.4	19.4	22	17	17.7	13.7	18	
	89.5	81.6	87.7	89.8	87.1	89.8	90.2	87.4	86.9	92.8	82.5	87	86.2	89	85.4	86.6	85.2	90.4	92.3	83.8	82	85.5	85	88	84.8	
	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	
	41.1	78.7	63.3	41.1	59.9	51	59.1	40.5	61.7	57.8	46.2	38.4	41.8	44.5	37	27.3	57	53.6	51.2	27.1	55.3	48.2	40.3	43	47.9	
	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	
	1	3	6	2	11	2	3	2	<1	4	2	2	1	<1	<1	2	1	1	2	95	2	2	2	1	<1	
	1.2	9.6	1.7	2.1	1.9	1.2	1.7	1.5	5	2.4	1.9	1.4	1.8	1.9	1.9	2.1	2.9	1.3	1.4	<1.0	5.8	3.2	2	1.7	16.5	
	8.51	7.82	8.14	8.09	8.11	8.28	8.18	8.66	8.15	8.64	8.28	8.56	8.55	8.49	8.31	8.42	8.28	8.52	8.67	8.01	8.25	8.6	8.64	8.5	8.48	
	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	

Notes:
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Data columns shown light grey are samples of soils that will be removed during construction.
*Indicates GAC values from SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination - Policy Companion Document published in 2014.
NAD = No Asbestos Detected.
NA/- = Not Available.
EIC/AGS/CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment published in 2010.
+ GAC S4ULs EC >35- 44 were used in the absense of suitable for use levels for EC>35-40
^ Indicates Intervention Values taken from **DUTCH INTERVENTION 2009**
& Since xylenes are reported as m&p xylene, hence the GAC limit was taken as the lower limit for the individual xylene type as a conservative approach.

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

		GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Res) (1% SOM)	GAC S4UL Public Open Space (Res) (2.5% SOM)	GAC S4UL Public Open Space (Res) (6% SOM)			
	Lab Ref												20/13444
	Sample ID												WS44
	Surface Elevation												26.70
	Depth (mbgl)												0.80-1.00
	Depth (mAOD)												25.90 to 25.70
	Sampled Date												29/09/2020
CAS Number	Test										Method	Units	LOD
TOC	Total Organic Carbon										TM27/PM24	%	<0.02
	Soil Organic Matter											**%**	**2.18**
7440-36-0	Antimony		550			7,500					TM36/PM16/TM56/PM45	mg/kg	<1
7440-38-2	Arsenic		40			640			79		TM36/PM16/TM56/PM45	mg/kg	<0.5
7440-39-3	Barium		1,300			22,000					TM36/PM16/TM56/PM45	mg/kg	<1
7440-43-9	Cadmium		85			190			120		TM36/PM16/TM56/PM45	mg/kg	<0.1
7440-47-3	Chromium										TM36/PM16/TM56/PM45	mg/kg	<0.5
7440-50-8	Copper		7,100			68,000			12,000		TM36/PM16/TM56/PM45	mg/kg	<1
7439-92-1	Lead		310*			2,300*			610*		TM36/PM16/TM56/PM45	mg/kg	<5
7439-97-6	Mercury		56			1,100			120		TM36/PM17/TM56/PM45	mg/kg	<0.1
7439-98-7	Molybdenum		670			17,000					TM36/PM16/TM56/PM45	mg/kg	<0.1
7440-02-0	Nickel		180			980			210		TM36/PM16/TM56/PM45	mg/kg	<0.7
7782-49-2	Selenium		430			12,000			1,100		TM36/PM16/TM56/PM45	mg/kg	<1
	3EL104S	Total Sulphate									TM30/PM20/PM120	mg/kg	<50
7440-42-8	Water Soluble Boron										TM29/PM20/PM45	mg/kg	<0.1
7440-66-6	Zinc		40,000			730,000			81,000		TM30/PM16/PM45	mg/kg	<5
	PAH MS												
91-20-3	Naphthalene	2.3	5.6	13	190	460	1100	4,900	4,900	4,900	TM4/PM8	mg/kg	<0.04
208-96-8	Acenaphthylene	2,900	4,600	6,000	83,000	97,000	100,000	15,000	15,000	15,000	TM4/PM8	mg/kg	<0.03
83-32-9	Acenaphthene	3,000	4,700	6,000	84,000	97,000	100,000	15,000	15,000	15,000	TM4/PM8	mg/kg	<0.05
86-73-7	Fluorene	2,800	3,800	4,500	63,000	68,000	71,000	9,900	9,900	9,900	TM4/PM8	mg/kg	<0.04
85-01-8	Phenanthrene	1,300	1,500	1,500	22,000	22,000	23,000	3,100	3,100	3,100	TM4/PM8	mg/kg	<0.03
120-12-7	Anthracene	31,000	35,000	37,000	520,000	540,000	540,000	74,000	74,000	74,000	TM4/PM8	mg/kg	<0.04
206-44-0	Fluoranthene	1,500	1,600	1,600	23,000	23,000	23,000	3,100	3,100	3,100	TM4/PM8	mg/kg	<0.03
129-00-0	Pyrene	3,700	3,800	3,800	54,000	54,000	54,000	7,400	7,400	7,400	TM4/PM8	mg/kg	<0.03
56-55-3	Benzo(a)anthracene	11	14	15	170	170	180	29	29	29	TM4/PM8	mg/kg	<0.06
218-01-9	Chrysene	30	31	32	350	350	350	57	57	57	TM4/PM8	mg/kg	<0.02
BEN-BK-FLUORAN	Benzo(b&k)fluoranthene										TM4/PM8	mg/kg	<0.07
50-32-8	Benzo(a)pyrene	3.2	3.2	3.2	35	35	36	5.7	5.7	5.7	TM4/PM8	mg/kg	<0.04
193-39-5	Indeno(123cd)pyrene	45	46	46	500	510	510	82	82	82	TM4/PM8	mg/kg	<0.04
53-70-3	Dibenzo(ah)anthracene	0.31	0.32	0.32	3.5	3.6	3.6	0.57	0.57	0.58	TM4/PM8	mg/kg	<0.04
191-24-2	Benzo(ghi)perylene	360	360	360	3,900	4,000	4,000	640	640	640	TM4/PM8	mg/kg	<0.04
191-07-1	Coronene										TM4/PM8	mg/kg	<0.04
PAH_6_TOTAL	PAH 6 Total										TM4/PM8	mg/kg	<0.22
PAH_17_TOTAL	PAH 17 Total										TM4/PM8	mg/kg	<0.64
205-99-2	Benzo(b)fluoranthene	3.9	4	4	44	44	45	7.1	7.2	7.2	TM4/PM8	mg/kg	<0.05
207-08-9	Benzo(k)fluoranthene	110	110	110	1,200	1,200	1,200	190	190	190	TM4/PM8	mg/kg	<0.02
205-82-3	Benzo(j)fluoranthene										TM4/PM8	mg/kg	<1
INTERPRETATION	EPH CWG Interpretation										TMS/PM16	None	
MINOIL_10-40	Mineral Oil (C10-C40)										TMS/PM16	mg/kg	<30
	TPH CWG												
	Aliphatics												
GTC05C06AL	>C5-C6	42	78	160	3,200	5,900	12,000	570,000	590,000	600,000	TM36/PM12	mg/kg	<0.1
GTC06C08AL	>C6-C8	100	230	530	7,800	17,000	40,000	600,000	610,000	620,000	TM36/PM12	mg/kg	<0.1
GTC08C10AL	>C8-C10	27	65	150	2,000	4,800	11,000	13,000	13,000	13,000	TM36/PM12	mg/kg	<0.1
GTC10C12AL	>C10-C12	130	330	770	9,700	23,000	47,000	13,000	13,000	13,000	TM5/PM16	mg/kg	<0.2
GTC12C16AL	>C12-C16	1,100	2,400	4,400	59,000	82,000	90,000	13,000	13,000	13,000	TM5/PM16	mg/kg	<4
GTC16C21AL	>C16-C21										TM5/PM16	mg/kg	<7
GTC21C35AL	>C21-C35										TM5/PM16	mg/kg	<7
GTC35C40AL	>C35-C40 +	65,000	92,000	110,000	1,600,000	1,700,000	1,800,000	250,000	250,000	250,000	TM5/PM16	mg/kg	<7
GTC05C40AL	Total aliphatics C5-40	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM12/PM16	mg/kg	<26
GTC06C10AL	>C6-C10										TM36/PM12	mg/kg	<0.1
GTC10C25AL	>C10-C25										TM5/PM16	mg/kg	<10
GTC25C35AL	>C25-C35										TM5/PM16	mg/kg	<10

		20/13444	20/13444	20/13444	20/13444	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13660	20/13660	20/13660	20/13660	20/13660	20/13660	20/13660	20/13660	20/13660	20/13660	20/13660
		WS44	WS44	WS44	WS44	WS 45	WS 45	WS 45	WS 45	WS 45	WS 46	WS 46	WS 46	WS 46	WS 47	WS 47	WS 47	WS 47	WS 47	WS51	WS51	WS51	WS50	WS50	WS50	WS48	WS48	WS48	WS48	WS48
		26.70	26.70	26.70	26.70	26.27	26.27	26.27	26.27	26.27	25.87	25.87	25.87	25.87	25.87	25.87	25.87	25.87	25.63	25.63	25.63	26.09	26.09	26.09	26.20	26.20	26.20	26.20	26.76	26.76
		0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.8-1.0	0.0-1.0	1.0-2.0	2.0-3.0	3.0-3.4	0.8-1.0	1.0-2.0	2.0-2.5	0.0-1.0	0.8-1.0	0.0-1.0	1.0-1.85	0.80-1.00	0.00-1.00	1.00-1.70	0.80-1.00	0.00-1.00	1.00-2.00	0.80-1.00	0.00-1.00	1.00-2.00	0.80-1.00	0.00-1.00	1.30-2.00	
		25.90 to 25.70	25.70 to 24.70	24.70 to 23.70	23.70 to 23.30	25.47 to 25.27	26.27 to 25.27	25.27 to 24.27	24.27 to 23.27	23.27 to 22.87	25.07 to 24.87	24.87 to 23.87	23.87 to 23.37	25.87 to 24.87	24.83 to 24.63	25.63 to 24.63	24.63 to 23.78	25.29 to 25.09	26.09 to 25.09	25.09 to 24.39	25.40 to 25.20	26.20 to 25.20	25.20 to 24.20	25.96 to 25.76	26.76 to 25.76	25.46 to 24.76				
		29/09/2020	29/09/2020	29/09/2020	29/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020
TM36/PM16/TM56/PM45	mg/kg	<1	2	2	2	2	1	2	2	1	1	1	2	1	2	4	3	2	2	1	2	2	2	2	2	2	2	2	1	
TM36/PM16/TM56/PM45	mg/kg	<0.5	10.7	11.1	11.4	10.9	6.1	13	7	6.1	8.2	6.1	7.3	7	30.9	7.9	13.2	12.2	10.1	29.4	6.8	22.4	15.8	11.6	8	14.3	4.9			
TM36/PM16/TM56/PM45	mg/kg	<1	84	93	83	77	67	85	64	39	26	39	45	49	77	89	81	94	71	34	42	64	90	80	59	108	27			
TM36/PM16/TM56/PM45	mg/kg	<0.1	1.7	2.3	2.4	2.1	0.9	1.2	2.6	2.1	1.4	1.4	1.9	1.5	0.9	2.2	2.3	2.1	2.3	0.7	2.2	1.5	2	2.2	1.9	1.2	1.3			
TM36/PM16/TM56/PM45	mg/kg	<0.5	47.6	47.6	43.6	51.2	52.1	71	52	48.4	46.2	53.6	43.3	34	83.9	97.9	94.8	50.2	43.6	35.8	37.3	41	46.9	39.9	59.9	53.5	40			
TM36/PM16/TM56/PM45	mg/kg	<1	33	29	37	32	13	25	19	22	18	20	22	25	29	96	53	39	34	19	26	30	28	34	20	39	15			
TM36/PM16/TM56/PM45	mg/kg	<5	49	25	20	22	29	44	14	11	9	16	11	11	65	319	83	41	17	15	11	24	31	20	15	67	9			
TM36/PM17/TM56/PM45	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
TM36/PM16/TM56/PM45	mg/kg	<0.7	32.3	39.1	42.8	47.7	15.1	28.9	31.1	25.5	24.8	29.5	30.4	31.1	28.8	49.4	54.1	51.8	45.3	18.4	27.3	33.4	39	47.1	29.6	31.2	20.5			
TM36/PM16/TM56/PM45	mg/kg	<1	<1	2	2	2	<1	<1	<1	4	2	<1	<1	5	1	<1	2	3	2	<1	3	<1	1	2	<1	1	<1			
TM30/PM20/PM120	mg/kg	<50	553	439	469	509	915	589	1020	367	1257	281	269	758	914	361	1453	420	261	274	311	393	1382	312	302	526	314			
TM29/PM20/PM45	mg/kg	<0.1	1.8	1.4	1	0.8	0.4	0.6	0.4	0.4	0.4	0.5	0.6	0.9	1.1	0.9	1	0.6	0.7	0.6	0.5	0.8	0.8	0.7	1.1	1.8	0.5			
TM30/PM16/PM45	mg/kg	<5	90	94	101	96	62	97	82	72	49	70	79	59	100	372	173	119	93	65	65	90	95	100	69	128	49			
TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.14	0.05	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.08	<0.04			
TM4/PM8	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	0.18	0.09	0.06	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03			
TM4/PM8	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.17	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05			
TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.22	0.11	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04			
TM4/PM8	mg/kg	<0.03	<0.03	0.05	<0.03	<0.03	0.07	<0.03	<0.03	<0.03	<0.03	0.06	<0.03	<0.03	0.3	2.5	0.96	0.37	<0.03	0.34	<0.03	0.06	0.09	<0.03	<0.03	0.14	<0.03			
TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.09	0.48	0.51	0.2	<0.04	0.17	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04			
TM4/PM8	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	0.16	0.06	<0.03	<0.03	<0.03	0.1	<0.03	<0.03	0.67	2.73	4.59	1.16	<0.03	1.16	<0.03	0.08	0.13	<0.03	<0.03	0.24	<0.03			
TM4/PM8	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	0.18	0.07	<0.03	<0.03	<0.03	0.09	<0.03	<0.03	0.61	2.46	3.78	1.09	<0.03	0.87	<0.03	0.07	0.12	<0.03	<0.03	0.22	<0.03			
TM4/PM8	mg/kg	<0.06	<0.06	<0.06	<0.06	<0.06	0.09	<0.06	<0.06	<0.06	<0.06	0.06	<0.06	<0.06	0.34	0.87	1.31	0.72	<0.06	0.39	<0.06	<0.06	0.08	<0.06	<0.06	0.17	<0.06			
TM4/PM8	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02	0.1	0.06	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	0.39	1.24	1.78	0.77	<0.02	0.41	<0.02	0.05	0.07	<0.02	<0.02	0.18	<0.02			
TM4/PM8	mg/kg	<0.07	<0.07	<0.07	<0.07	<0.07	0.14	0.15	<0.07	<0.07	<0.07	0.11	<0.07	<0.07	0.76	2.09	3.61	1.53	<0.07	0.42	<0.07	<0.07	0.13	<0.07	<0.07	0.31	<0.07			
TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	0.09	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	0.4	1.01	1.92	0.87	<0.04	0.18	<0.04	<0.04	0.07	<0.04	<0.04	0.17	<0.04			
TM36/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.26	0.78	1.3	0.62	<0.04	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	<0.04			
TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.04	0.17	0.21	0.14	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04			
TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	0.1	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.28	1.19	1.14	0.57	<0.04	0.1	<0.04	<0.04	<0.04	<0.04	<0.04	0.13	<0.04			
TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.39	0.25	0.11	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04			
TM4/PM8	mg/kg	<0.22	<0.22	<0.22	<0.22	<0.22	0.46	0.48	<0.22	<0.22	<0.22	0.26	<0.22	<0.22	2.37	7.8	12.56	4.73	<0.22	1.94	<0.22	<0.22	0.33	<0.22	<0.22	0.95	<0.22			
TM4/PM8	mg/kg	<0.64	<0.64	<0.64	<0.64	<0.64	0.9	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	4.17	16.62	21.76	8.3	<0.64	4.12	<0.64	<0.64	0.69	<0.64	<0.64	1.79	<0.64			
TM4/PM8	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	0.1	0.11	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	0.55	1.5	2.6	1.09	<0.05	0.3	<0.05	<0.05	0.09	<0.05	<0.05	0.22	<0.05			
TM4/PM8	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	0.04	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	0.21	0.59	1.01	0.42	<0.02	0.12	<0.02	<0.02	0.04	<0.02	<0.02	0.09	<0.02			
TM4/PM8	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			
TMS/PM16	None		No interpretation possible	No interpretation possible	Degraded kerosene	No interpretation possible	No interpretation possible	Not enough peaks for interpretation	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	----------	Lubricating oil	Lubricating oil	Not enough peaks for interpretation	No interpretation possible	No interpretation possible	No interpretation possible	PAH's	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	PAH's	No interpretation possible	
TMS/PM16	mg/kg	<30	<30	<30	<30	<30	<30	44	<30	<30	<30	<30	<30	<30	<30	1845	1742	58	<30	<30	<30	<30	<30	<30	<30	<30	<30			
TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
TM5/PM16	mg/kg	<0.2	<0.2	<0.2	4.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	10.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2			
TM5/PM16	mg/kg	<4	<4	<4	12	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	8	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4			
TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	49	21	9	<7	<7	<7	<7	<7	<7	<7	<7	<7			
TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	20	<7	<7	<7	<7	<7	<7	<7	1572	1590	49	<7	<7	<7	<7	11	<7	<7	<7	<7			
TM5/PM16	mg/kg	<7	<7	<7	<7	<7	24	<7	<7	<7	<7	<7	<7	<7	<7	214	123	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7			
TM5/TM36/PM12/PM16	mg/kg	<26	<26	<26	<26	<26	<26	44	<26	<26	<26	<26	<26	<26	<26	1845	1741	58	<26	<26	<26	<26	<26	<26	<26	<26	<26			
TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1			
TM5/PM16	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	284	245	20	<10	<10	<10	<10	<10	<10	<10	<10	<10			
TM5/PM16	mg/kg	<10	<10	<10	<10	<10	19	<10	<10	<10	<10	<10	<10	<10	<10	1351	1372	34	<10	<10	<10	11	<10	<10	<10	<10	<10			

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

CAS Number	Test	GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Resi) (1% SOM)	GAC S4UL Public Open Space (Resi) (2.5% SOM)	GAC S4UL Public Open Space (Resi) (6% SOM)	Method	Units	LOD	Lab Cert	20/13444	20/13444	20/13444	20/13444	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13523	20/13660	20/13660	20/13660	20/13660	20/13660	20/13660	20/13660	20/13660	20/13660
														Sample ID	WS44	WS44	WS44	WS44	WS 45	WS 45	WS 45	WS 45	WS 45	WS 45	WS 46	WS 46	WS 46	WS 46	WS 46	WS 47	WS 47	WS 47	WS51	WS51	WS51	WS50	WS50	WS50	WS50	WS48	WS48	WS48
														Surface Elevation	26.70	26.70	26.70	26.70	26.27	26.27	26.27	26.27	26.27	25.87	25.87	25.87	25.87	25.87	25.63	25.63	25.63	26.09	26.09	26.09	26.20	26.20	26.20	26.20	26.76	26.76	26.76
														Depth (mbgl)	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.40	0.8-1.0	0.0-1.0	1.0-2.0	2.0-3.0	3.0-3.4	0.8-1.0	1.0-2.0	2.0-2.5	0.0-1.0	0.8-1.0	0.0-1.0	1.0-1.85	0.80-1.00	0.00-1.00	1.00-1.70	0.80-1.00	0.00-1.00	1.00-2.00	0.80-1.00	0.00-1.00	1.30-2.00
														Depth [mAOD]	25.90 to 25.70	25.70 to 24.70	24.70 to 23.70	23.70 to 23.30	25.47 to 25.27	26.27 to 25.27	25.27 to 24.27	24.27 to 23.27	23.27 to 22.87	25.07 to 24.87	24.87 to 23.87	23.87 to 23.37	25.87 to 24.87	24.83 to 24.63	25.63 to 24.63	24.63 to 23.78	25.29 to 25.09	26.09 to 25.09	25.09 to 24.39	25.40 to 25.20	26.20 to 25.20	25.20 to 24.20	25.96 to 25.76	26.76 to 25.76	25.46 to 24.76
														Sampled Date	29/09/2020	29/09/2020	29/09/2020	29/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	30/09/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020	01/10/2020
	Aromatics																																				
GTEC05EC07AR	>EC5-EC7	370	690	1,400	26,000	46,000	86,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC07EC08AR	>EC7-EC8	860	1,800	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC08EC10AR	>EC8-EC10	47	110	270	3,500	8,100	17,000	5,000	5,000	5,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC10EC12AR	>EC10-EC12	250	590	1,200	16,000	28,000	34,000	5,000	5,000	5,000	TM5/PM16	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	121.1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
GTEC12EC16AR	>EC12-EC16	1,800	2,300	2,500	36,000	37,000	38,000	5,100	5,100	5,000	TM5/PM16	mg/kg	<4	<4	<4	<4	<4	<4	<4	<4	<6	<4	<4	<4	<4	<4	<4	19	<4	<4	<4	<4	11	<4	<4	<4	<4	<4	<4
GTEC16EC21AR	>EC16-EC21	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	65	16	<7	<7	<7	<7	40	<7	<7	<7	<7	<7
GTEC21EC35AR	>EC21-EC35	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	39	<7	<7	<7	<7	<7	<7	<7	<7	973	739	45	<7	<7	<7	90	<7	<7	<7	37	<7
GTEC35EC40AR	>EC35-EC40	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	37	<7	<7	<7	<7	<7	<7	<7	<7	258	135	<7	<7	<7	<7	25	<7	<7	<7	<7	<7
GTEC05EC40AR	Total aromatics C5-40										TM5/TM36/PM12/PM16	mg/kg	<26	<26	<26	<26	<26	76	<26	<26	<26	<26	<26	<26	<26	<26	<26	1436	890	45	<26	<26	<26	166	<26	<26	<26	37	<26
GTC05C40ALAR	Total aliphatics and aromatics(>C5-40)	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM12/PM16	mg/kg	<52	<52	<52	<52	<52	<52	120	<52	<52	<52	<52	<52	<52	<52	<52	3281	2632	103	<52	<52	<52	166	<52	<52	<52	<52	<52
GTEC06EC10AR	>EC6-EC10										TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC10EC25AR	>EC10-EC25										TM5/PM16	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	531	124	14	<10	<10	<10	83	<10	<10	<10	<10	<10
GTEC25EC35AR	>EC25-EC35										TM5/PM16	mg/kg	<10	<10	<10	<10	<10	<10	40	<10	<10	<10	<10	<10	<10	<10	<10	647	632	33	<10	<10	<10	64	<10	<10	<10	25	<10
1634-04-4	MTBE										TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
71-43-2	Benzene	0.38	0.7	1.4	27	47	90	72	72	73	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005	<0.005
108-88-3	Toluene	880	1900	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
100-41-4	Ethylbenzene	83	190	440	5,700	13,000	27,000	24,000	24,000	25,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
P_M_XYLENE	m/p-Xylene	79	180	430	5,900	14,000	30,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
95-47-6	o-Xylene	88	210	480	6,600	15,000	33,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
7012-37-5	PCB 28										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35693-99-3	PCB 52										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
37680-73-2	PCB 101										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
31508-00-6	PCB 118										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35065-28-2	PCB 153										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.024	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35065-27-1	PCB 153										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.019	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35065-29-3	PCB 180										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
PCB_7_CON_TOTAL	Total 7 PCBs		1,000^			1,000^			1,000^		TM17/PM8	mg/kg	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	0.067	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
108-95-2	Phenol	750	1,300	2,300	760	1,500	3,200	760	1,500	3,200	TM26/PM21	mg/kg	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOIST_CONT_DRY	Natural Moisture Content										PM4/PM0	%	<0.1	16.7	14.2	12.9	15.3	11.5	13.3	9.9	9.5	8.6	7.7	14.5	13.5	12.1	20.7	16.8	14.9	9.8	7.7	6.9	13.5	16.1	11.8	10.7	14.4	6.3
MOIST_CONT_WET	(Moisture Content (% Wet Weight))										PM4/PM0	%	<0.1	14.3	12.4	11.4	13.3	10.3	11.8	9	8.7	7.9	7.1	12.7	11.9	10.8	17.2	14.4	12.9	8.9	7.1	6.5	11.9	13.9	10.5	9.7	12.6	5.9
JE11006	(Moisture Content 105C (% Dry Weight))										PM4/PM0	%	<0.1	17.4	15	12.2	18.3	12.7	11.6	10.3	10.5	9.2	11.8	10.5	13.7	16.9	24.4	24.8	13.1	8.2	13.1	12.3	14.7	18.5	12.6	10.8	16.3	9.3
JE11007	Dry Matter Content Ratio (105°C)										NONE/PM4	%	<0.1	85.2	86.9	89.1	84.5	88.8	89.6	90.7	90.5	91.6	89.4	90.5	87.9	85.6	80.4	80.1	88.4	92.4	88.4	89	87.2	84.4	88.8	90.2	86	91.5
18540-29-9	Hexavalent Chromium		6			33			7.7		TM38/PM20	mg/kg	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
CHROMIUM_III	Chromium III		910			8,600			1,500		NONE/NONE	mg/kg	<0.5	47.6	47.6	43.6	51.2	52.1	71	52	48.4	46.2	53.6	43.3	34	83.9	97.9	94.8	50.2	43.6	35.8	37.3	41	46.9	39.9	59.9	53.5	40
57-12-5	Total Cyanide										TM89/PM45	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SULPHIDE	Sulphide										TM106/PM45	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
ALKALI_RES	Alkali Reserve										TM160/PM110	(mol+/kg)	<0.000	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP
ELEM_SULPH	Elemental Sulphur										TM36/PM12/PM8	mg/kg	<1	<1	1	<1	<1	1	<1	1	8	8	<1	1	5	1	14	<1	2	<1	2	2	<1	11	<1	1	7	1
JE1559/LOI	Loss on Ignition										TM22/PM0	%	<1.0	3.7	2.8	2.4	2.3	1.3	3	1.3	1.2	<1.0	1.5	1.5	1.7	3.7	5.5	5.6	2.3	2.1	1.8	2	2.4	4.6	2.3	1.9	5.2	<1.0
PH	pH										TM73/PM11	pH units	<0.01	8.3	8.36	8.26	8.33	7.81	8.06	8.76	8.72	6.48	8.99	8.81	8.75	8.65	8.41	8.72	8.49	8.8	8.49	8.76	8.78	8.42	8.7	8.76	8.38	8.83
	IOM Asbestos Analysis														NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD

Notes:
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Data colums shown light grey are samples of soils that will be removed during construction.
*Indicates GAC values from SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination - Policy Companion Document published in 2014.
NAD = No Asbestos Detected.
NA/- = Not Available.
EIC/AGS/CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment published in 2010.
+ GAC S4ULs EC >35- 44 were used in the absense of suitable for use levels for EC>35-40
^ Indicates Intervention Values taken from **DUTCH INTERVENTION 2009**
& Since xylenes are reported as m&p xylene, hence the GAC limit was taken as the lower limit for the individual xylene type as a conservative approach.

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

		GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Res) (1% SOM)	GAC S4UL Public Open Space (Res) (2.5% SOM)	GAC S4UL Public Open Space (Res) (6% SOM)				Lab Ref	20/13660	20/13660	20/13660	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108
														Sample ID	WS48	WS49	WS49	TP19	TP19	TP19	TP19	TP27	TP27	TP27	TP27	TP35	TP35	TP35	TP35	TP35	TP33	TP33	TP33	TP33	TP28	TP28	TP49	TP49
														Surface Elevation	26.76	26.48	26.48	24.41	24.41	24.41	24.41	24.40	24.40	24.40	24.40	25.35	25.35	25.35	25.35	25.35	25.56	25.56	25.56	25.56	25.56	25.75	26.49	26.49
														Depth (mbgl)	2.40-3.00	0.70-0.90	0.00-0.90	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	0.80-1.00	1.50-2.00	2.00-3.00	3.00-3.20	0.00-0.85	0.80-0.85	1.00-2.00	2.00-3.00	3.00-3.20	0.20-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.20	1.00-2.00	2.00-3.00	1.00-2.00	2.00-3.00
														Depth (mAOD)	24.36 to 23.76	25.78 to 25.58	26.48 to 25.58	24.41 to 23.41	23.61 to 23.41	23.41 to 22.41	22.41 to 21.41	23.60 to 23.40	22.90 to 22.40	22.40 to 21.40	21.40 to 21.20	25.35 to 24.50	24.55 to 24.50	24.35 to 23.35	23.35 to 22.35	22.35 to 22.15	25.36 to 24.56	24.76 to 24.56	24.56 to 23.56	23.56 to 22.56	22.56 to 22.36	24.75 to 23.75	23.75 to 22.75	25.49 to 24.49	24.49 to 23.49
														Sampled Date	01/10/2020	01/10/2020	01/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	12/10/2020	12/10/2020
CAS Number	Test											Method	Units	LOD																							
TOC	Total Organic Carbon											TM27/PM24	%	<0.02	0.43	0.49	1.11	1.8	1.36	0.4	0.41	0.39	0.81	0.76	0.75	0.96	0.61	0.54	0.7	0.67	0.37	0.28	0.44	0.57	0.67	0.38	0.69	0.52	0.68
	Soil Organic Matter												%		**0.74**	**0.84**	**1.91**	**3.10**	**2.34**	**0.69**	**0.71**	**0.67**	**1.39**	**1.31**	**1.29**	**1.65**	**1.05**	**0.93**	**1.20**	**1.15**	**0.64**	**0.48**	**0.76**	**0.98**	**1.15**	**0.65**	**1.19**	**0.89**	**1.17**
7440-36-0	Antimony		550			7,500						TM5/PM15/PM16	mg/kg	<1	2	2	2	1	1	2	2	2	3	2	2	2	2	2	2	2	2	1	2	2	1	2	2	2	2
7440-38-2	Arsenic		40			640			79			TM5/PM15/PM16	mg/kg	<0.5	9.1	11.1	45.3	62.2	27.7	14.2	7.9	7	20.9	10	12.2	8.4	7.8	10.6	9.1	10	10	6.9	9.9	7.7	8.1	11.4	9.2	12.8	14.7
7440-39-3	Barium		1,300			22,000						TM5/PM15/PM16	mg/kg	<1	44	75	134	111	84	99	20	59	139	69	246	60	54	71	56	59	85	39	95	53	81	68	48	64	72
7440-43-9	Cadmium		85			190			120			TM5/PM15/PM16	mg/kg	<0.1	1.9	1.7	4.1	1.6	1.3	1.7	1.4	2	2.5	2.4	2.5	1.2	0.7	2.2	2.4	2.5	2.5	2.2	2.6	2.1	1.8	2.3	2.1	2.3	2.4
7440-47-3	Chromium					190						TM5/PM15/PM16	mg/kg	<0.5	35.7	45	51.4	21.2	22.1	43.1	46	42.6	36.9	34.6	34.5	50.2	53.4	35.9	43.6	33.2	43.2	36.1	41.6	37.3	38.4	38.2	36.4	38.3	32.5
7440-50-8	Copper		7,100			68,000			12,000			TM5/PM15/PM16	mg/kg	<1	23	25	28	39	39	25	21	25	40	34	36	85	159	29	35	32	24	21	29	27	24	35	31	37	38
7439-92-1	Lead		310*			2,300*			610*			TM5/PM15/PM16	mg/kg	<5	11	37	49	103	97	20	12	15	18	128	18	24	25	13	18	14	18	67	14	12	16	17	17	29	19
7439-97-6	Mercury		56			1,100			120			TM5/PM15/PM16	mg/kg	<0.1	<0.1	<0.1	<0.1	0.2	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
7439-98-7	Molybdenum		670			17,000						TM5/PM15/PM16	mg/kg	<0.1	4.4	4.3	4	2.1	1.6	4.9	4.7	4.4	13.1	6.5	6	3.3	3.7	3.7	4.2	3.3	4.4	4.3	4.9	4.7	4	5.7	4.9	5.1	4.7
7440-02-0	Nickel		180			980			210			TM5/PM15/PM16	mg/kg	<0.7	31.7	27	39.3	39.2	30.9	32.4	21.1	25.6	45.8	34.8	42.6	27.4	19	32.6	37.4	34.1	32.2	27.5	35.4	29.6	32.6	38.3	36.1	41.8	41.3
7782-49-2	Selenium		430			12,000			1,100			TM5/PM15/PM16	mg/kg	<1	1	<1	1	1	1	<1	<1	<1	10	3	3	<1	<1	1	4	3	1	<1	2	3	2	<1	3	<1	3
JE1104S	Total Sulphate											TM30/PM20/PM20	mg/kg	<50	410	1893	699	1048	716	252	217	291	1990	2787	1177	300	281	240	1228	1198	388	354	232	1122	1035	293	1600	340	862
7440-42-8	Water Soluble Boron											TM5/PM20/PM16	mg/kg	<0.1	0.7	1.2	1.2	1.2	1.2	0.6	0.5	0.5	0.7	0.5	0.5	0.7	0.6	0.7	0.7	0.7	0.7	0.4	0.5	0.4	0.5	0.7	0.7	0.7	0.8
7440-66-6	Zinc		40,000			730,000			81,000			TM5/PM15/PM16	mg/kg	<5	67	79	115	143	132	86	66	78	105	75	95	90	79	75	84	79	77	82	95	76	60	84	86	101	102
	PAH MS																																					
91-20-3	Naphthalene	2.3	5.6	13	190	460	1100	4,900	4,900	4,900		TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.16	0.21	0.14	<0.04	<0.04	<0.04	<0.04
208-96-8	Acenaphthylene	2,900	4,600	6,000	83,000	97,000	100,000	15,000	15,000	15,000		TM4/PM8	mg/kg	<0.03	<0.03	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.44	0.17	0.09	<0.03	<0.03	<0.03	<0.03
83-32-9	Acenaphthene	3,000	4,700	6,000	84,000	97,000	100,000	15,000	15,000	15,000		TM4/PM8	mg/kg	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	<0.05	<0.05	0.32	0.15	0.09	<0.05	<0.05	<0.05	<0.05
86-73-7	Fluorene	2,800	3,800	4,500	63,000	68,000	71,000	9,900	9,900	9,900		TM4/PM8	mg/kg	<0.04	<0.04	0.09	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.56	<0.04	<0.04	<0.04	<0.04	1.32	0.61	0.34	<0.04	<0.04	<0.04	<0.04
85-01-8	Phenanthrene	1,300	1,500	1,500	22,000	22,000	23,000	3,100	3,100	3,100		TM4/PM8	mg/kg	<0.03	<0.03	0.87	0.5	0.19	0.19	<0.03	<0.03	0.04	<0.03	<0.03	<0.03	<0.03	0.26	0.94	<0.03	<0.03	<0.03	<0.03	2.65	1.15	0.66	<0.03	<0.03	0.24	0.03
120-12-7	Anthracene	31,000	35,000	37,000	520,000	540,000	540,000	74,000	74,000	74,000		TM4/PM8	mg/kg	<0.04	<0.04	0.14	0.09	0.05	0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04	<0.04	<0.04	0.11	<0.04	<0.04	<0.04	<0.04	0.05	<0.04
206-44-0	Fluoranthene	1,500	1,600	1,600	23,000	23,000	23,000	3,100	3,100	3,100		TM4/PM8	mg/kg	<0.03	<0.03	0.89	0.6	0.34	0.39	0.05	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	0.36	<0.03	<0.03	<0.03	<0.03	<0.03	0.11	0.06	0.03	<0.03	<0.03	0.2	0.03
129-00-0	Pyrene	3,700	3,800	3,800	54,000	54,000	54,000	7,400	7,400	7,400		TM4/PM8	mg/kg	<0.03	<0.03	0.78	0.52	0.3	0.35	0.05	<0.03	<0.03	<0.03	<0.03	<0.03	0.06	0.33	0.07	<0.03	<0.03	<0.03	<0.03	0.17	0.09	0.07	<0.03	<0.03	0.18	0.03
56-55-3	Benzo(a)anthracene	11	14	15	170	170	180	29	29	29		TM4/PM8	mg/kg	<0.06	<0.06	0.36	0.27	0.16	0.21	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.2	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.1	<0.06
218-01-9	Chrysene	30	31	32	350	350	350	57	57	57		TM4/PM8	mg/kg	<0.02	<0.02	0.38	0.31	0.19	0.23	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	0.21	<0.02	<0.02	<0.02	<0.02	<0.02	0.06	<0.02	0.02	<0.02	<0.02	0.09	<0.02
BEN-BK-FLUORAN	Benzo(bk)fluoranthene											TM4/PM8	mg/kg	<0.07	<0.07	0.55	0.41	0.31	0.39	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.32	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.11	<0.07
50-32-8	Benzo(a)pyrene	3.2	3.2	3.2	35	35	36	5.7	5.7	5.7		TM4/PM8	mg/kg	<0.04	<0.04	0.25	0.2	0.16	0.2	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.16	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.04
193-39-5	Indeno(123cd)pyrene	45	46	46	500	510	510	82	82	82		TM4/PM8	mg/kg	<0.04	<0.04	0.13	0.1	0.1	0.12	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.1	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
53-70-3	Dibenzo(ah)anthracene	0.31	0.32	0.32	3.5	3.6	3.6	0.57	0.57	0.58		TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
191-24-2	Benzo(ghi)perylene	360	360	360	3,900	4,000	4,000	640	640	640		TM4/PM8	mg/kg	<0.04	<0.04	0.17	0.15	0.12	0.12	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.12	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
191-07-1	Coronene											TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
PAH_6_TOTAL	PAH 6 Total											TM4/PM8	mg/kg	<0.22	<0.22	1.99	1.46	1.03	1.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	1.06	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	0.38	<0.22
PAH_17_TOTAL	PAH 17 Total											TM4/PM8	mg/kg	<0.64	<0.64	4.72	3.2	1.92	2.25	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	2.13	1.85	<0.64	<0.64	<0.64	<0.64	5.34	2.44	1.44	<0.64	<0.64	1.04	<0.64
205-99-2	Benzo(b)fluoranthene	3.9	4	4	44	44	45	7.1	7.2	7.2		TM4/PM8	mg/kg	<0.05	<0.05	0.4	0.3	0.22	0.28	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.23	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
207-08-9	Benzo(k)fluoranthene	110	110	110	1,200	1,200	1,200	190	190	190		TM4/PM8	mg/kg	<0.02	<0.02	0.15	0.11	0.09	0.11	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02
205-82-3	Benzo(j)fluoranthene											TM4/PM8	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
INTERPRETATION	EPH CWG Interpretation											TM5/PM16	None		No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	Insufficient Evidence of Degraded Fuels	Possible Mix of Degraded Fuels	Possible Degraded Fuels	Insufficient Evidence of Degraded Fuels	No interpretation possible	No interpretation possible	Mixture of Degraded Fuels and Lubricating Oil	Insufficient Evidence of Degraded Fuels	Degraded diesel	No interpretation possible	Degraded diesel	No interpretation possible	Degraded diesel	Degraded diesel	Degraded diesel	Degraded diesel	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible
MINOIL_10-40	Mineral Oil (C10-C40)											TM5/PM16	mg/kg	<30	<30	<30	<30	<30	<30	<30	<30	<30	46	<30	<30	<30	<30	1185	<30	73	<30	199	1499	511	844	<30	<30	<30	<30
	TPH CWG																																					
	Aliphatics																																					
GTC05C06AL	>C5-C6	42	78	160	3,200	5,900	12,000	570,000	590,000	600,000		TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC06C08AL	>C6-C8	100	230	510	7,800	17,000	40,000	600,000	610,000	620,000		TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	<0.1	<0.1	<0.1	1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1
GTC08C10AL	>C8-C10	27	65	150	2,000	4,800	11,000	13,000	13,000	13,000		TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.3	<0.1	0.2	<0.1	0.7	<0.1	<0.1	<0.1	<0.1	15.1	4.5	1.7	<0.1	<0.1	<0.1	<0.1
GTC10C12AL	>C10-C12	130	330	770	9,700	23,000	47,000	13,000	13,000	13,000		TM5/PM16	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.5	<0.2	<0.2	<0.2	109.4	<0.2	6	<0.2	1.3	165.4	55.7	69.8	<0.2	<0.2	<0.2	<0.2
GTC12C16AL	>C12-C16	1,100	2,400	4,400	59,000	82,000	90,000	13,000	13,000	13,000		TM5/PM16	mg/kg	<4	<4	<4	<4	<4	<4	<4	<4	<4	9	21	10	<4	<4	414	<4	29	<4	56	533	180	293	<4	<4	<4	<4
GTC16C21AL	>C16-C21							<7	<7	<7	<7	TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	<7	<7	<7	8	23	<7	<7	<7	457	<7	28	11	105	632	206	348	<7	<7	<7	<7
GTC21C35AL	>C21-C35							<7	<7	<7	<7	TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	205	<7	10	<7	37	189	69	133	<7	<7	<7	<7
GTC35C40AL	>C35-C40 +	65,000	92,000	110,000	1,600,000	1,700,000	1,800,000	250,000	250,000	250,000		TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
GTC01C40AL	Total aliphatics C5-40	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions		TM5/TM36/PM16/PM12/PM42	mg/kg	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	46	<26	<26	<26	1191	<26	73	<26	199	1516	515	846	<26	<26	<26	<26
GTC06C10AL	>C6-C10							<0.1	<0.1	<0.1	<0.1	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.3	<0.1	0.2	<0.1	5.5	<0.1	<0.1	<0.1	<0.1	16.1	4.7	1.7	<0.1	<0.1	<0.1	<0.1
GTC10C25AL	>C10-C25							<10	<10	<10	<10	TM5/PM16	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<10	18	50	13	<10	<10	1088	<10	88	<10	213	1627	541	820	<10	<10	<10	<10
GTC25C35AL	>C25-C35							<10	<10	<10	<10	TM5/PM16	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	13	172	<10	<10	<10	<10	42	11	25	<10	<10	<10	<10

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

CAS Number	Test	GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Resi) (1% SOM)	GAC S4UL Public Open Space (Resi) (2.5% SOM)	GAC S4UL Public Open Space (Resi) (6% SOM)	Method	Units	LOD	Lab Cert	20/13660	20/13660	20/13660	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108	20/14108
														Sample ID	WS48	WS49	WS49	TP19	TP19	TP19	TP19	TP27	TP27	TP27	TP27	TP35	TP35	TP35	TP35	TP35	TP35	TP33	TP33	TP33	TP33	TP28	TP28	TP49	TP49
														Surface Elevation	26.76	26.48	26.48	24.41	24.41	24.41	24.41	24.40	24.40	24.40	24.40	25.35	25.35	25.35	25.35	25.35	25.35	25.56	25.56	25.56	25.56	25.75	25.75	26.49	26.49
														Depth (mbgl)	2.40-3.00	0.70-0.90	0.00-0.90	0.00-1.00	0.80-1.00	1.00-2.00	2.00-3.00	0.80-1.00	1.50-2.00	2.00-3.00	3.00-3.20	0.00-0.85	0.80-0.85	1.00-2.00	2.00-3.00	3.00-3.20	0.20-1.00	0.80-1.00	1.00-2.00	2.00-3.00	3.00-3.20	1.00-2.00	2.00-3.00	1.00-2.00	2.00-3.00
														Depth [mAOD]	24.36 to 23.76	25.78 to 25.58	26.48 to 25.58	24.41 to 23.41	23.61 to 23.41	23.41 to 22.41	22.41 to 21.41	23.60 to 23.40	22.90 to 22.40	22.40 to 21.40	21.40 to 21.20	25.35 to 24.50	24.55 to 24.50	24.35 to 23.35	23.35 to 22.35	22.35 to 22.15	25.36 to 24.56	24.76 to 24.56	24.56 to 23.56	23.56 to 22.56	22.56 to 22.36	24.75 to 23.75	23.75 to 22.75	25.49 to 24.49	24.49 to 23.49
														Sampled Date	01/10/2020	01/10/2020	01/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	09/10/2020	12/10/2020	12/10/2020
	Aromatics																																				
GTEC05EC07AR	>EC5-EC7	370	690	1,400	26,000	46,000	86,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC07EC08AR	>EC7-EC8	860	1,800	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC08EC10AR	>EC8-EC10	47	110	270	3,500	8,100	17,000	5,000	5,000	5,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	0.7	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC10EC12AR	>EC10-EC12	250	590	1,200	16,000	28,000	34,000	5,000	5,000	5,000	TM5/PM16	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	45	<0.2	<0.2	<0.2	67.8	24.2	27.8	<0.2	<0.2	<0.2	<0.2	<0.2
GTEC12EC16AR	>EC12-EC16	1,800	2,300	2,500	36,000	37,000	38,000	5,100	5,100	5,000	TM5/PM16	mg/kg	<4	<4	<4	<4	<4	<4	<4	<4	<6	<4	<4	<4	<4	<4	264	<4	16	<4	7	403	145	207	<4	<4	<4	<4
GTEC16EC21AR	>EC16-EC21	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	340	<7	18	<7	56	501	183	277	<7	<7	<7	<7
GTEC21EC35AR	>EC21-EC35	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	19	133	155	<7	<7	<7	<7	36	157	66	103	<7	<7	<7	<7
GTEC35EC40AR	>EC35-EC40	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	30	39	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
GTEC05EC40AR	Total aromatics C5-40										TM5/TM36/PM12	mg/kg	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	<26	49	193	804	<26	34	<26	99	1130	418	615	<26	<26	<26	<26	<26
GTC05C40ALAR	Total aliphatics and aromatics(>C5-40)	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM12/PM16	mg/kg	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	<52	193	1995	<52	107	<52	298	2646	933	1461	<52	<52	<52	<52
GTEC06EC10AR	>EC6-EC10										TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	<0.1	0.7	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTEC10EC25AR	>EC10-EC25										TM5/PM16	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	878	<10	33	<10	106	1178	422	592	<10	<10	<10	<10
GTEC25EC35AR	>EC25-EC35										TM5/PM16	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	18	126	25	<10	<10	<10	<10	18	<10	27	<10	<10	<10	<10	<10
	BTEX																																					
1634-04-4	MTBE										TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
71-43-2	Benzene	0.38	0.7	1.4	27	47	90	72	72	73	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
108-88-3	Toluene	880	1900	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
100-41-4	Ethylbenzene	83	190	440	5,700	13,000	27,000	24,000	24,000	25,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.025	<0.005	<0.005	<0.005	<0.005	0.104	0.028	0.007	<0.005	<0.005	<0.005	<0.005
P_M_XYLENE	m/p-Xylene	79	180	430	5,900	14,000	30,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	0.108	<0.005	<0.005	<0.005	<0.005	0.329	0.09	0.02	<0.005	<0.005	<0.005	<0.005
95-47-6	o-Xylene	88	210	480	6,600	15,000	33,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005	0.096	<0.005	<0.005	<0.005	<0.005	0.256	0.074	0.021	<0.005	<0.005	<0.005	<0.005
	PCBs																																					
7012-37-5	PCB 28										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35693-99-3	PCB 52										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
37680-73-2	PCB 101										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
31508-00-6	PCB 118										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35065-28-2	PCB 153										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35065-27-1	PCB 153										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
35065-29-3	PCB 180										TM17/PM8	mg/kg	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
PCB_7_CON_TOTAL	Total 7 PCBs		1,000^			1,000^			1,000^		TM17/PM8	mg/kg	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
	Phenol																																					
108-95-2	Phenol	750	1,300	2,300	760	1,500	3,200	760	1,500	3,200	TM26/PM21	mg/kg	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MOIST_CONT_DRY	Natural Moisture Content										PM4/PM0	%	<0.1	10.7	9	13.3	16.1	17	17.7	18.4	10.2	14.7	8.8	11.2	10.3	9.3	12	11.5	11.6	12	11.3	14.6	10.7	13.1	12.5	13.2	13.3	14.7
MOIST_CONT_WET	(Moisture Content in Wet Weight)										PM4/PM0	%	<0.1	9.7	8.2	11.7	13.8	14.6	15	15.6	9.2	12.8	8.1	10	9.4	8.5	10.7	10.3	10.4	10.7	10.2	12.7	9.7	11.6	11.1	11.7	11.8	12.8
JEL1006	(Moisture Content 105C (% Dry Weight))										PM4/PM0	%	<0.1	13	10.6	16.1	19.2	21.4	18.9	27.6	11.4	16.4	10.3	9.4	14.6	11.4	13.8	12.3	13	13.8	11.8	14.1	11.1	10.5	16.4	11.8	14.8	12.6
JEL1007	Dry Matter Content Ratio (105°C)										NONE/PM4	%	<0.1	88.5	90.4	86.1	83.9	82.4	84.1	78.3	89.8	85.9	90.7	91.4	87.3	89.8	87.9	89.1	88.5	87.9	89.4	87.7	90	90.5	85.9	89.5	87.1	88.8
18540-29-9	Hexavalent Chromium		6			33			7.7		TM38/PM20	mg/kg	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
CHROMIUM_III	Chromium III		910			8,600			1,500		NONE/NONE	mg/kg	<0.5	35.7	45	51.4	21.2	22.1	43.1	46	42.6	36.9	34.6	34.5	50.2	53.4	35.9	43.6	33.2	43.2	36.1	41.6	37.3	38.4	38.2	36.4	38.3	32.5
57-12-5	Total Cyanide										TM89/PM45	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SULPHIDE	Sulphide										TM106/PM45	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
ALKALI_RES	Alkali Reserve										TM160/PM110	mole/kg	<0.000	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NA	NDP	NDP	NDP	NDP	NDP
ELEM_SULPH	Elemental Sulphur										TM106/PM110/PM45	mg/kg	<1	3	1	1	<1	<1	<1	<1	2	3	33	12	<1	3	7	41	56	2	2	9	5	6	1	22	<1	<1
JEL559/LOI	Loss on Ignition										TM22/PM0	%	<1.0	1.9	2.8	4.1	3.1	2.9	1.8	1.4	1.4	1.6	1.2	1.9	2.7	1.9	1.8	1.4	1.3	1.8	1.3	1.8	1.4	1.5	2	1.9	2.2	2
PH	pH										TM73/PM11	pH units	<0.01	8.87	8.91	8.33	8.44	8.2	8.73	8.45	8.57	8.39	8.33	8.48	8.46	8.7	8.33	8.74	8.67	8.46	8.24	7.97	8.13	8.21	8.3	8.31	8.65	8.7
	IOM Asbestos Analysis														NAD	NAD	NAD	NAD	NAD	NAD	Chrysotile - 0.003% Asbestos as unbound fibres	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD

Notes:
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Data columns shown light grey are samples of soils that will be removed during construction.
*Indicates GAC values from SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination - Policy Companion Document published in 2014.
NAD = No Asbestos Detected.
NA/- = Not Available.
EIC/AGS/CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment published in 2010.
+ GAC S4ULs EC >35- 44 were used in the absense of suitable for use levels for EC>35-40
^ Indicates Intervention Values taken from **DUTCH INTERVENTION 2009**
& Since xylenes are reported as m&p xylene, hence the GAC limit was taken as the lower limit for the individual xylene type as a conservative approach.

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

		GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Res) (1% SOM)	GAC S4UL Public Open Space (Res) (2.5% SOM)	GAC S4UL Public Open Space (Res) (6% SOM)																									
	Lab Cert												20/14108	20/14108	20/14108	20/14108	20/14178	20/14178	20/14178	20/14178	20/14178	20/14178	20/14178	20/14178	20/14178	20/14178	20/14172	20/14172	20/14656	20/14656	20/14656	20/14656	20/14656	20/14656
	Sample ID												TP49	TP50	TP51	TP51	TP 37	TP 37	TP 37	TP 40	TP 40	TP 09	TP 17	TP 22	TP 25	BH03	BH03	BH04	BH07	BH08	BH08	BH12	BH12
	Surface Elevation												26.49	26.26	26.06	26.06	26.03	26.03	26.03	26.69	26.69	24.47	24.76	24.56	25.22	24.13	24.13	23.73	25.44	24.90	24.90	25.71	25.71
	Depth (mbgl)												3.00-3.20	2.00-2.70	1.70-3.00	2.90-3.00	1.00-2.00	2.00-3.00	3.00-3.20	2.40-3.00	3.00-3.20	0.80-1.00	0.80-1.00	0.80-1.00	0.80-1.00	0.80-1.00	3.00-3.40	3.00-3.40	3.00-3.40	1.00-2.00	3.00-3.40	1.85-3.00	3.00-3.40	
	Depth (mAOD)												23.49 to 23.29	24.26 to 23.56	24.36 to 23.06	23.16 to 23.06	25.03 to 24.03	24.03 to 23.03	23.03 to 22.83	24.29 to 23.69	23.69 to 23.49	23.67 to 23.47	23.96 to 23.76	23.76 to 23.56	24.42 to 24.22	23.33 to 23.13	21.13 to 20.73	20.73 to 20.33	22.44 to 22.04	23.90 to 22.90	21.90 to 21.50	23.86 to 22.71	22.71 to 22.31	
	Sampled Date												12/10/2020	12/10/2020	12/10/2020	12/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	09/10/2020	09/10/2020	07/10/2020	12/10/2020	12/10/2020	12/10/2020	14/10/2020	14/10/2020	
CAS Number	Test										Method	Units	LOD																					
TOC	Total Organic Carbon										TM27/PM24	%	<0.02	0.72	0.72	0.47	0.73	0.34	0.56	0.55	1.35	1.09	0.54	0.34	NDP	0.38	0.55	0.79	0.76	0.74	0.13	0.52	0.76	0.8
	Soil Organic Matter											%		**1.24**	**1.24**	**0.81**	**1.26**	**0.58**	**0.96**	**0.95**	**2.32**	**1.87**	**0.93**	**0.58**	**NA**	**0.65**	**0.95**	**1.36**	**1.31**	**1.27**	**0.22**	**0.89**	**1.31**	**1.38**
7440-36-0	Antimony		550			7,500					Tests/Inec/Jan/metals	mg/kg	<1	2	2	2	2	1	1	<1	2	1	2	2	4	1	<1	2	2	2	<1	2	1	1
7440-38-2	Arsenic		40			640			79		Tests/Inec/Jan/metals	mg/kg	<0.5	12.4	12.8	10.7	13.6	10.2	7.5	7.4	13.4	8.7	7.8	10.4	17.3	7.3	5.8	11.8	11.1	9.9	5.6	5.1	6.9	7.4
7440-39-3	Barium		1,300			22,000					Tests/Inec/Jan/metals	mg/kg	<1	67	63	50	39	105	99	77	85	48	84	66	145	67	27	40	77	72	31	22	21	23
7440-43-9	Cadmium		85			190			120		Tests/Inec/Jan/metals	mg/kg	<0.1	2.5	2.4	2	2.2	2.5	1.4	1.1	2.3	1.4	3.6	2.2	1.3	1.3	0.7	1.9	2.5	2	0.3	1.8	0.2	0.6
7440-47-3	Chromium										Tests/Inec/Jan/metals	mg/kg	<0.5	40.2	33.3	67.1	40	38.3	35.9	35	43	38.3	55.7	44.2	22.5	46.8	44.4	43.5	40.7	34.8	44.4	28.7	28.7	27.1
7440-50-8	Copper		7,100			68,000			12,000		Tests/Inec/Jan/metals	mg/kg	<1	34	34	31	39	21	20	17	29	26	23	25	52	16	15	31	43	34	10	20	22	24
7439-92-1	Lead		310*			2,300*			630*		Tests/Inec/Jan/metals	mg/kg	<5	16	17	15	15	12	12	11	59	22	17	16	160	18	20	16	15	15	6	9	12	10
7439-97-6	Mercury		56			1,100			120		Tests/Inec/Jan/metals	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
7439-98-7	Molybdenum		670			17,000					Tests/Inec/Jan/metals	mg/kg	<0.1	5.3	5.1	4.5	5	4.6	3.5	3	5.6	4.4	5.4	3.7	2.3	3.4	3.8	5.9	5.6	4.6	2.4	2.3	1.8	2.6
7440-02-0	Nickel		180			980			230		Tests/Inec/Jan/metals	mg/kg	<0.7	42.2	40.6	53.2	37.3	36.2	26.7	32.2	40.8	36.9	37.6	38.8	28.2	30.2	15.7	39.3	42.9	39	8.8	20.8	39.1	40.5
7782-49-2	Selenium		430			12,000			1,100		Tests/Inec/Jan/metals	mg/kg	<1	6	4	4	7	<1	2	1	1	2	1	<1	1	<1	<1	3	4	3	<1	2	2	2
JEL1045	Total Sulphate										TM30/PM20/PM19	mg/kg	<50	1744	3717	1117	2434	502	919	2466	782	564	482	413	33273	410	671	2996	3164	2626	203	1014	1316	1578
7440-42-8	Water Soluble Boron										TM70/PM30/PM81	mg/kg	<0.1	0.7	0.5	0.5	0.6	0.5	0.9	1	1.9	1.3	1	0.8	1.7	0.7	0.4	0.4	0.5	0.5	0.3	0.5	0.8	1
7440-66-6	Zinc		40,000			730,000			81,000		TM85/PM55/PM62	mg/kg	<5	89	97	93	88	79	57	46	107	65	80	84	237	66	38	73	87	89	68	56	25	37
	PAH MS																																		
91-20-3	Naphthalene	2.3	5.6	13	190	460	1100	4,900	4,900	4,900	TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.12	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
208-96-8	Acenaphthylene	2,900	4,600	6,000	83,000	97,000	100,000	15,000	15,000	15,000	TM4/PM8	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
83-32-9	Acenaphthene	3,000	4,700	6,000	84,000	97,000	100,000	15,000	15,000	15,000	TM4/PM8	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
86-73-7	Fluorene	2,800	3,800	4,500	63,000	68,000	71,000	9,900	9,900	9,900	TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.23	0.07	0.06	0.31	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
85-01-8	Phenanthrene	1,300	1,500	1,500	22,000	22,000	23,000	3,100	3,100	3,100	TM4/PM8	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.15	0.07	0.1	0.49	<0.03	<0.03	0.09	<0.03	<0.03	0.08	0.06	<0.03	0.09	<0.03	<0.03	<0.03
120-12-7	Anthracene	31,000	35,000	37,000	520,000	540,000	540,000	74,000	74,000	74,000	TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	<0.04
206-44-0	Fluoranthene	1,500	1,600	1,600	23,000	23,000	23,000	3,100	3,100	3,100	TM4/PM8	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.04	<0.03	0.06	0.05	<0.03	<0.03	0.24	<0.03	<0.03	<0.03	<0.03	<0.03	0.1	<0.03	<0.03	<0.03
129-00-0	Pyrene	3,700	3,800	3,800	54,000	54,000	54,000	7,400	7,400	7,400	TM4/PM8	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.08	<0.03	0.05	0.07	<0.03	<0.03	0.24	<0.03	<0.03	<0.03	<0.03	<0.03	0.11	<0.03	<0.03	<0.03
56-55-3	Benzo(a)anthracene	11	14	15	170	170	180	29	29	29	TM4/PM8	mg/kg	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.15	<0.06	<0.06	<0.06	<0.06	<0.06	0.08	<0.06	<0.06	<0.06
218-01-9	Chrysene	30	31	32	350	350	350	57	57	57	TM4/PM8	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	0.04	<0.02	<0.02	0.17	<0.02	<0.02	0.04	0.03	<0.02	0.06	<0.02	<0.02	<0.02
BEN-BK-FLUORAN	Benzo(bk)fluoranthene										TM4/PM8	mg/kg	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.33	<0.07	<0.07	<0.07	<0.07	<0.07	0.11	<0.07	<0.07	<0.07
50-32-8	Benzo(a)pyrene	3.2	3.2	3.2	35	35	36	5.7	5.7	5.7	TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.17	<0.04	<0.04	<0.04	<0.04	<0.04	0.07	<0.04	<0.04	<0.04
193-39-5	Indeno(1,2,3-cd)pyrene	45	46	46	500	510	510	82	82	82	TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.08	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	<0.04
53-70-3	Dibenz(a,h)anthracene	0.31	0.32	0.32	3.5	3.6	3.6	0.57	0.57	0.58	TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
191-24-2	Benzo(ghi)perylene	360	360	360	3,900	4,000	4,000	640	640	640	TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.12	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	<0.04
191-07-1	Coronene										TM4/PM8	mg/kg	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
PAH_6_TOTAL	PAH 6 Total										TM4/PM8	mg/kg	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	0.94	<0.22	<0.22	<0.22	<0.22	<0.22	0.39	<0.22	<0.22	<0.22
PAH_17_TOTAL	PAH 17 Total										TM4/PM8	mg/kg	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	1.01	<0.64	<0.64	1.71	<0.64	<0.64	<0.64	<0.64	<0.64	0.78	<0.64	<0.64	<0.64
205-99-2	Benzo(b)fluoranthene	3.9	4	4	44	44	45	7.1	7.2	7.2	TM4/PM8	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.24	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05
207-08-9	Benzo(k)fluoranthene	110	110	110	1,200	1,200	1,200	190	190	190	TM4/PM8	mg/kg	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.02
205-82-3	Benzo(j)fluoranthene										TM4/PM8	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
INTERPRETATION	EPH CWG Interpretation										TM5/PM16	None		No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	Degraded diesel	Degraded diesel	Degraded diesel	Degraded diesel	No interpretation possible	No interpretation possible	Possible lubricating oil	No interpretation possible	No interpretation possible	No interpretation possible	No interpretation possible	Possible lubricating oil	No interpretation possible	No interpretation possible	No interpretation possible
MINOIL_10-40	Mineral Oil (C10-C40)										TM5/PM16	mg/kg	<30	<30	<30	<30	<30	<30	704	526	439	1467	<30	<30	89	<30	<30	<30	<30	<30	66	<30	<30	<30
	TPH CWG Aliphatics																																		
GTC05C06AL	>C5-C6	42	78	160	3,200	5,900	12,000	570,000	590,000	600,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC06C08AL	>C6-C8	100	230	530	7,800	17,000	40,000	600,000	610,000	620,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC08C10AL	>C8-C10	27	65	150	2,000	4,800	11,000	11,000	11,000	11,000	TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	2.3	0.7	0.4	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC10C12AL	>C10-C12	130	330	770	9,700	23,000	47,000	13,000	13,000	13,000	TM5/PM16	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	71.3	44.3	54.5	158.5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
GTC12C16AL	>C12-C16	1,100	2,400	4,400	59,000	82,000	90,000	13,000	13,000	13,000	TM5/PM16	mg/kg	<4	<4	<4	<4	<4	<4	265	194	161	537	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
GTC16C21AL	>C16-C21										TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	263	203	161	547	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
GTC21C35AL	>C21-C35										TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	105	85	62	224	<7	<7	89	<7	<7	<7	<7	<7	56	<7	<7	<7
GTC35C40AL	>C35-C40 +	65,000	92,000	110,000	1,600,000	1,700,000	1,800,000	250,000	250,000	250,000	TM5/PM16	mg/kg	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	10	<7	<7	<7
GTC05C40AL	Total aliphatics C5-40	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM16/PM12	mg/kg	<26	<26	<26	<26	<26	<26	707	527	439	1469	<26	<26	89	<26	<26	<26	<26	<26	66	<26	<26	<26
GTC06C10AL	>C6-C10										TM36/PM12	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	2.3	0.7	0.4	2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
GTC10C25AL	>C10-C25										TM5/PM16	mg/kg	<10	<10	<10	<10	<10	<10	706	522	432	1477	<10	<10	140	<10	<10	<10	<10	<10	<10	<10	<10	<10
GTC25C35AL	>C25-C35										TM5/PM16	mg/kg	<10	<10	<10	<10	<10	<10	<10	<10	<10	33	<10	<10	72	<10	<10	<10	<10	<10	48	<10	<10	<10

Table 1 - RA Soil Analysis
Emmet Road - Site Investigation 2020

CAS Number	Test	GAC S4UL Residential without plant uptake End Use 1%	GAC S4UL Residential without plant uptake End Use 2.5%	GAC S4UL Residential without plant uptake End Use 6%	GAC S4UL Commercial End Use 1%	GAC S4UL Commercial End Use 2.5%	GAC S4UL Commercial End Use 6%	GAC S4UL Public Open Space (Resi) (1% SOM)	GAC S4UL Public Open Space (Resi) (2.5% SOM)	GAC S4UL Public Open Space (Resi) (6% SOM)	Method	Units	LOD
	Aromatics												
GTEC05EC07AR	>C5-EC7	370	690	1,400	26,000	46,000	86,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1
GTEC07EC08AR	>EC7-EC8	860	1,800	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.1
GTEC08EC10AR	>EC8-EC10	47	110	270	3,500	8,100	17,000	5,000	5,000	5,000	TM36/PM12	mg/kg	<0.1
GTEC10EC12AR	>EC10-EC12	250	590	1,200	16,000	28,000	34,000	5,000	5,000	5,000	TM5/PM16	mg/kg	<0.2
GTEC12EC16AR	>EC12-EC16	1,800	2,300	2,500	36,000	37,000	38,000	5,100	5,100	5,000	TM5/PM16	mg/kg	<4
GTEC16EC21AR	>EC16-EC21	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC21EC35AR	>EC21-EC35	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC35EC40AR	>EC35-EC40	1,900	1,900	1,900	28,000	28,000	28,000	3,800	3,800	3,800	TM5/PM16	mg/kg	<7
GTEC05EC40AR	Total aromatics C5-40										TM5/TM36/PM12	mg/kg	<26
GTC05C40ALAR	Total aliphatics and aromatics(C5-40)	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	See Individual Fractions	TM5/TM36/PM12/PM16	mg/kg	<52
GTEC06EC10AR	>EC6-EC10										TM36/PM12	mg/kg	<0.1
GTEC10EC25AR	>EC10-EC25										TM5/PM16	mg/kg	<10
GTEC25EC35AR	>EC25-EC35										TM5/PM16	mg/kg	<10
1634-04-4	MTBE										TM36/PM12	mg/kg	<0.005
71-43-2	Benzene	0.38	0.7	1.4	27	47	90	72	72	73	TM36/PM12	mg/kg	<0.005
108-88-3	Toluene	880	1900	3,900	56,000	110,000	180,000	56,000	56,000	56,000	TM36/PM12	mg/kg	<0.005
100-41-4	Ethylbenzene	83	190	440	5,700	13,000	27,000	24,000	24,000	25,000	TM36/PM12	mg/kg	<0.005
P_M_XYLENE	m/p-Xylene	79	180	430	5,900	14,000	30,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005
95-47-6	o-Xylene	88	210	480	6,600	15,000	33,000	41,000	42,000	43,000	TM36/PM12	mg/kg	<0.005
7012-37-5	PCB 28										TM17/PM8	mg/kg	<0.005
35693-99-3	PCB 52										TM17/PM8	mg/kg	<0.005
37680-73-2	PCB 101										TM17/PM8	mg/kg	<0.005
31508-00-6	PCB 118										TM17/PM8	mg/kg	<0.005
35065-28-2	PCB 138										TM17/PM8	mg/kg	<0.005
35065-27-1	PCB 153										TM17/PM8	mg/kg	<0.005
35065-29-3	PCB 180										TM17/PM8	mg/kg	<0.005
PCB_7_CON_TOTAL	Total 7 PCBs		1,000*			1,000*			1,000*		TM17/PM8	mg/kg	<0.035
108-95-2	Phenol	750	1,300	2,300	760	1,500	3,200	760	1,500	3,200	TM26/PM21	mg/kg	<0.01
MOIST_CONT_DRY	Natural Moisture Content										PM4/PM0	%	<0.1
MOIST_CONT_WET	Moisture Content (% Wet Weight)										PM4/PM0	%	<0.1
JEL1006	Moisture Content 105C(% Dry Weight)										PM4/PM0	%	<0.1
JEL1007	Dry Matter Content Ratio 105°C										NONE/PM4	%	<0.1
18540-29-9	Hexavalent Chromium		6			33			7.7		TM38/PM20	mg/kg	<0.3
CHROMIUM_III	Chromium III		910			8,600			1,500		NONE/NONE	mg/kg	<0.5
57-12-5	Total Cyanide										TM89/PM45	mg/kg	<0.5
SULPHIDE	Sulphide										TM106/PM45	mg/kg	<10
ALKALI_RES	Alkali Reserve										TM110/PM110	gNa2O/kg	<0.000
ELEM_SULPH	Elemental Sulphur										TM100/PM114/PM0	mg/kg	<1
JEL559/LOI	Loss on Ignition										TM22/PM0	%	<1.0
PH	pH										TM73/PM11	pH units	<0.01
	IOM Asbestos Analysis												

Lab Cert																Commercial							
Sample ID	TP49	TP50	TP51	TP51	TP 37	TP 37	TP 37	TP 40	TP 40	TP 09	TP 17	TP 22	TP 25	BH03	BH03	BH04	BH07	BH08	BH08	BH12	BH12
Surface Elevation	26.49	26.26	26.06	26.06	26.03	26.03	26.03	26.69	26.69	24.47	24.76	24.56	25.22	24.13	24.13	23.73	25.44	24.50	24.90	25.71	25.71
Depth (mbgl)	3.00-3.20	2.00-2.70	1.70-3.00	2.90-3.00	1.00-2.00	2.00-3.00	3.00-3.20	2.40-3.00	3.00-3.20	0.80-1.00	0.80-1.00	0.80-1.00	0.80-1.00	0.80-1.00	3.00-3.40	3.00-3.40	3.00-3.40	1.00-2.00	3.00-3.40	1.85-3.00	3.00-3.40
Depth (mAOD)	**23.49 to 23.29**	**24.26 to 23.56**	**24.36 to 23.06**	**23.16 to 23.06**	**25.03 to 24.03**	**24.03 to 23.03**	**23.03 to 22.83**	**24.29 to 23.69**	**23.69 to 23.49**	**23.67 to 23.47**	**23.96 to 23.76**	**23.76 to 23.56**	**24.42 to 24.22**	**23.33 to 23.13**	**21.13 to 20.73**	**20.73 to 20.33**	**22.44 to 22.04**	**23.90 to 22.90**	**21.90 to 21.50**	**23.86 to 22.71**	**22.71 to 22.31**
Sampled Date	12/10/2020	12/10/2020	12/10/2020	12/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	13/10/2020	09/10/2020	09/10/2020	07/10/2020	12/10/2020	12/10/2020	12/10/2020	14/10/2020	14/10/2020
<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	15.5	11.8	0.6	17.9	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
<4	<4	<4	<4	<4	<4	<4	150	87	57	224	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
<7	<7	<7	<7	<7	<7	<7	248	147	107	433	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7
<7	<7	<7	<7	<7	<7	<7	107	57	40	240	<7	<7	<7	<7	<7	<7	<7	88	<7	<7	<7
<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	14	<7	<7	<7
<26	<26	<26	<26	<26	<26	521	303	205	915	<26	<26	<26	<26	<26	<26	<26	<26	112	<26	<26	<26
<52	<52	<52	<52	<52	<52	1228	830	644	2384	<52	<52	89	<52	<52	<52	<52	<52	178	<52	<52	<52
<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
<10	<10	<10	<10	<10	<10	537	305	216	900	<10	<10	<10	<10	<10	<10	<10	<10	31	<10	<10	<10
<10	<10	<10	<10	<10	<10	13	<10	<10	49	<10	<10	<10	<10	<10	<10	<10	<10	67	<10	<10	<10
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.017	<0.005	<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.048	0.011	0.006	0.039	<0.005	<0.005	0.015	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.046	0.014	<0.005	0.035	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
<0.1	10	8.3	10	8.3	11.5	10.1	9.6	21.6	22.4	16	16.8	13.2	13.1	11.1	9	12.1	10.1	2.4	7.1	9.1	10.5
<0.1	9.1	7.7	9.1	7.7	10.3	9.2	8.8	17.7	18.3	13.8	14.4	24.9	11.6	10	8.2	10.8	9.2	2.4	6.6	8.3	9.5
<0.1	12.9	8.9	8.5	9.8	17.2	10.4	9	20.3	24.3	14.2	14.9	21.9	13	21.4	10.9	8.9	12.7	6.8	8.3	12.6	11.8
<0.1	88.5	91.8	92.2	91.1	85.3	90.6	91.7	83.1	80.4	87.6	87	82.1	88.5	NA	NA	NA	NA	NA	NA	NA	NA
<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
<0.5	40.2	33.3	67.1	40	38.3	35.9	35	43	38.3	55.7	44.2	22.5	46.8	44.4	43.5	40.7	34.8	44.4	28.7	28.7	27.1
<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
NA	NA	NA	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NDP	NA	NA	NA	NA	NA	NA	NA	NA
<1	5	6	11	24	2	27	11	141	98	3	3	164	5	<1	5	9	4	4	22	4	3
<1.0	1.7	1.2	1.4	1.3	1.5	1.8	1.9	3.8	3	2.6	2.3	NDP	2	1.5	2.2	2.1	1.9	<1.0	1.2	2.5	2.6
<0.01	8.55	8.41	8.45	8.37	8.67	8.16	8.26	8.16	7.99	8.64	8.55	7.44	8.69	8.09	8.09	8.22	8.38	9.15	8.18	8.49	8.47
	NAD	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**	**NAD**

Notes:
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Data columns shown light grey are samples of soils that will be removed during construction.
*Indicates GAC values from SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination - Policy Companion Document published in 2014.
NAD = No Asbestos Detected.
NA/- = Not Available.
EIC/AGS/CL:AIRE Soil Generic Assessment Criteria for Human Health Risk Assessment published in 2010.
+ GAC S4ULs EC >35- 44 were used in the absense of suitable for use levels for EC>35-40
^ Indicates Intervention Values taken from **DUTCH INTERVENTION 2009**
& Since xylenes are reported as m&p-xylene, hence the GAC limit was taken as the lower limit for the individual xylene type as a conservative approach.

Table 2 - Gas Monitoring

Development at Emmet Road - 2020 OCSC Environmental Division

Borehole ID	Date	Sample Time	High Tide 1	Low Tide 1	High Tide 2	Low Tide 2	Stable CH4 %	CH4% Peak	Stable CO2 %	CO2% Peak	O2 %	Bal %	CO stable ppm	CO peak ppm	H2S stable ppm	H2S peak ppm	Atmospheric Pressure mb	Relative pressure mb	Flow l/hr	Flow l/hr Peak	Groundwater level mbGL
BH02	17/11/2020	12:28	00:33	06:02	12:52	18:27	0.00	0.00	0.60	0.60	17.60	81.90	1.00	1.00	0.00	0.00	1008	-0.09	-3.60	-2.90	2.35
	19/11/2020	11:00	02:06	07:38	14:20	20:11	Inaccessible														2.39
	23/11/2020	10:49	06:15	11:53	18:21	-	0.00	0.00	0.20	0.20	19.70	80.10	0.00	0.00	0.00	0.00		-0.02	0.00	0.00	2.39
	26/11/2020	11:15	02:23	09:03	14:38	21:06	0.00	0.00	0.00	0.00	19.70	80.30	2.00	3.00	0.00	0.00	1019	0.05	0.10	0.10	2.38
	01/12/2020	10:30	-	05:19	12:00	17:39	0.00	0.00	0.00	0.00	18.40	81.60	0.00	0.00	0.00	0.00	1026	0.03	0.10	0.10	2.42
	03/12/2020	10:25	00:56	06:30	13:09	18:56	0.00	0.00	0.00	0.00	18.50	81.50	0.00	0.00	0.00	0.00	984	0.03	0.10	0.10	2.39
	16/12/2002	12:25	00:18	05:47	12:36	18:16	0.00	0.00	0.00	0.10	18.20	81.70	0.00	0.00	0.00	0.00	992	0.19	0.90	1.60	2.30
WS07	17/11/2020	12:55	00:33	06:02	12:52	18:27	0.00	0.00	0.00	0.00	19.70	80.30	0.00	0.00	0.00	0.00	1008	0.00	0.00	0.00	1.56
	19/11/2020	11:07	02:06	07:38	14:20	20:11	0.00	0.00	0.00	0.00	20.30	79.60	0.00	0.00	0.00	0.00	1029	0.09	-0.10	0.00	1.60
	23/11/2020	11:08	06:15	11:53	18:21	-	0.00	0.00	0.00	0.00	20.40	79.50	0.00	0.00	0.00	0.00	1017	-0.03	0.00	0.10	1.59
	26/11/2020	11:28	02:23	09:03	14:38	21:06	0.00	0.00	0.00	0.00	20.60	79.40	0.00	0.00	0.00	0.00	1019	0.03	0.00	0.00	1.63
	01/12/2020	10:42	-	05:19	12:00	17:39	0.00	0.00	0.10	0.10	20.20	79.70	0.00	0.00	0.00	0.00	1026	0.02	0.10	0.10	1.68
	03/12/2020	10:35	00:56	06:30	13:09	18:56	0.00	0.00	0.10	0.10	20.60	79.20	0.00	0.00	0.00	0.00	984	0.03	0.00	0.00	1.65
	16/12/2002	11:56	00:18	05:47	12:36	18:16	0.00	0.00	0.30	0.30	19.80	79.90	0.00	0.00	0.00	0.00	992	0.02	0.00	0.00	1.46
WS15	17/11/2020	13:12	00:33	06:02	12:52	18:27	0.00	0.00	2.50	2.50	16.10	81.40	0.00	0.00	0.00	0.00	1008	-0.02	0.00	0.00	1.27
	19/11/2020	11:21	02:06	07:38	14:20	20:11	0.00	0.00	2.60	2.60	16.70	80.70	0.00	0.00	0.00	0.00	1029	-0.02	0.00	0.00	1.38
	23/11/2020	11:25	06:15	11:53	18:21	-	0.00	0.00	2.50	2.50	15.50	82.00	0.00	0.00	0.00	0.00	1017	0.00	0.00	0.10	1.40
	26/11/2020	11:41	02:23	09:03	14:38	21:06	0.00	0.00	2.50	2.50	16.70	80.80	0.00	0.00	0.00	0.00	1019	0.02	0.00	0.00	1.49
	01/12/2020	10:55	-	05:19	12:00	17:39	0.00	0.00	2.40	2.40	16.10	81.50	0.00	0.00	0.00	0.00	1026	0.03	0.00	0.00	1.54
	03/12/2020	10:44	00:56	06:30	13:09	18:56	0.00	0.00	2.60	2.60	16.00	81.40	0.00	0.00	0.00	0.00	984	0.05	0.00	0.00	1.50
	16/12/2002	12:43	00:18	05:47	12:36	18:16	0.00	0.00	2.50	2.50	14.10	83.40	0.00	0.00	0.00	0.00	992	0.00	0.00	0.00	1.12
BH07	17/11/2020	13:28	00:33	06:02	12:52	18:27	0.00	0.00	1.40	1.40	16.60	82.00	0.00	0.00	0.00	0.00	1008	0.00	0.10	0.10	1.68
	19/11/2020	11:41	02:06	07:38	14:20	20:11	0.00	0.00	1.10	1.10	18.10	80.80	0.00	0.00	0.00	0.00	1029	0.00	0.00	0.00	1.71
	23/11/2020	11:40	06:15	11:53	18:21	-	0.00	0.00	1.00	1.00	17.90	81.10	0.00	0.00	0.00	0.00	1017	0.07	0.00	0.00	1.75
	26/11/2020	11:56	02:23	09:03	14:38	21:06	0.00	0.00	1.00	1.00	17.40	81.60	0.00	0.00	0.00	0.00	1019	0.00	0.10	0.10	1.78
	01/12/2020	11:06	-	05:19	12:00	17:39	0.00	0.00	0.80	0.90	17.70	81.50	0.00	0.00	0.00	0.00	1026	0.00	0.10	0.10	1.84
	03/12/2020	10:57	00:56	06:30	13:09	18:56	0.00	0.00	1.00	1.00	17.90	81.00	0.00	0.00	0.00	0.00	984	0.02	0.00	0.00	1.85
	16/12/2002	13:48	00:18	05:47	12:36	18:16	Inaccessible														1.66
BH08	17/11/2020	13:49	00:33	06:02	12:52	18:27	0.00	0.00	0.00	0.00	20.90	79.00	0.00	6.00	0.00	0.00	1008	0.03	0.10	0.10	1.15
	19/11/2020	11:55	02:06	07:38	14:20	20:11	0.00	0.00	0.10	0.10	21.50	78.40	0.00	0.00	0.00	0.00	1029	0.00	0.00	0.00	1.18
	23/11/2020	11:57	06:15	11:53	18:21	-	0.00	0.00	0.00	0.00	20.60	79.40	0.00	0.00	0.00	0.00	1017	0.02	0.10	0.20	1.18
	26/11/2020	12:25	02:23	09:03	14:38	21:06	0.00	0.00	0.00	0.00	20.40	79.50	2.00	7.00	0.00	0.00	1019	0.05	0.10	0.10	1.20
	01/12/2020	11:16	-	05:19	12:00	17:39	0.00	0.00	0.00	0.00	21.20	78.60	0.00	2.00	0.00	0.00	1026	0.02	0.00	0.10	1.23
	03/12/2020	11:50	00:56	06:30	13:09	18:56	0.10	0.10	0.10	0.10	21.90	77.90	0.00	0.00	0.00	0.00	984	0.00	0.00	0.10	1.20
	16/12/2002	12:55	00:18	05:47	12:36	18:16	0.40	0.50	0.30	2.00	19.60	79.80	11.00	24.00	0.00	0.00	992	0.02	0.00	0.00	1.11
WS34	17/11/2020	14:14	00:33	06:02	12:52	18:27	0.50	1.00	2.00	4.10	12.70	84.80	1.00	4.00	0.00	0.00	1008	0.69	1.30	2.10	1.09
	19/11/2020	12:17	02:06	07:38	14:20	20:11	0.20	0.50	0.80	1.70	18.40	80.70	0.00	1.00	0.00	0.00	1029	0.02	0.00	0.00	1.20
	23/11/2020	12:20	06:15	11:53	18:21	-	0.00	0.10	0.50	0.50	20.50	79.00	0.00	0.00	0.00	0.00	1017	0.00	0.10	0.10	1.22
	26/11/2020	12:40	02:23	09:03	14:38	21:06	0.00	0.00	0.50	2.30	20.10	79.30	0.00	0.00	0.00	0.00	1019	0.09	0.00	0.00	1.26
	01/12/2020	11:30	-	05:19	12:00	17:39	0.00	0.10	1.80	6.10	17.30	80.90	0.00	1.00	0.00	0.00	1026	-0.02	0.00	0.00	1.36
	03/12/2020	11:40	00:56	06:30	13:09	18:56	0.10	0.10	2.40	4.40	16.00	81.50	0.00	0.00	0.00	0.00	984	0.00	0.10	0.20	1.31
	16/12/2002	13:04	00:18	05:47	12:36	18:16	0.40	1.20	1.90	5.10	15.50	82.30	0.00	0.00	0.00	0.00	992	1.40	0.40	0.40	1.16
WS43	17/11/2020	14:25	00:33	06:02	12:52	18:27	0.00	0.00	3.10	3.20	17.50	79.30	0.00	1.00	0.00	0.00	1008	-0.07	0.10	0.10	1.14
	19/11/2020	12:33	02:06	07:38	14:20	20:11	0.00	0.00	3.20	3.20	18.20	78.70	0.00	0.00	0.00	0.00	1029	0.02	0.00	0.10	1.24
	23/11/2020	12:08	06:15	11:53	18:21	-	0.00	0.00	3.20	3.20	17.30	79.60	0.00	0.00	0.00	0.00	1017	0.03	0.00	0.00	1.27
	26/11/2020	12:58	02:23	09:03	14:38	21:06	0.00	0.00	3.10	3.50	17.00	79.90	0.00	0.00	0.00	0.00	1019	0.00	0.00	0.00	1.39
	01/12/2020	11:44	-	05:19	12:00	17:39	0.00	0.00	3.20	3.20	16.70	80.10	0.00	0.00	0.00	0.00	1026	0.05	0.00	0.00	1.50
	03/12/2020	11:20	00:56	06:30	13:09	18:56	0.00	0.00	3.40	3.40	17.20	79.30	0.00	0.00	0.00	0.00	984	0.00	0.00	0.00	1.63
	16/12/2002	13:17	00:18	05:47	12:36	18:16	0.00	0.40	3.10	3.10	17.20	79.70	0.00	0.00	0.00	0.00	992	0.50	0.00	0.00	0.95
WS44	17/11/2020	14:59	00:33	06:02	12:52	18:27	0.00	0.00	2.60	2.60	8.20	89.20	0.00	0.00	0.00	0.00	1008	0.00	0.00	0.00	3.05
	19/11/2020	13:10	02:06	07:38	14:20	20:11	0.00	0.00	3.10	3.10	9.50	87.40	0.00	0.00	0.00	0.00	1029	0.00	0.10	0.10	3.07
	23/11/2020	12:37	06:15	11:53	18:21	-	0.00	0.00	3.10	3.10	11.60	85.30	0.00	0.00	0.00	0.00	1017	0.00	0.00	0.10	3.08
	26/11/2020	13:33	02:23	09:03	14:38	21:06	0.00	0.00	3.00	3.00	11.70	85.30	0.00	0.00	0.00	0.00	1019	0.03	0.10	0.10	3.09
	01/12/2020	12:20	-	05:19	12:00	17:39	0.00	0.00	2.90	2.90	12.10	85.00	0.00	0.00	0.00	0.00	1026	0.00	0.00	0.00	3.10
	03/12/2020	12:35	00:56	06:30	13:09	18:56	0.00	0.00	3.50	3.50	12.60	83.90	0.00	0.00	0.00	0.00	984	0.02	0.00	0.00	3.11
	16/12/2002	13:48	00:18	05:47	12:36	18:16	0.00	0.00	3.90	3.90	12.80	83.30	0.00	0.00	0.00	0.00	992	0.00	0.00	0.00	2.22
BH12	17/11/2020	14:36	00:33	06:02	12:52	18:27	0.00	0.00	2.70	2.70	13.10	84.20	0.00	0.00	0.00	0.00	1008	-0.02	0.00	0.00	Inaccesible
	19/11/2020	12:43	02:06	07:38	14:20	20:11	0.00	0.00	2.90	2.90	13.70	83.40	0.00	0.00	0.00	0.00	1029	0.00	0.10	0.10	Inaccesible
	23/11/2020	13:07	06:15	11:53	18:21	-	0.00	0.00	2.70	2.70	13.70	83.60	0.00	0.00	0.00	0.00	1017	0.00	0.00	0.00	Inaccesible
	26/11/2020	13:10	02:23	09:03	14:38	21:06	0.00	0.00	1.60	1.60	15.80	82.50	0.00	0.00	0.00	0.00	1019	0.03	0.20	0.20	2.27
	01/12/2020	11:54	-	05:19	12:00	17:39	0.00	0.00	1.80	1.80	16.30	81.90	0.00	0.00	0.00	0.00	1026	0.02	0.10	0.10	2.29
	03/12/2020	12:00	00:56	06:30	13:09	18:56	0.00	0.00	2.70	2.70	15.10	82.10	0.00	0.00	0.00	0.00	984	0.03	0.10	0.10	2.25
	16/12/2002	13:26	00:18	05:47	12:36	18:16	0.00	0.10	0.40	2.80	20.10	79.90	0.00	0.00	0.00	0.00	992	0.07	0.00	0.00	2.19
WS50	17/11/2020	14:49	00:33	06:02	12:52	18:27	0.00	0.00	1.40	1.40	9.50	89.10	0.00	0.00	0.00	0.00	1008	0.00	0.00	0.00	1.08
	19/11/2020	12:55	02:06	07:38	14:20	20:11	0.00	0.00	1.60	1.60	10.20	88.20	0.00	0.00	0.00	0.00	1029	0.00	0.00	0.10	1.09
	23/11/2020	12:49	06:15	11:53	18:21	-	0.00	0.00	1.50	1.50	10.90	87.60	0.00	0.00	0.00	0.00	1017	0.10	0.10	0.10	1.10
	26/11/2020	13:23	02:23	09:03	14:38	21:06	0.00	0.00	1.5	1.5	11	87.6	0.00	0.00	0.00	0.00	1019	0.05	0.10	0.10	1.11
	01/12/2020	12:06	-	05:19	12:00	17:39	0.00	0.00	1.6	1.6	10.5	87.9	0.00	0.00	0.00	0.00	1026	0.00	0.10	0.20	1.13
	03/12/2020	12:15	00:56	06:30	13:09	18:56	0.00	0.00	1.9	1.9	11.9	86.2	0.00	0.00	0.00	0.00	984	0.00	0.00	0.00	1.13
	16/12/2002	13:35	00:18	05:47	12:36	18:16	0.00	0.00	2.3	2.3	12.5	85.2	0.00	0.00	0.00	0.00	992	0.00	0.00	0.00	1.03

Table 3: Groundwater Environmental Risk Site Investigation 2021

Emmet Road

DCC

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Multidisciplinary Consulting Engineers

CAS Number	Test	Groundwater Regulations	EPA Interim Guideline Values	Method	Units	LOD	Sample ID	WS34	WS43	BH02
							Depth	Unknown	Unknown	Unknown
							Sample Type	Ground Water	Ground Water	Ground Water
							Sampled Date	08/01/2021	08/01/2021	08/01/2021
		2016	2003							
7440-36-0	Dissolved Antimony			TM30/PM14	ug/l	<2		4	<2	<2
7440-38-2	Dissolved Arsenic	7.50	10	TM30/PM14	ug/l	<2.5		12.7	<2.5	<2.5
7440-43-9	Dissolved Cadmium		5	TM30/PM14	ug/l	<0.5		<0.5	<0.5	<0.5
7440-47-3	Total Dissolved Chromium	37.50	30	TM30/PM14	ug/l	<1.5		<1.5	1.9	2.8
7440-50-8	Dissolved Copper		30	TM30/PM14	ug/l	<7		<7	<7	<7
7439-92-1	Dissolved Lead	7.50	10	TM30/PM14	ug/l	<5		<5	<5	<5
7439-97-6	Dissolved Mercury	0.75	1	TM30/PM14	ug/l	<1		<1	<1	<1
7440-02-0	Dissolved Nickel		20	TM30/PM14	ug/l	<2		13	6	<2
7782-49-2	Dissolved Selenium			TM30/PM14	ug/l	<3		<3	<3	<3
7440-66-6	Dissolved Zinc	75.00	100	TM30/PM14	ug/l	<3		<3	<3	<3
	PAHs									
91-20-3	Naphthalene		1	TM16/PM30	ug/l	<1		0.6	<0.1	<0.1
208-96-8	Acenaphthylene			TM16/PM30	ug/l	<0.5		0.907	<0.013	<0.013
83-32-9	Acenaphthene			TM16/PM30	ug/l	<1		0.831	<0.013	<0.013
86-73-7	Fluorene			TM16/PM30	ug/l	<0.5		2.503	<0.014	<0.014
85-01-8	Phenanthrene			TM16/PM30	ug/l	<0.5		2.938	0.035	<0.011
120-12-7	Anthracene		10,000	TM16/PM30	ug/l	<0.5		<0.013	<0.013	<0.013
206-44-0	Fluoranthene		1	TM16/PM30	ug/l	<0.5		0.038	0.069	<0.012
129-00-0	Pyrene			TM16/PM30	ug/l	<0.5		0.135	0.068	<0.013
56-55-3	Benzo(a)anthracene			TM16/PM30	ug/l	<0.5		0.019	0.038	<0.015
218-01-9	Chrysene			TM16/PM30	ug/l	<0.5		0.049	0.046	<0.011
BEN-BK-FLUORAN	Benzo(bk)fluoranthene*		0.5	TM16/PM30	ug/l	<1		<0.018	0.07	<0.018
50-32-8	Benzo(a)pyrene	0.0075	0.01	TM16/PM30	ug/l	<1		<0.016	0.034	<0.016
193-39-5	Indeno(123cd)pyrene		0.05	TM16/PM30	ug/l	<1		<0.011	0.03	<0.011
53-70-3	Dibenzo(ah)anthracene			TM16/PM30	ug/l	<0.5		<0.01	<0.01	<0.01
191-24-2	Benzo(ghi)perylene		0.05	TM16/PM30	ug/l	<0.5		<0.011	0.034	<0.011
	Total 16 EPA PAHs		0.1		ug/l	<1		8.02	0.424	<0.195
	TPH CWG									
	Aliphatics									
GTC05C06AL	>C5-C6			TM36/PM12	ug/l	<10		<10	<10	<10
GTC06C08AL	>C6-C8			TM36/PM12	ug/l	<10		<10	<10	<10
GTC08C10AL	>C8-C10			TM36/PM12	ug/l	<10		47	<10	<10
GTC10C12AL	>C10-C12			TM5/PM16/PM30	ug/l	<5		248	<5	<5
GTC12C16AL	>C12-C16			TM5/PM16/PM30	ug/l	<10		820	<10	<10
GTC16C21AL	>C16-C21			TM5/PM16/PM30	ug/l	<10		880	<10	<10
GTC21C35AL	>C21-C35			TM5/PM16/PM30	ug/l	<10		400	<10	<10
GTC05C35AL	Total aliphatics C5-35			TM5/TM36/PM12/PM16/PM30	ug/l	<10		2395	<10	<10
	Aromatics									
GTEC05EC07AR	>C5-EC7			TM36/PM12	ug/l	<10		<10	<10	<10
GTEC07EC08AR	>EC7-EC8			TM36/PM12	ug/l	<10		<10	<10	<10
GTEC08EC10AR	>EC8-EC10			TM36/PM12	ug/l	<10		<10	<10	<10
GTEC10EC12AR	>EC10-EC12			TM5/PM16/PM30	ug/l	<5		327	<5	<5
GTEC12EC16AR	>EC12-EC16			TM5/PM16/PM30	ug/l	<10		790	<10	<10
GTEC16EC21AR	>EC16-EC21			TM5/PM16/PM30	ug/l	<10		720	<10	<10
GTEC21EC35AR	>EC21-EC35			TM5/PM16/PM30	ug/l	<10		360	<10	<10
GTEC05EC35AR	Total aromatics C5-35			TM5/TM36/PM12/PM16/PM30	ug/l	<10		2197	<10	<10
7012-37-5	PCB 28			TM17/PM30	ug/l	<0.1		<0.1	<0.1	<0.1
35693-99-3	PCB 52			TM17/PM30	ug/l	<0.1		<0.1	<0.1	<0.1
37680-73-2	PCB 101			TM17/PM30	ug/l	<0.1		<0.1	<0.1	<0.1
31508-00-6	PCB 118			TM17/PM30	ug/l	<0.1		<0.1	<0.1	<0.1
35065-28-2	PCB 138			TM17/PM30	ug/l	<0.1		<0.1	<0.1	<0.1
35065-27-1	PCB 153			TM17/PM30	ug/l	<0.1		<0.1	<0.1	<0.1
35065-29-3	PCB 180			TM17/PM30	ug/l	<0.1		<0.1	<0.1	<0.1
PCB_7_CON_TOTAL	Total 7 PCBs		0.01	TM17/PM30	ug/l	<0.7		<0.7	<0.7	<0.7
14808-79-8	Sulphate as SO4	187.50	200	TM38/PM0	mg/l	<0.5		11.3	71.3	87.9
	pH		>6.5 & <9.5		pH units			7.72	7.8	8.02

Notes:
N/A = Not Analysed/ No Analytical Results

Table 4: Groundwater Human health Risk Site Investigation 2021

Emmet Road

DCC

				Sample ID			WS34	WS43	BH02
				Depth			Unknown	Unknown	Unknown
				Sample Type			Ground Water	Ground Water	Ground Water
				Sampled Date			08/01/2021	08/01/2021	08/01/2021
CAS Number	**Test**	**SoBRA 2017 Residential Development GACs**	**SoBRA 2017 Commercial Development GACs**	**Method**	**Units**	**LOD**			
7440-36-0	Dissolved Antimony			TM30/PM14	ug/l	<2	4	<2	<2
7440-38-2	Dissolved Arsenic			TM30/PM14	ug/l	<2.5	12.7	<2.5	<2.5
7440-43-9	Dissolved Cadmium			TM30/PM14	ug/l	<0.5	<0.5	<0.5	<0.5
7440-47-3	Total Dissolved Chromium			TM30/PM14	ug/l	<1.5	<1.5	1.9	2.8
7440-50-8	Dissolved Copper			TM30/PM14	ug/l	<7	<7	<7	<7
7439-92-1	Dissolved Lead			TM30/PM14	ug/l	<5	<5	<5	<5
7439-97-6	Dissolved Mercury (sol)	1	95	TM30/PM14	ug/l	<1	<1	<1	<1
7440-02-0	Dissolved Nickel			TM30/PM14	ug/l	<2	13	6	<2
7782-49-2	Dissolved Selenium			TM30/PM14	ug/l	<3	<3	<3	<3
7440-66-6	Dissolved Zinc			TM30/PM14	ug/l	<3	<3	<3	<3
	PAHs								
91-20-3	Naphthalene	220	23,000	TM16/PM30	ug/l	<1	0.6	<0.1	<0.1
208-96-8	Acenaphthylene (sol)	220,000	20,000,000	TM16/PM30	ug/l	<0.5	0.907	<0.013	<0.013
83-32-9	Acenaphthene (sol)	170,000	15,000,000	TM16/PM30	ug/l	<1	0.831	<0.013	<0.013
86-73-7	Fluorene (sol)	210,000	18,000,000	TM16/PM30	ug/l	<0.5	2.503	<0.014	<0.014
85-01-8	Phenanthrene			TM16/PM30	ug/l	<0.5	2.938	0.035	<0.011
120-12-7	Anthracene			TM16/PM30	ug/l	<0.5	<0.013	<0.013	<0.013
206-44-0	Fluoranthene			TM16/PM30	ug/l	<0.5	0.038	0.069	<0.012
129-00-0	Pyrene			TM16/PM30	ug/l	<0.5	0.135	0.068	<0.013
56-55-3	Benzo(a)anthracene			TM16/PM30	ug/l	<0.5	0.019	0.038	<0.015
218-01-9	Chrysene			TM16/PM30	ug/l	<0.5	0.049	0.046	<0.011
BEN-BK-FLUORAN	Benzo(bk)fluoranthene			TM16/PM30	ug/l	<1	<0.018	0.07	<0.018
50-32-8	Benzo(a)pyrene			TM16/PM30	ug/l	<1	<0.016	0.034	<0.016
193-39-5	Indeno(123cd)pyrene			TM16/PM30	ug/l	<1	<0.011	0.03	<0.011
53-70-3	Dibenzo(ah)anthracene			TM16/PM30	ug/l	<0.5	<0.01	<0.01	<0.01
191-24-2	Benzo(ghi)perylene			TM16/PM30	ug/l	<0.5	<0.011	0.034	<0.011
	Total 16 EPA PAHs						8.02	0.424	<0.195

Table 4: Groundwater Human health Risk Site Investigation 2021

Emmet Road

DCC

				Sample ID		WS34	WS43	BH02
				Depth		Unknown	Unknown	Unknown
				Sample Type		Ground Water	Ground Water	Ground Water
				Sampled Date		08/01/2021	08/01/2021	08/01/2021
CAS Number	**Test**	**SoBRA 2017 Residential Development GACs**	**SoBRA 2017 Commercial Development GACs**	**Method**	**Units**	**LOD**		
	TPH CWG							
	Aliphatics							
GTC05C06AL	>C5-C6 (sol)	1,900	190,000	TM36/PM12	ug/l	<10	<10	<10	<10
GTC06C08AL	>C6-C8 (sol)	1,500	150,000	TM36/PM12	ug/l	<10	<10	<10	<10
GTC08C10AL	>C8-C10 (sol)	57	5,700	TM36/PM12	ug/l	<10	47	<10	<10
GTC10C12AL	>C10-C12 (sol)	37	3,600	TM5/PM16/PM30	ug/l	<5	248	<5	<5
GTC12C16AL	>C12-C16			TM5/PM16/PM30	ug/l	<10	820	<10	<10
GTC16C21AL	>C16-C21			TM5/PM16/PM30	ug/l	<10	880	<10	<10
GTC21C35AL	>C21-C35			TM5/PM16/PM30	ug/l	<10	400	<10	<10
GTC05C35AL	Total aliphatics C5-35			TM5/TM36/PM12/PM16/PM30	ug/l	<10	2395	<10	<10
	Aromatics							
GTEC05EC07AR	>C5-EC7 (sol)	210,000	20,000,000	TM36/PM12	ug/l	<10	<10	<10	<10
GTEC07EC08AR	>EC7-EC8 (sol)	220,000	21,000,000	TM36/PM12	ug/l	<10	<10	<10	<10
GTEC08EC10AR	>EC8-EC10 (sol)	1,900	190,000	TM36/PM12	ug/l	<10	<10	<10	<10
GTEC10EC12AR	>EC10-EC12 (sol)	6,800	660,000	TM5/PM16/PM30	ug/l	<5	327	<5	<5
GTEC12EC16AR	>EC12-EC16 (sol)	39,000	3,700,000	TM5/PM16/PM30	ug/l	<10	790	<10	<10
GTEC16EC21AR	>EC16-EC21			TM5/PM16/PM30	ug/l	<10	720	<10	<10
GTEC21EC35AR	>EC21-EC35			TM5/PM16/PM30	ug/l	<10	360	<10	<10
GTEC05EC35AR	Total aromatics C5-35			TM5/TM36/PM12/PM16/PM30	ug/l	<10	2197	<10	<10
7012-37-5	PCB 28			TM17/PM30	ug/l	<0.1	<0.1	<0.1	<0.1
35693-99-3	PCB 52			TM17/PM30	ug/l	<0.1	<0.1	<0.1	<0.1
37680-73-2	PCB 101			TM17/PM30	ug/l	<0.1	<0.1	<0.1	<0.1
31508-00-6	PCB 118			TM17/PM30	ug/l	<0.1	<0.1	<0.1	<0.1
35065-28-2	PCB 138			TM17/PM30	ug/l	<0.1	<0.1	<0.1	<0.1
35065-27-1	PCB 153			TM17/PM30	ug/l	<0.1	<0.1	<0.1	<0.1
35065-29-3	PCB 180			TM17/PM30	ug/l	<0.1	<0.1	<0.1	<0.1
PCB_7_CON_TOTAL	Total 7 PCBs			TM17/PM30	ug/l	<0.7	<0.7	<0.7	<0.7
14808-79-8	Sulphate as SO4			TM38/PM0	mg/l	<0.5	11.3	71.3	87.9
PH	pH				pH units		7.72	7.8	8.02

Notes:
N/A = Not Analysed/ No Analytical Data

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Appendix A

Proposed Development Plans

NOTE: FUTURE RESIDENTIAL DEVELOPMENT – SHOWN FOR REFERENCE (PART OF SDRA 9)

ST. MICHAEL'S CHURCH

RICHMOND BARRACKS

PATRIOTS PATH

EMMET ROAD

GOLDENBRIDGE CEMETARY

PUBLIC OPEN SPACE 3188.0 m2

PUBLIC OPEN SPACE 1165.2 m2

COMMUNAL OPEN SPACE MR2 1167.6 m2

COMMUNAL OPEN SPACE MR1 2540.8 m2

PUBLIC OPEN SPACE 1026.7 m2

17500

ST. VINCENT STREET WEST

NOTE: REFER TO O'CONNOR SUTTON CRONIN CONSULTING ENGINEER'S AND INZ ENGINEERING DESIGN PARTNERSHIPS DRAWINGS FOR PROPOSED WORKS / NEW SERVICES CONNECTIONS WITHIN EXISTING ADJACENT ROAD. ROAD SERVICES TO BE MADE GOOD AS EXISTING.

NOTE: REFER TO SHEET 0318-S-A1-04 FOR CONTINUATION.

THOMAS DAVIS STREET

TYRONE COURT

EMMET CRESENT

revision	drawn	checked	date	no.
UPDATES FOR COORDINATION	SJ	KH	19/09/22	A

SITE APPLICATION BOUNDARY
AREA – 4.6825 Hectares / 46825m2

COMMUNAL OPEN SPACE

PUBLIC OPEN SPACE

+24.76 FFL PROPOSED LEVEL

POTENTIAL TREE / PLANTED ZONE FOR FUTURE DEVELOPMENT

N

notes:

No dimensions on this drawing are to be scaled. All levels and dimensions on this drawing are to be checked on site. Any discrepancies on this drawing are to be reported to and verified with the architect.

This drawing is to be read in conjunction with all other application documentation and information as issued.

This is not a construction drawing, it is unsuitable for the purpose of construction and must on no account be used as such.

This drawing is the copyright of Buchholz McEvoy Architects Ltd and may not be copied, altered, or reproduced in any form or passed to a third party without license or written consent.

STAGE	PLANNING DRAFT			
drawing	SITE LAYOUT PLAN - PROPOSED			
drawing no.	scale 1:500 @ A1	drawn SJ	project no. 0318	
0318-S-A1-03	date 02/09/22	checked KH	revision A	
project	EMMET ROAD MIXED-USE DEVELOPMENT, DUBLIN 8			
client	Dublin City Council			

bucholzmcevoy ARCHITECTS
UNIT C MOUNTPLEASANT BUSINESS CENTRE UPPER MOUNTPLEASANT AVENUE DUBLIN 6 IRELAND
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Appendix B

Topography

Refer to Appendix B of Waste Soil Classification included as Appendix C1 of this EIAR

Appendix C

Photographic Log

Refer to Appendix C of Waste Soil Classification included as Appendix C1 of this EIAR

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Appendix D
GII Report

Refer to Appendix C2 of this EIAR

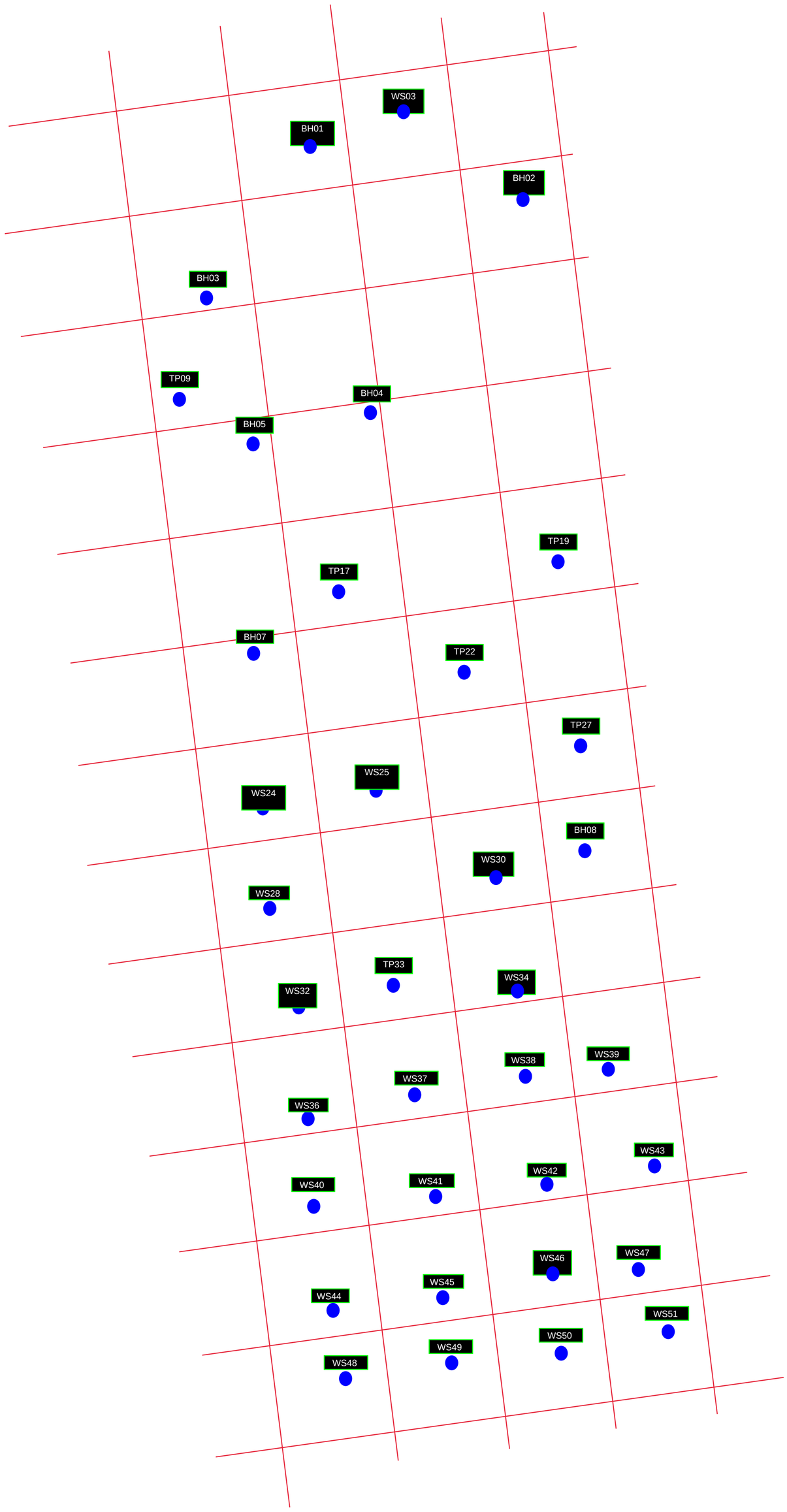
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Appendix E
Site Investigation Maps

LEGEND

RA SAMPLES (0.8 - 1 mbgl) COLLECTED

RA SAMPLES (0.8 - 1 mbgl) SCHEDULED



Project: PROPOSED DEVELOPEMNT AT EMMET ROAD

Title: SITE INVESTIGATION - Risk Assessment Samples @0.8 to 1.0mbgl

SK No: B967 - OCSC - XX - XX - SK - S - 000X | S1 | P01

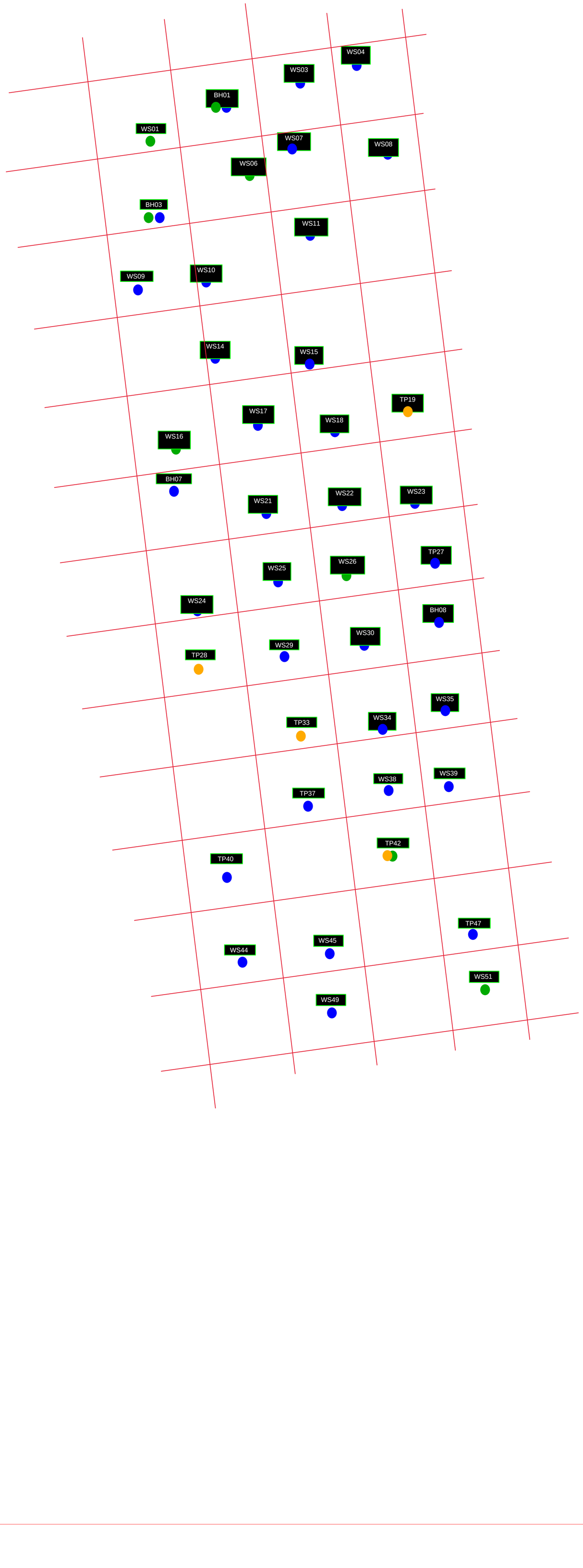
Date: 06/10/2020 By: KS

LEGEND

RA SAMPLES COLLECTED BELOW 3.0

RA SAMPLES COLLECTED @2.5 - 3.0

ON HOLD SAMPLES



Project: PROPOSED DEVELOPEMNT AT EMMET ROAD

Title: SITE INVESTIGATION - RISK ASSESMENT SAMPLES below 3.0mbgl

SK No: B967 - OCSC - XX - XX - SK - S - 000X | S1 P01

Date: 16/10/2020 By: KS

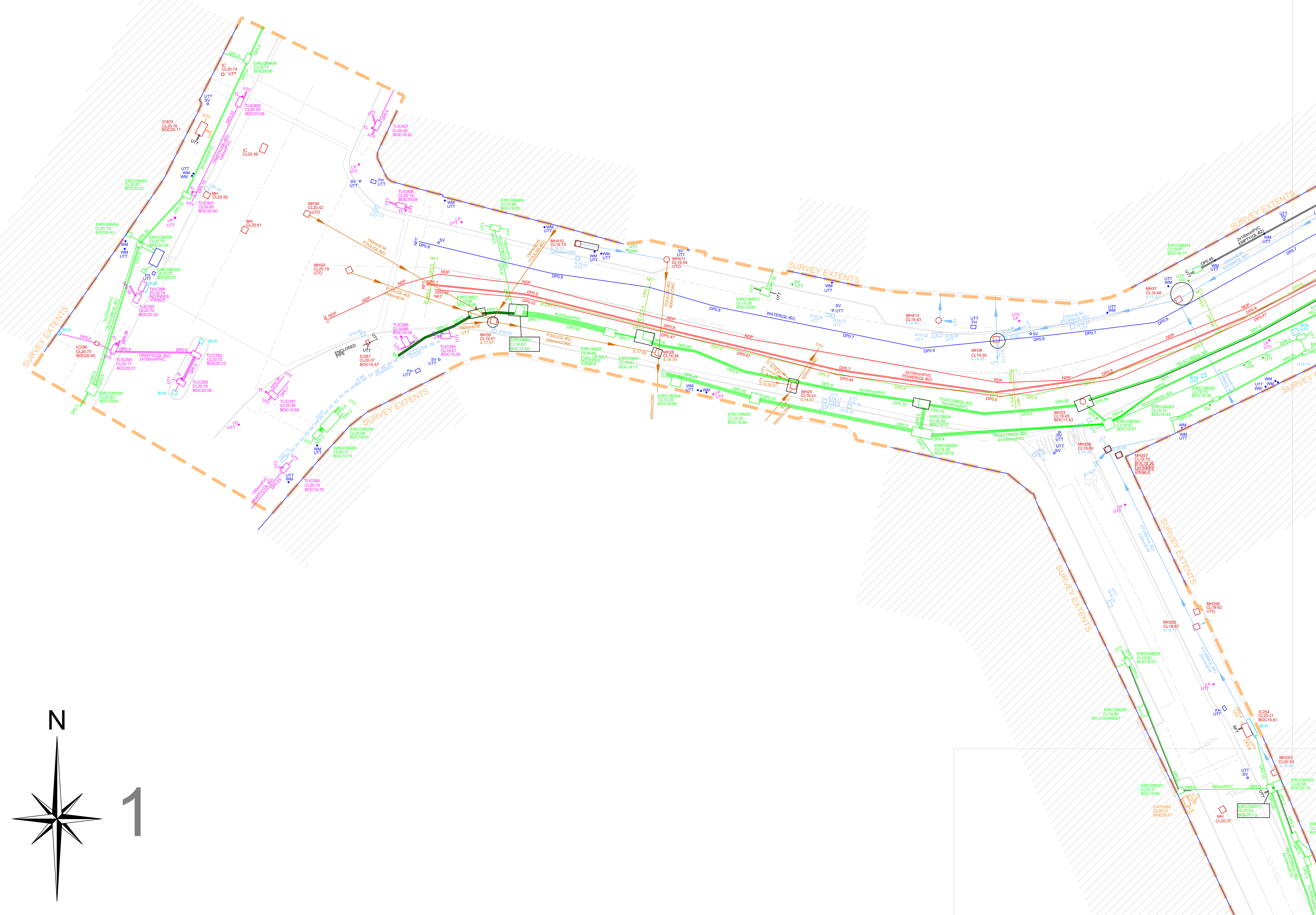
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Appendix F

Laboratory Analysis Certificates

Refer to Appendix D of Waste soil Classification Report included as Appendix C1 of this EIAR

Appendix C4 Utilities Survey



PAS 128: 2014 (Quality of Survey Level Outputs):

DESKTOP UTILITY RECORDS SEARCH	
QL-D	Drafted from utility records
SITE RECONNAISSANCE	
QL-C	Location Demonstrated by visual reference to street furniture or evidence of previous streetworks, ie - reinstatement scars
DETECTION	
QL-B4	A segment of utility suspected to exist but has not been detected by a geophysical technique
QL-B3	Horizontal location only of the utility detected by one of the geophysical techniques used
QL-B2	Horizontal and vertical location of the utility detected by one of the geophysical techniques used
QL-B1	Horizontal and vertical location of the utility detected by multiple geophysical techniques
VERIFICATION	
QL-A	Horizontal and vertical location of the top and/or bottom of the utility

Apex Surveys Ltd. Disclaimer - Utility Survey

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Apex Survey shall not be liable for any omissions or inaccuracies in the survey which arise due to the limitations of the service. No liability shall attach to Apex Surveys, in any circumstances, howsoever arising, in respect of any consequential loss or damages suffered by the Client.

The following is a non-exhaustive list of the limitations of utility surveys:

The Survey aims to map existing utilities subsurface utilities and provide information with respect to pipe size, material type and drainage connectivity. However utility surveying is limited by the following guidelines and it may not be possible to accurately survey, define and locate all services and sub-surface features.

- Depth of Utility: The depth and size of a utility affect the signal response and the degree with which a utility can be located.
  Due to attenuation of the radar signal with depth, resolution is restricted, hence making identification of utilities more difficult with increasing depth.
- Size of Utility: The smaller the diameter of a utility the more difficult it is to locate. This difficulty increases with depth.
- Ground Conditions: The depth penetration and quality of the data depends on the ground conditions of the site. GPR Surveying works best within high resistivity material. Clay overburden can impair GPR Surveying. Poor data may be a result of areas with high conductivity.
- Utility Congestion: Where different utilities converge together into a service corridor or cross paths it becomes difficult to isolate a specific utility and to map its route. The reflected signal will display a single response to multiple utilities. Therefore multiple utilities may appear to be a single utility. Where similar services run on close proximity, separation may be impossible.
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- Acute bends in pipework: It may not be possible to trace a pipe past an acute bend.

Accuracy estimates:

- Locational accuracy is determined by referring to the manufacturers guidelines for the detector used.
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- Plan accuracies of + or - 150mm may be achieved but this figure will depend on the depth of service below ground level. However variations within the subsurface subsurface, depth below the ground, close proximity of other services and local magnetic, atmospheric or ground conditions, bends, lateral service connections and any of the other limitations listed in this disclaimer may alter this estimated accuracy.
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STREET FURNITURE :

BOLLARDS	BD
BUS STOP	BS
CRASH BARRIER	CB
GATE	
ELECTRICITY POLE	EP
TELEPHONE POLE	TP
EARTHING ROD	ER +
LAMP POST	LP
MARKER POST	MKR +
SIGN POST	SIGN
TRAFFIC LIGHT	TL
TELEPHONE BOX	TB
POST	POST
POST BOX	POST BOX
ROADSIGN	RS · RS
BORE HOLE	BH +
TRIAL PIT	TPIT +
BOTTOM OF CHAMBER	BOC
CAST-IRON	C/I
CONCRETE	CONC
DIAMETER	DIA

SERVICES :

AIR VALVE	AV
ARMSTRONG JUNCTION	AJ
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COVER LEVEL	CL
EIRCOM COVER	EIRCOM
EIRCOM JUNCTION BOX	EIRCOM BOX
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DOWNPIPE	DP
EARTHENWARE	E/W
NO FURTHER TRACE	NFT
OFFSITE	O/S

STOPCOCK	ST
SERVICE BOX (UNKNOWN)	BOX
TRAFFIC COVER	TLIC
VENT	VENT
WATER METER	WM +

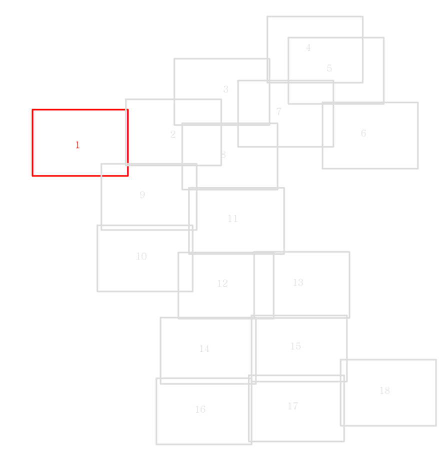
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FLOOR LEVEL	+ FL101.50
INVERT LEVEL	+ IL101.50
ROAD LEVEL	+ 101.50
SOFFIT LEVEL	+ SL101.50
SPOT LEVEL	+ 101.50
TOP OF WALL LEVEL	+ TOW101.50
WATER LEVEL	+ WL101.50
SURVEY CONTROL STATION	
START OF RUN	SOR
UNABLE TO OPEN	UTO
UNABLE TO TRACE	UTT

UNDERGROUND LEGEND :

WATER MAIN	WATER
GAS MAIN	GAS
STORM DRAIN	STORM
FOUL SEWER	FOUL
COMBINED SEWER	COMB
ELECTRIC CABLE	POWER
ELECTRIC LIGHTING	LIGHTING
EIRCOM	EIRCOM
FIBRE OPTIC CABLE	F.OPTIC
BROADBAND	BROADBAND
CABLE TV	TV
TRAFFIC AND SIGNAL CABLE	TRAFFIC
CCTV	CCTV
IRRIGATION PIPE	IRRIGATION
EMPTY DUCT	EMPTY
GPR ANOMALY	ANOMALY
UNKNOWN CABLE	CABLE
O/HEAD ELECTRICITY	OE
O/HEAD TELECOM	OT

SHEET LAYOUT :



PLAN PRODUCED BY:

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CONTACT INFORMATION:

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CLIENT:

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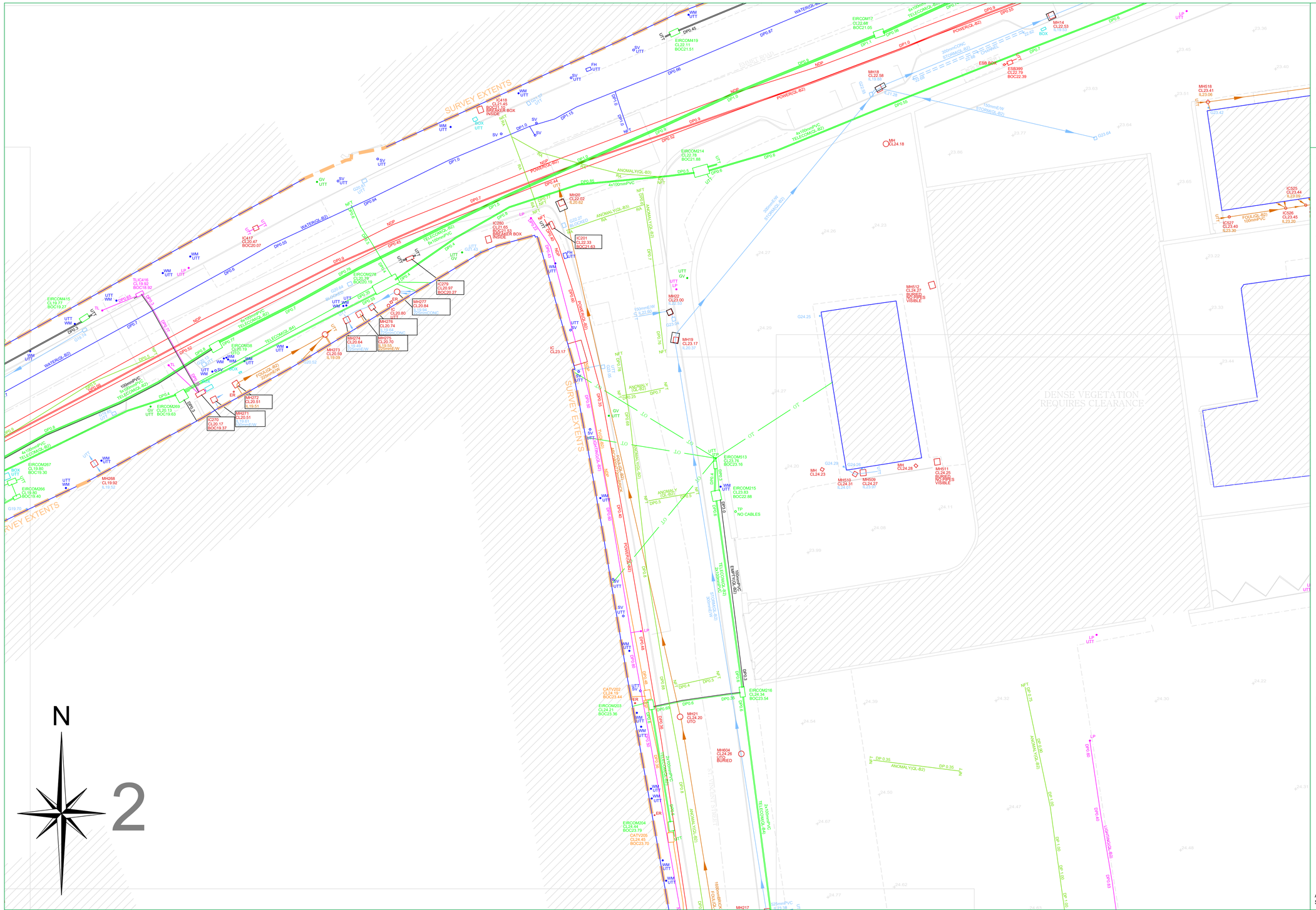
Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	N/A	Original Drawing
002	09/2020	Additional Services Added

SCALE :	1/200 A1	DATE :	23/09/2020
DRG No:	4413	DESCRIPTION :	2D Utilities
		SURVEYED BY :	M.T. / N.G.
SHEET:	1 of 18	PROCESSED BY :	Apex Surveys
		CHECKED BY :	Alan Brady



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EARTHING ROD	ER		
LAMP POST	LP		
MARKER POST	MKR		
SIGN POST	SIGN		
TRAFFIC LIGHT	TL		
TELEPHONE BOX	TB		
POST	POST		
POST BOX	POST BOX		
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EIRCOM COVER	EIRCOM		
EIRCOM JUNCTION BOX	EIRCOM BOX		
ELECTRICAL CABLE PIT	ECP		
ESAT COVER	ESAT		
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STOPCOCK	ST	START OF RUN	SOR
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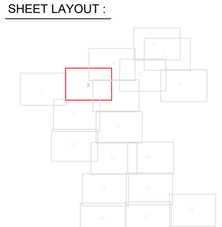
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WATER LEVEL	+ WL101.50
SURVEY CONTROL STATION	

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O/HEAD ELECTRICITY	OE
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SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

CONTACT INFORMATION:

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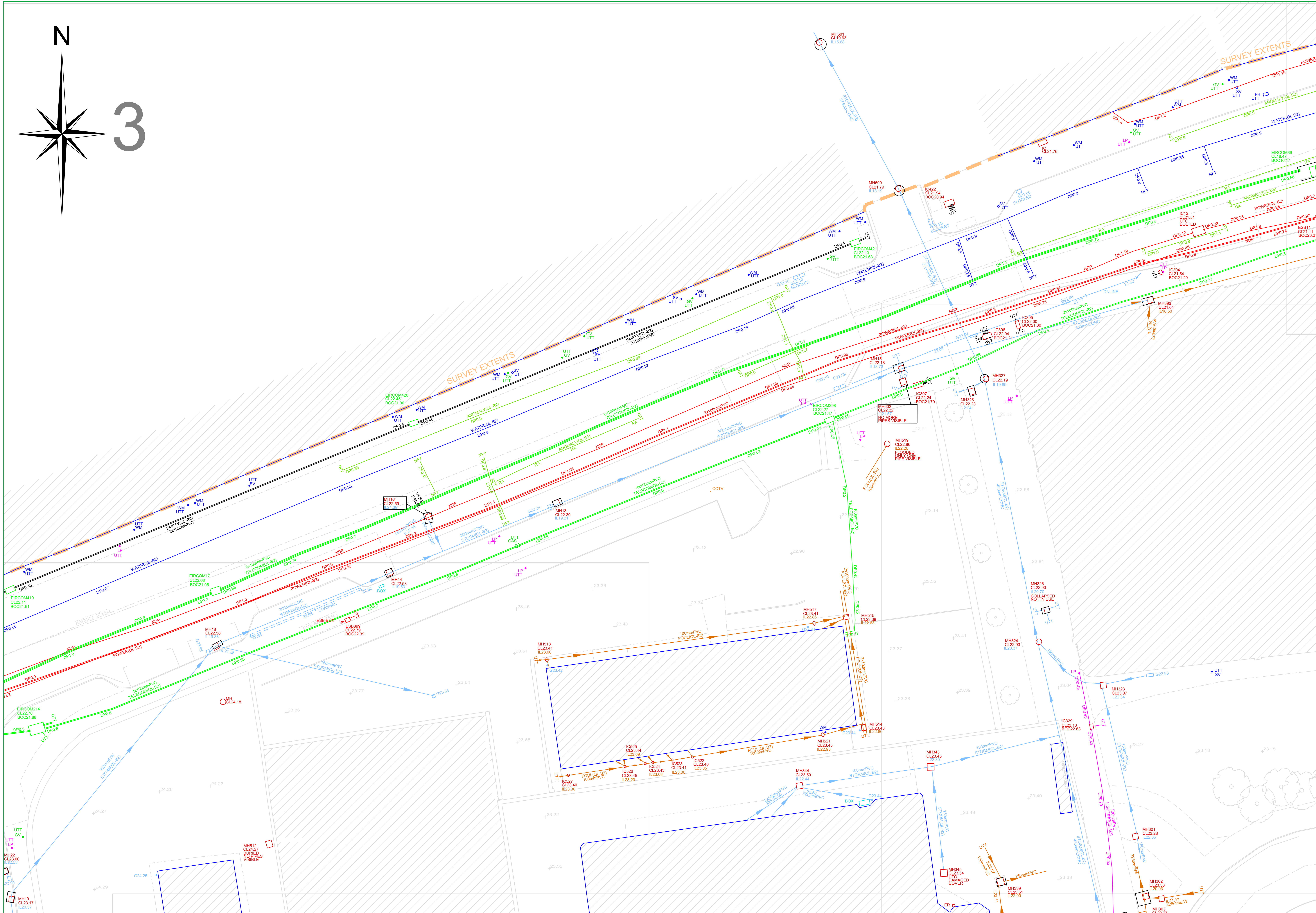
Emmet Road, Inchicore

GRID SYSTEM: Irish Transverse Mercator
DATUM: Malin Head (OSGM15)
NOTES: Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	N/A	Original Drawing
002	09/2020	Additional Services Added

SCALE : 1/200 A1
DATE : 23/09/2020
DRG No: 4413
DESCRIPTION : 2D Utilities
SURVEYED BY : M.T. / N.G.
SHEET: 2 of 18
PROCESSED BY : Apex Surveys
CHECKED BY : Alan Brady



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QL-C	Location Demonstrated by visual reference to street furniture or evidence of previous streetworks, ie - reinstatement scars

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VERIFICATION

QL-A	Horizontal and vertical location of the top and/or bottom of the utility

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- Ground Conditions: The depth penetration and quality of the data depends on the ground conditions of the site. GPR Surveying works best within high resistivity material. Clay overburden can impair GPR Surveying. Poor data may be a result of areas with high conductivity.
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- Surface Obstructions: The GPR system relies on a relatively flat and even surface on which to perform radar passes. If ground obstructions such as vehicles, organic material (long grass, scrub) or undulating ground surface are present then the acquired data will be of lower resolution and in some cases not viable.
- Loss of signal: It is not always possible to trace the entire length of each underground service.
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Accuracy estimates:

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APEX SURVEYS

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00353 1 691 0156

STREET FURNITURE :

BOLLARDS	BD
BUS STOP	BS
CRASH BARRIER	CB
GATE	
ELECTRICITY POLE	EP
TELEPHONE POLE	TP
EARTHING ROD	ER +
LAMP POST	LP
MARKER POST	MKR +
SIGN POST	SIGN
TRAFFIC LIGHT	TL
TELEPHONE BOX	TB
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POST BOX	POST BOX
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STOPCOCK	ST
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TRAFFIC COVER	TLIC
VENT	VENT
WATER METER	WM +

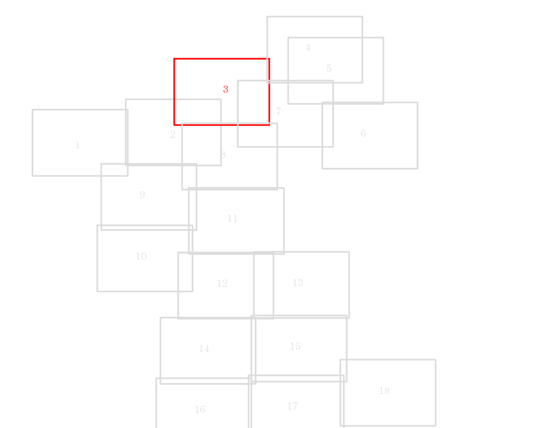
LEVELS :

BED LEVEL	+ BED101.50
FLOOR LEVEL	+ FL101.50
INVERT LEVEL	+ IL101.50
ROAD LEVEL	+ 101.50
SOFFIT LEVEL	+ SL101.50
SPOT LEVEL	+ 101.50
TOP OF WALL LEVEL	+ TOW101.50
WATER LEVEL	+ WL101.50
SURVEY CONTROL STATION	
START OF RUN	SOR
UNABLE TO OPEN	UTO
UNABLE TO TRACE	UTT

UNDERGROUND LEGEND :

WATER MAIN	WATER
GAS MAIN	GAS
STORM DRAIN	STORM
FOUL SEWER	FOUL
COMBINED SEWER	COMB
ELECTRIC CABLE	POWER
ELECTRIC LIGHTING	LIGHTING
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FIBRE OPTIC CABLE	F.OPTIC
BROADBAND	BROADBAND
CABLE TV	TV
TRAFFIC AND SIGNAL CABLE	TRAFFIC
CCTV	CCTV
IRRIGATION PIPE	IRRIGATION
EMPTY DUCT	EMPTY
GPR ANOMALY	ANOMALY
UNKNOWN CABLE	CABLE
O/HEAD ELECTRICITY	OE
O/HEAD TELECOM	OT

SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

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00353 1 691 0156

CLIENT:

O'Connor Sutton Cronin

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

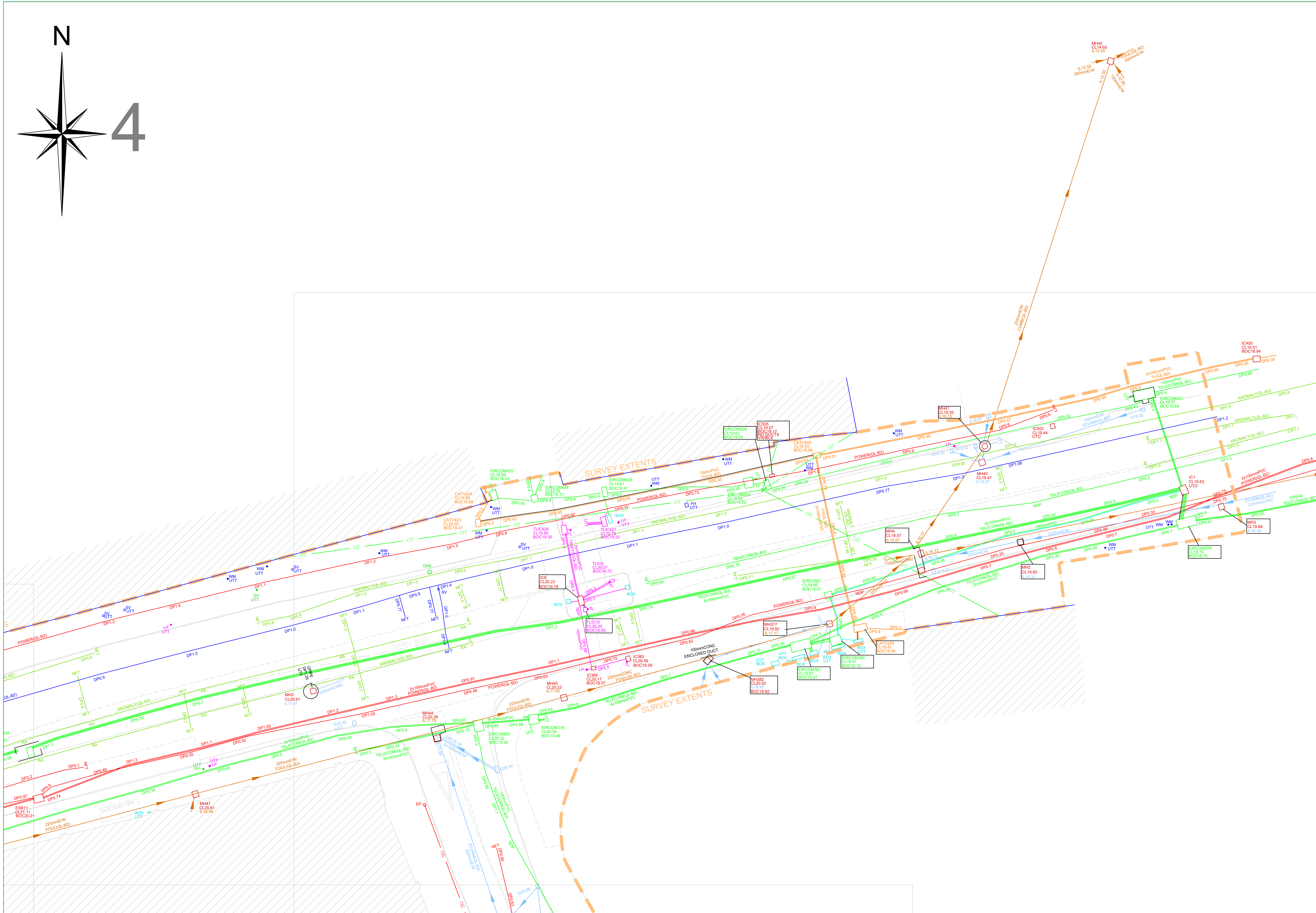
REVISIONS:

No.	Date	Description
001	N/A	Original Drawing
002	09/2020	Additional Services Added

PROJECT:

Emmet Road, Inchicore

SCALE :	1/200 A1	DATE :	23/09/2020
DRG No:	4413	DESCRIPTION :	2D Utilities
		SURVEYED BY :	M.T. / N.G.
SHEET:	3 of 18	PROCESSED BY :	Apex Surveys
		CHECKED BY :	Alan Brady



PAS 128: 2014 (Quality of Survey Level Outputs):

DESKTOP UTILITY RECORDS SEARCH

QL-D	Drafted from utility records

SITE RECONNAISSANCE

QL-C	Location Demonstrated by visual reference to street furniture or evidence of previous streetworks, ie - reinstatement scars

DETECTION

QL-B4	A segment of utility suspected to exist but has not been detected by a geophysical technique
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QL-B2	Horizontal and vertical location of the utility detected by one of the geophysical techniques used
QL-B1	Horizontal and vertical location of the utility detected by multiple geophysical techniques

VERIFICATION

QL-A	Horizontal and vertical location of the top and/or bottom of the utility

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The following is a non-exhaustive list of the limitations of utility surveys:

The Survey aims to map existing utilities subsurface utilities and provide information with respect to pipe size, material type and drainage connectivity. However utility surveying is limited by the following guidelines and it may not be possible to accurately survey, define and locate all services and sub-surface features.

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APEX SURVEYS

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00353 1 691 0156

STREET FURNITURE :

BOLLARDS	BD
BUS STOP	BS
CRASH BARRIER	CB
GATE	
ELECTRICITY POLE	EP
TELEPHONE POLE	TP
EARTHING ROD	ER
LAMP POST	LP
MARKER POST	MKR
SIGN POST	SIGN
TRAFFIC LIGHT	TL
TELEPHONE BOX	TB
POST	POST
POST BOX	POST BOX
ROADSIGN	RS · RS
BORE HOLE	BH
TRIAL PIT	TPIT

BOTTOM OF CHAMBER	BOC
CAST-IRON	C/I
CONCRETE	CONC
DIAMETER	DIA

SERVICES :

AIR VALVE	AV
ARMSTRONG JUNCTION	AJ
CABLE TV IC	CATV
COVER LEVEL	CL
EIRCOM COVER	EIRCOM
EIRCOM JUNCTION BOX	EIRCOM BOX
ELECTRICAL CABLE PIT	ECP
ESAT COVER	ESAT
ESB COVER	ESB
ESB JUNCTION BOX	ESB BOX
FIRE HYDRANT	FH
GAS VALVE	GV
GULLY	G
INSPECTION COVER	IC
MANHOLE	MH
SEPTIC TANK	SEPTIC
SLUICE VALVE	SV
STOPCOCK	ST
SERVICE BOX (UNKNOWN)	BOX
TRAFFIC COVER	TLIC
VENT	VENT
WATER METER	WM

DOWNPIPE	DP
EARTHENWARE	E/W
NO FURTHER TRACE	NFT
OFFSITE	O/S

LEVELS :

BED LEVEL	BED101.50
FLOOR LEVEL	FL101.50
INVERT LEVEL	IL101.50
ROAD LEVEL	101.50
SOFFIT LEVEL	SL101.50
SPOT LEVEL	101.50
TOP OF WALL LEVEL	TOW101.50
WATER LEVEL	WL101.50
SURVEY CONTROL STATION	

START OF RUN	SOR
UNABLE TO OPEN	UTO
UNABLE TO TRACE	UTT

UNDERGROUND LEGEND :

WATER MAIN	WATER
GAS MAIN	GAS
STORM DRAIN	STORM
FOUL SEWER	FOUL
COMBINED SEWER	COMB
ELECTRIC CABLE	POWER
ELECTRIC LIGHTING	LIGHTING
EIRCOM	EIRCOM
FIBRE OPTIC CABLE	F.OPTIC
BROADBAND	BROADBAND
CABLE TV	TV
TRAFFIC AND SIGNAL CABLE	TRAFFIC
CCTV	CCTV
IRRIGATION PIPE	IRRIGATION
EMPTY DUCT	EMPTY
GPR ANOMALY	ANOMALY
UNKNOWN CABLE	CABLE
O/HEAD ELECTRICITY	OE
O/HEAD TELECOM	OT

SHEET LAYOUT :

PLAN PRODUCED BY:

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O'Connor Sutton Cronin

PROJECT:

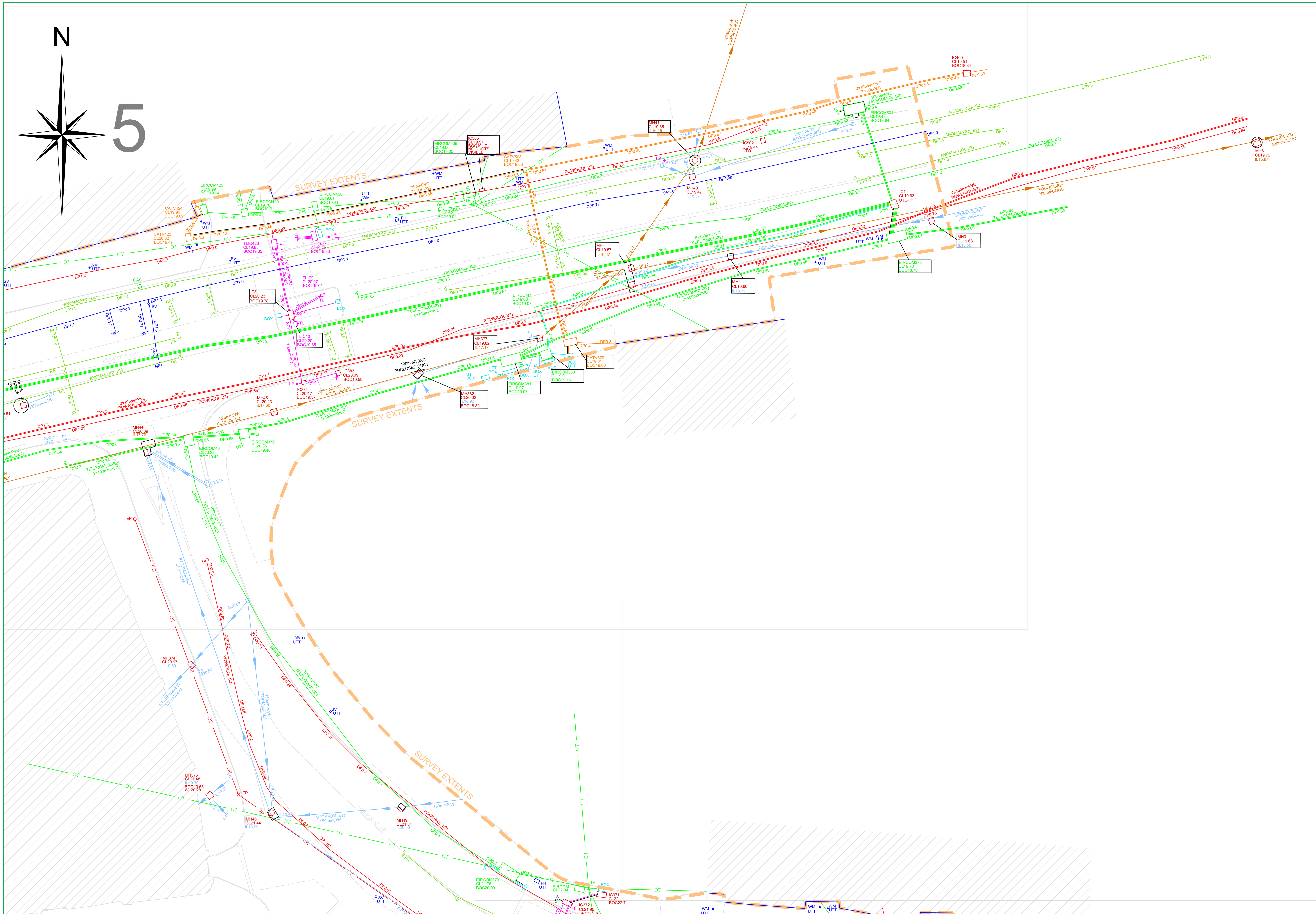
Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	N/A	Original Drawing
002	09/2020	Additional Services Added

SCALE :	1/200 A1	DATE :	23/09/2020
DRG No:	4413	DESCRIPTION :	2D Utilities
		SURVEYED BY :	M.T. / N.G.
SHEET:	4 of 18	PROCESSED BY :	Apex Surveys
		CHECKED BY :	Alan Brady



STREET FURNITURE :

BOLLARDS	BD
BUS STOP	BS
CRASH BARRIER	CB
GATE	
ELECTRICITY POLE	EP
TELEPHONE POLE	TP
EARTHING ROD	ER
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NO FURTHER TRACE	NFT
OFFSITE	O/S

STOPCOCK	ST
SERVICE BOX (UNKNOWN)	BOX
TRAFFIC COVER	TLIC
VENT	VENT
WATER METER	WM +

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BED LEVEL	+ BED101.50
FLOOR LEVEL	+ FL101.50
INVERT LEVEL	+ IL101.50
ROAD LEVEL	+ 101.50
SOFFIT LEVEL	+ SL101.50
SPOT LEVEL	+ 101.50
TOP OF WALL LEVEL	+ TOW101.50
WATER LEVEL	+ WL101.50
SURVEY CONTROL STATION	
START OF RUN	SOR
UNABLE TO OPEN	UTO
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SHEET LAYOUT :

PAS 128: 2014 (Quality of Survey Level Outputs):

DESKTOP UTILITY RECORDS SEARCH

QL-D	Drafted from utility records

SITE RECONNAISSANCE

QL-C	Location Demonstrated by visual reference to street furniture or evidence of previous streetworks, ie - reinstatement scars

DETECTION

QL-B4	A segment of utility suspected to exist but has not been detected by a geophysical technique
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VERIFICATION

QL-A	Horizontal and vertical location of the top and/or bottom of the utility

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PLAN PRODUCED BY: APEX SURVEYS

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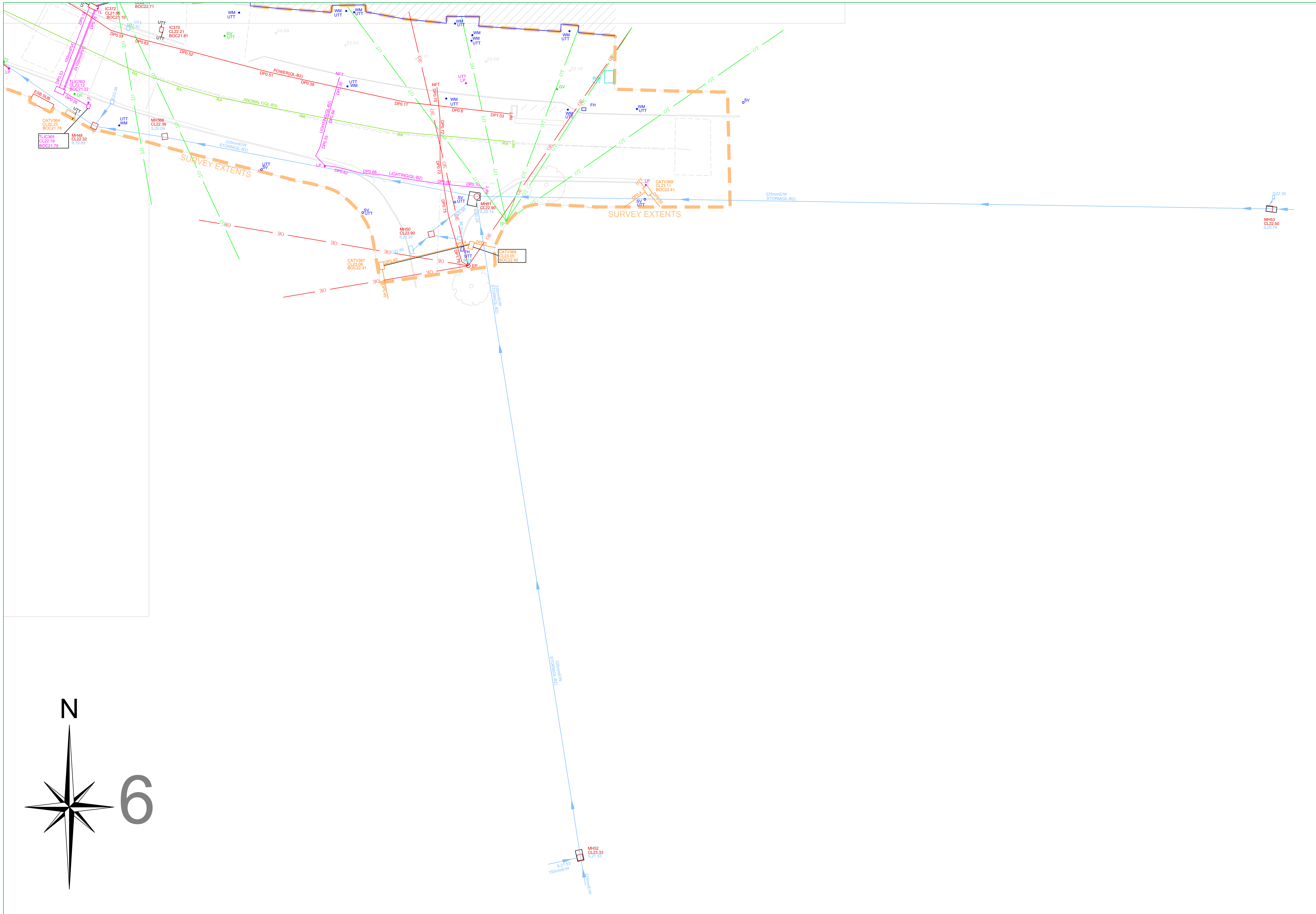
PROJECT: Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
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REVISIONS:

No.	Date	Description
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SCALE :	1/200 A1	DATE :	23/09/2020
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		SURVEYED BY :	M.T. / N.G.
SHEET:	5 of 18	PROCESSED BY :	Apex Surveys
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VERIFICATION

QL-A	Horizontal and vertical location of the top and/or bottom of the utility

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APEX SURVEYS

www.apexsurveys.ie
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00353 1 691 0156

STREET FURNITURE :

BOLLARDS	BD
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CRASH BARRIER	CB
GATE	
ELECTRICITY POLE	EP
TELEPHONE POLE	TP
EARTHING ROD	ER
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OFFSITE	O/S
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VENT	VENT
WATER METER	WM

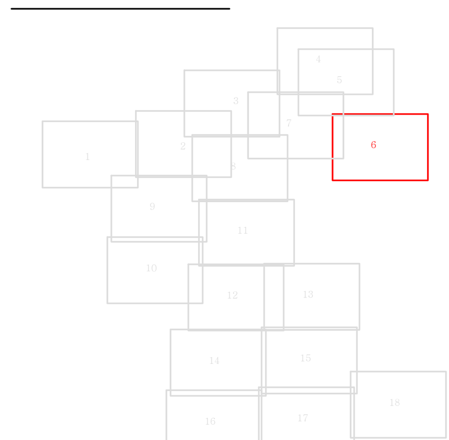
LEVELS :

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FLOOR LEVEL	FL101.50
INVERT LEVEL	IL101.50
ROAD LEVEL	101.50
SOFFIT LEVEL	SL101.50
SPOT LEVEL	101.50
TOP OF WALL LEVEL	TOW101.50
WATER LEVEL	WL101.50
SURVEY CONTROL STATION	
START OF RUN	SOR
UNABLE TO OPEN	UTO
UNABLE TO TRACE	UTT

UNDERGROUND LEGEND :

WATER MAIN	WATER
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SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

CONTACT INFORMATION:

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CLIENT:

O'Connor Sutton Cronin

PROJECT:

Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	N/A	Original Drawing
002	09/2020	Additional Services Added

SCALE :	1/200 A1	DATE :	23/09/2020
DRG No:	4413	DESCRIPTION :	2D Utilities
		SURVEYED BY :	M.T. / N.G.
SHEET:	6 of 18	PROCESSED BY :	Apex Surveys
		CHECKED BY :	Alan Brady



PAS 128: 2014 (Quality of Survey Level Outputs):

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QL-D	Drafted from utility records
SITE RECONNAISSANCE	
QL-C	Location Demonstrated by visual reference to street furniture or evidence of previous streetworks, ie - reinstatement scars
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LEVELS :

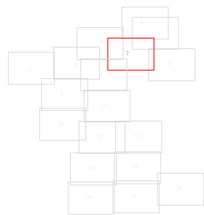
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SPOT LEVEL	+ 101.50
TOP OF WALL LEVEL	+ TOW101.50
WATER LEVEL	+ WL101.50
SURVEY CONTROL STATION	

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UNABLE TO OPEN	UTO
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SHEET LAYOUT :



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SCALE : 1/200 A1

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DRG No: 4413

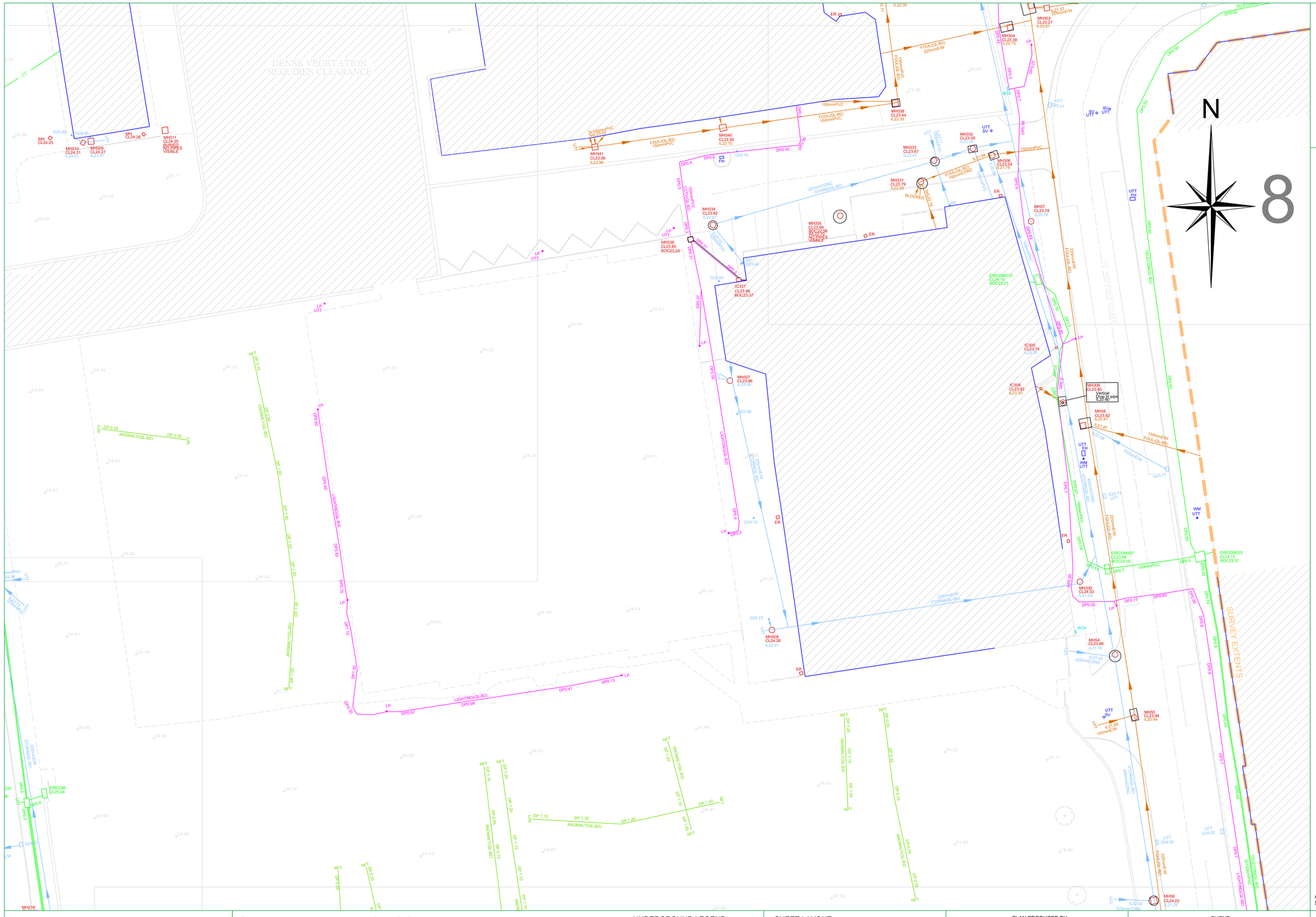
SHEET: 7 of 18

DESCRIPTION : 2D Utilities

SURVEYED BY : M.T. / N.G.

PROCESSED BY : Apex Surveys

CHECKED BY : Alan Brady



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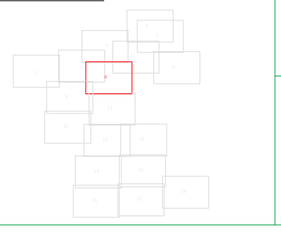
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CONTACT INFORMATION:

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Unit 78 Dunboyne Business Park
Dunboyne, Co. Meath, Ireland
www.apexsurveys.ie
info@apexsurveys.ie
00353 1 691 0156

CLIENT:

O'Connor Sutton Cronin

PROJECT:

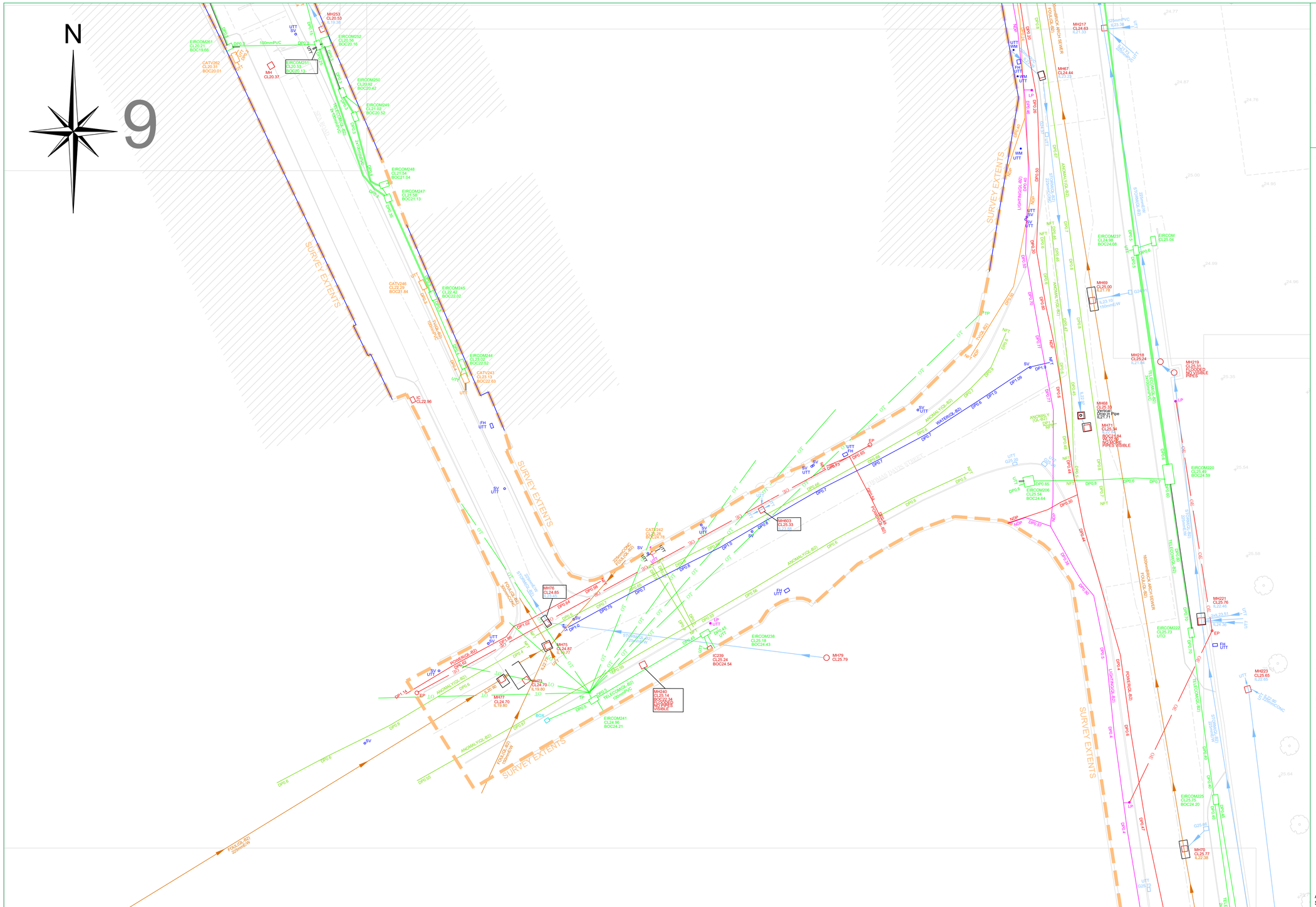
Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	N/A	Original Drawing
002	09/2020	Additional Services Added

SCALE :	1/200 A1
DATE :	23/09/2020
DRG No:	4413
DESCRIPTION :	2D Utilities
SURVEYED BY :	M.T. / N.G.
SHEET:	8 of 18
PROCESSED BY :	Apex Surveys
CHECKED BY :	Alan Brady



PAS 128: 2014 (Quality of Survey Level Outputs):

DESKTOP UTILITY RECORDS SEARCH	
QL-D	Drafted from utility records
SITE RECONNAISSANCE	
QL-C	Location Demonstrated by visual reference to street furniture or evidence of previous streetworks, ie - reinstatement scars
DETECTION	
QL-B4	A segment of utility suspected to exist but has not been detected by a geophysical technique
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VERIFICATION	
QL-A	Horizontal and vertical location of the top and/or bottom of the utility

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- Size of Utility: The smaller the diameter of a utility the more difficult it is to locate. This difficulty increases with depth.
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STREET FURNITURE :

BOLLARDS	BD •	BUS STOP	BS •
CRASH BARRIER	CB	GATE	
ELECTRICITY POLE	EP •	TELEPHONE POLE	TP •
EARTHING ROD	ER +	LAMP POST	LP •
MARKER POST	MKR +	SIGN POST	SIGN
TRAFFIC LIGHT	TL •	TELEPHONE BOX	TB
POST	POST •	POST BOX	POST BOX
ROADSIGN	RS- RS	BORE HOLE	BH +
TRIAL PIT	TPIT +		

BOTTOM OF CHAMBER	BOC
CAST-IRON	C/I
CONCRETE	CONC
DIAMETER	DIA

SERVICES :

AIR VALVE	AV	STOPCOCK	ST •
ARMSTRONG JUNCTION	AJ	SERVICE BOX (UNKNOWN)	BOX
CABLE TV IC	CATV	TRAFFIC COVER	TLIC
COVER LEVEL	CL	VENT	VENT •
EIRCOM COVER	EIRCOM	WATER METER	WM +
EIRCOM JUNCTION BOX	EIRCOM BOX		
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INSPECTION COVER	IC		
MANHOLE	MH		
SEPTIC TANK	SEPTIC		
SLUICE VALVE	SV •		

LEVELS :

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ROAD LEVEL	+101.50
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SPOT LEVEL	+101.50
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WATER LEVEL	+WL101.50
SURVEY CONTROL STATION	

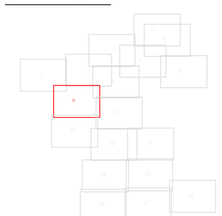
DOWNPIPE	DP
EARTHENWARE	E/W
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OFFSITE	O/S

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SHEET LAYOUT :



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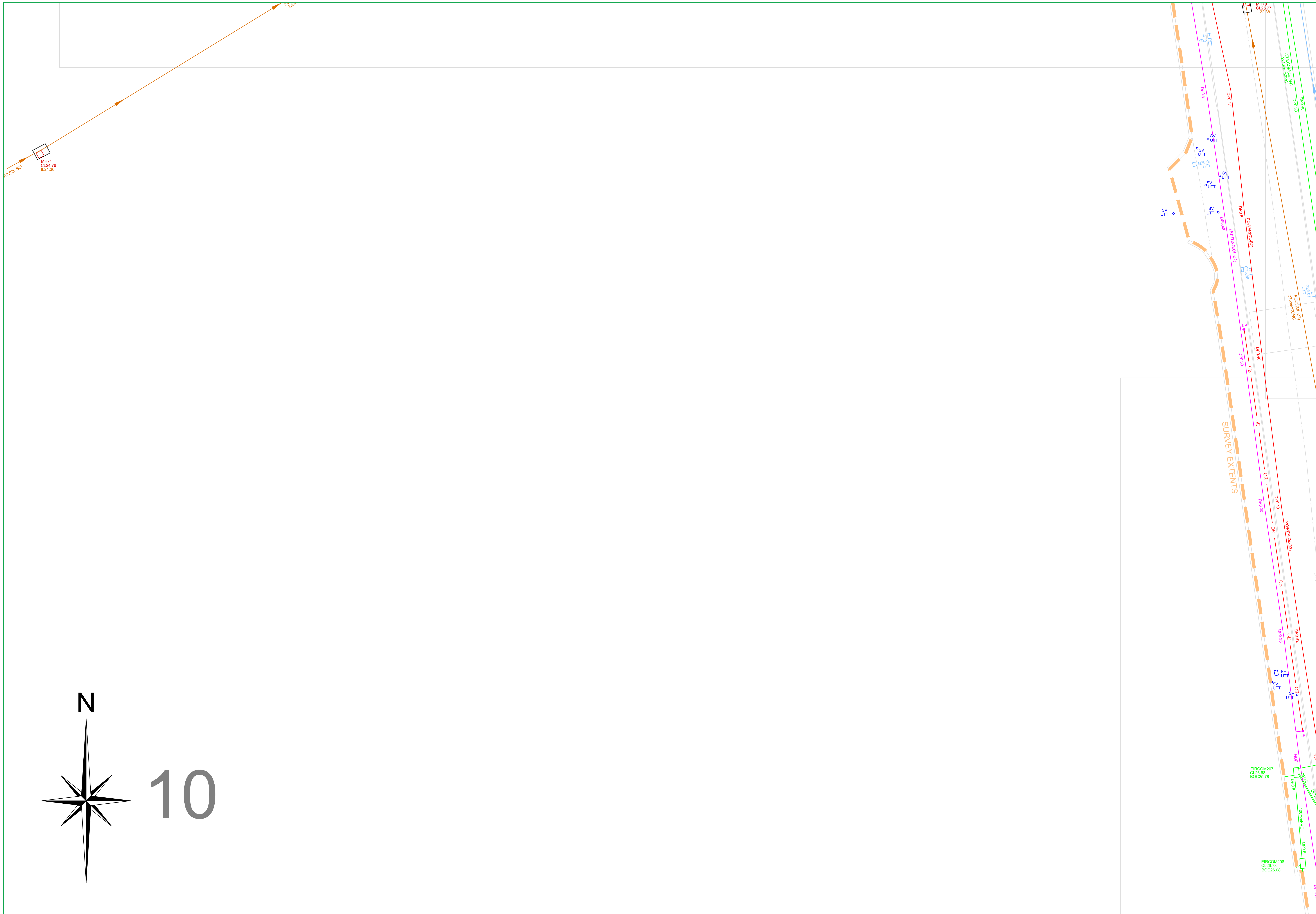
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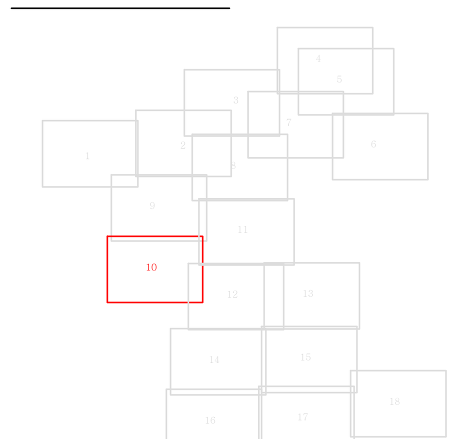
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SPOT LEVEL	101.50
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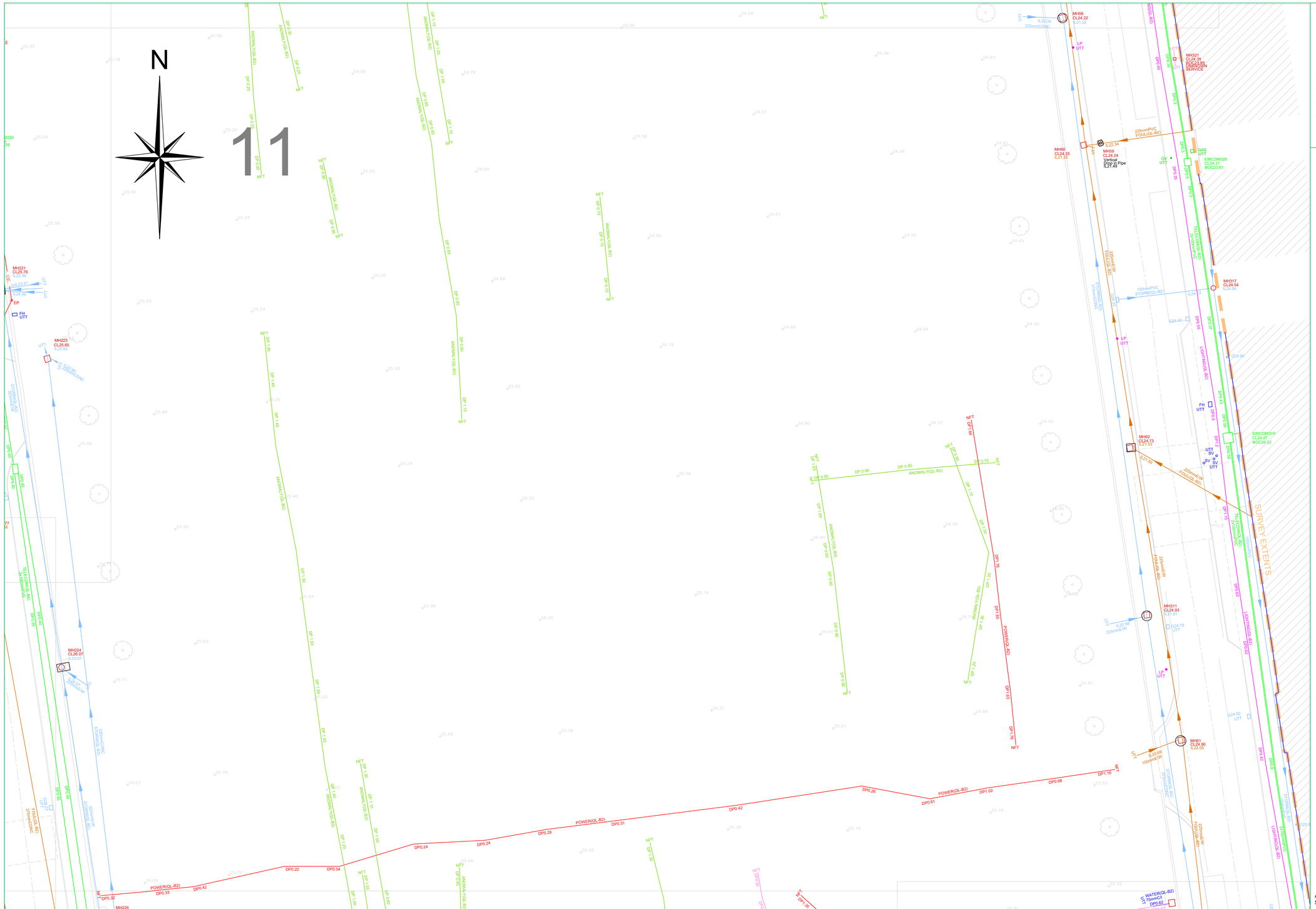
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SLUICE VALVE	SV •

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SERVICE BOX (UNKNOWN)	BOX
TRAFFIC COVER	TLIC
VENT	VENT •
WATER METER	WM +

LEVELS :

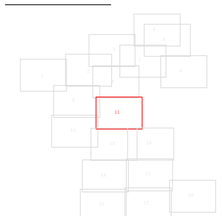
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ROAD LEVEL	+ 101.50
SOFFIT LEVEL	+ SL101.50
SPOT LEVEL	+ 101.50
TOP OF WALL LEVEL	+ TOW101.50
WATER LEVEL	+ WL101.50
SURVEY CONTROL STATION	

BOTTOM OF CHAMBER	BOC	DOWNPIPE	DP
CAST-IRON	C/I	EARTHENWARE	E/W
CONCRETE	CONC	NO FURTHER TRACE	NFT
DIAMETER	DIA	OFFSITE	O/S
START OF RUN	SOR		
UNABLE TO OPEN	UTO		
UNABLE TO TRACE	UTT		

UNDERGROUND LEGEND :

WATER MAIN	WATER
GAS MAIN	GAS
STORM DRAIN	STORM
FOUL SEWER	FOUL
COMBINED SEWER	COMB
ELECTRIC CABLE	POWER
ELECTRIC LIGHTING	LIGHTING
EIRCOM	EIRCOM
FIBRE OPTIC CABLE	F.OPTIC
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GPR ANOMALY	ANOMALY
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O/HEAD TELECOM	OT

SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

CONTACT INFORMATION:

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00353 1 691 0156

CLIENT:

O'Connor Sutton Cronin

PROJECT:

Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	N/A	Original Drawing
002	09/2020	Additional Services Added

SCALE : 1/200 A1

DATE : 23/09/2020

DRG No: 4413

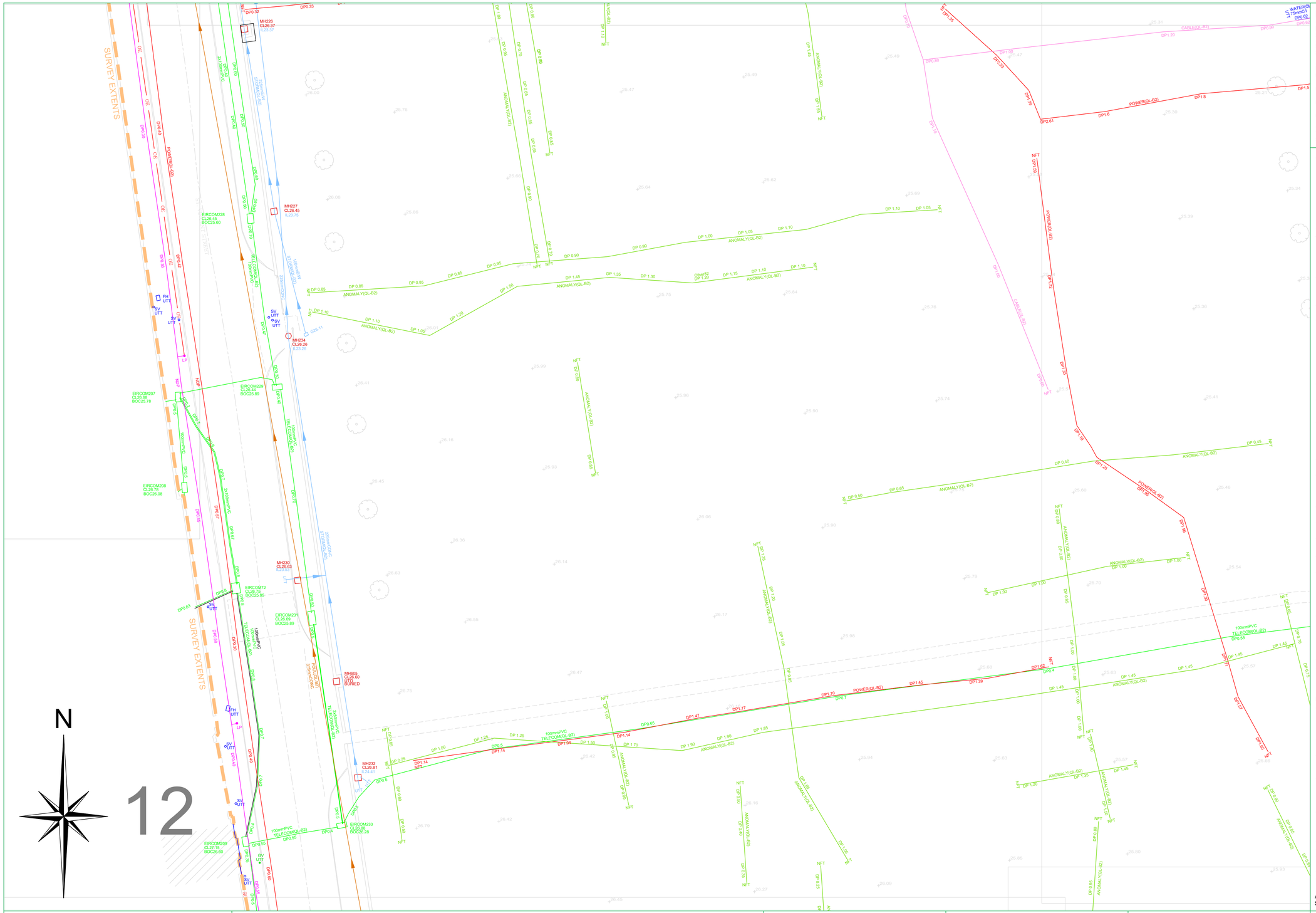
DESCRIPTION : 2D Utilities

SURVEYED BY : M.T. / N.G.

SHEET: 11 of 18

PROCESSED BY : Apex Surveys

CHECKED BY : Alan Brady



PAS 128: 2014 (Quality of Survey Level Outputs):

DESKTOP UTILITY RECORDS SEARCH	
QL-D	Drafted from utility records
SITE RECONNAISSANCE	
QL-C	Location Demonstrated by visual reference to street furniture or evidence of previous streetworks, ie - reinstatement scars
DETECTION	
QL-B4	A segment of utility suspected to exist but has not been detected by a geophysical technique
QL-B3	Horizontal location only of the utility detected by one of the geophysical techniques used
QL-B2	Horizontal and vertical location of the utility detected by one of the geophysical techniques used
QL-B1	Horizontal and vertical location of the utility detected by multiple geophysical techniques
VERIFICATION	
QL-A	Horizontal and vertical location of the top and/or bottom of the utility

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- Ground Conditions: The depth penetration and quality of the data depends on the ground conditions of the site. GPR Surveying works best within high resistivity material. Clay overburden can impair GPR Surveying. Poor data may be a result of areas with high conductivity.
- Utility Congestion: Where different utilities converge together into a service corridor or cross paths it becomes difficult to isolate a specific utility and to map its route. The reflected signal will display a single response to multiple utilities. Therefore multiple utilities may appear to be a single utility. Where similar services run on close proximity, separation may be impossible.
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APEX SURVEYS
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info@apexsurveys.ie
00353 1 691 0156

STREET FURNITURE :

BOLLARDS	BD
BUS STOP	BS
CRASH BARRIER	CB
GATE	
ELECTRICITY POLE	EP
TELEPHONE POLE	TP
EARTHING ROD	ER
LAMP POST	LP
MARKER POST	MKR
SIGN POST	SIGN
TRAFFIC LIGHT	TL
TELEPHONE BOX	TB
POST	POST
POST BOX	POST BOX
ROADSIGN	RS/ RS
BORE HOLE	BH
TRIAL PIT	TPIT

SERVICES :

AIR VALVE	AV
ARMSTRONG JUNCTION	AJ
CABLE TV IC	CATV
COVER LEVEL	CL
EIRCOM COVER	EIRCOM
EIRCOM JUNCTION BOX	EIRCOM BOX
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LEVELS :

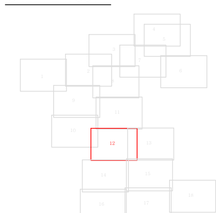
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SOFFIT LEVEL	+SL101.50
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WATER LEVEL	+WL101.50
SURVEY CONTROL STATION	

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CONCRETE	CONC	NO FURTHER TRACE	NFT	UNABLE TO TRACE	UTT
DIAMETER	DIA	OFFSITE	O/S		

SHEET LAYOUT :



PLAN PRODUCED BY:

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PROJECT:

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GRID SYSTEM: Irish Transverse Mercator
DATUM: Malin Head (OSGM15)
NOTES: Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	N/A	Original Drawing
002	09/2020	Additional Services Added

SCALE : 1/200 A1
DATE : 23/09/2020
DRG No: 4413
DESCRIPTION : 2D Utilities
SURVEYED BY : M.T. / N.G.
SHEET: 12 of 18
PROCESSED BY : Apex Surveys
CHECKED BY : Alan Brady



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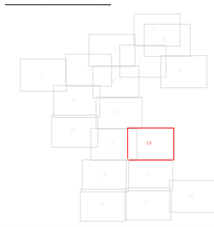
BED LEVEL	+ BED101.50
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TOP OF WALL LEVEL	+ TOW101.50
WATER LEVEL	+ WL101.50
SURVEY CONTROL STATION	13

UNDERGROUND LEGEND :

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SHEET LAYOUT :



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REVISIONS:

No.	Date	Description
001	N/A	Original Drawing
002	09/2020	Additional Services Added

SCALE : 1/200 A1

DATE : 23/09/2020

DRG No: 4413

DESCRIPTION : 2D Utilities

SURVEYED BY : M.T. / N.G.

SHEET: 13 of 18

PROCESSED BY : Apex Surveys

CHECKED BY : Alan Brady



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APEX SURVEYS

www.apexsurveys.ie
info@apexsurveys.ie
00353 1 691 0156

STREET FURNITURE :

BOLLARDS	BD
BUS STOP	BS
CRASH BARRIER	CB
GATE	
ELECTRICITY POLE	EP
TELEPHONE POLE	TP
EARTHING ROD	ER
LAMP POST	LP
MARKER POST	MKR
SIGN POST	SIGN
TRAFFIC LIGHT	TL
TELEPHONE BOX	TB
POST	POST
POST BOX	POST BOX
ROADSIGN	RS · RS
BORE HOLE	BH
TRIAL PIT	TPIT
BOTTOM OF CHAMBER	BOC
CAST-IRON	C/I
CONCRETE	CONC
DIAMETER	DIA

SERVICES :

AIR VALVE	AV
ARMSTRONG JUNCTION	AJ
CABLE TV IC	CATV
COVER LEVEL	CL
EIRCOM COVER	EIRCOM
EIRCOM JUNCTION BOX	EIRCOM BOX
ELECTRICAL CABLE PIT	ECP
ESAT COVER	ESAT
ESB COVER	ESB
ESB JUNCTION BOX	ESB BOX
FIRE HYDRANT	FH
GAS VALVE	GV
GULLY	G
INSPECTION COVER	IC
MANHOLE	MH
SEPTIC TANK	SEPTIC
SLUICE VALVE	SV
DOWNPIPE	DP
EARTHENWARE	E/W
NO FURTHER TRACE	NFT
OFFSITE	O/S
STOPCOCK	ST
SERVICE BOX (UNKNOWN)	BOX
TRAFFIC COVER	TLIC
VENT	VENT
WATER METER	WM

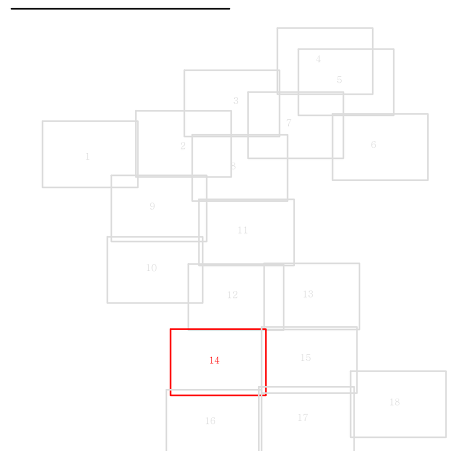
LEVELS :

BED LEVEL	BED101.50
FLOOR LEVEL	FL101.50
INVERT LEVEL	IL101.50
ROAD LEVEL	101.50
SOFFIT LEVEL	SL101.50
SPOT LEVEL	101.50
TOP OF WALL LEVEL	TOW101.50
WATER LEVEL	WL101.50
SURVEY CONTROL STATION	
START OF RUN	SOR
UNABLE TO OPEN	UTO
UNABLE TO TRACE	UTT

UNDERGROUND LEGEND :

WATER MAIN	WATER
GAS MAIN	GAS
STORM DRAIN	STORM
FOUL SEWER	FOUL
COMBINED SEWER	COMB
ELECTRIC CABLE	POWER
ELECTRIC LIGHTING	LIGHTING
EIRCOM	EIRCOM
FIBRE OPTIC CABLE	F.OPTIC
BROADBAND	BROADBAND
CABLE TV	TV
TRAFFIC AND SIGNAL CABLE	TRAFFIC
CCTV	CCTV
IRRIGATION PIPE	IRRIGATION
EMPTY DUCT	EMPTY
GPR ANOMALY	ANOMALY
UNKNOWN CABLE	CABLE
O/HEAD ELECTRICITY	OE
O/HEAD TELECOM	OT

SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

CONTACT INFORMATION:

Apex Surveys
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00353 1 691 0156

CLIENT:

O'Connor Sutton Cronin

PROJECT:

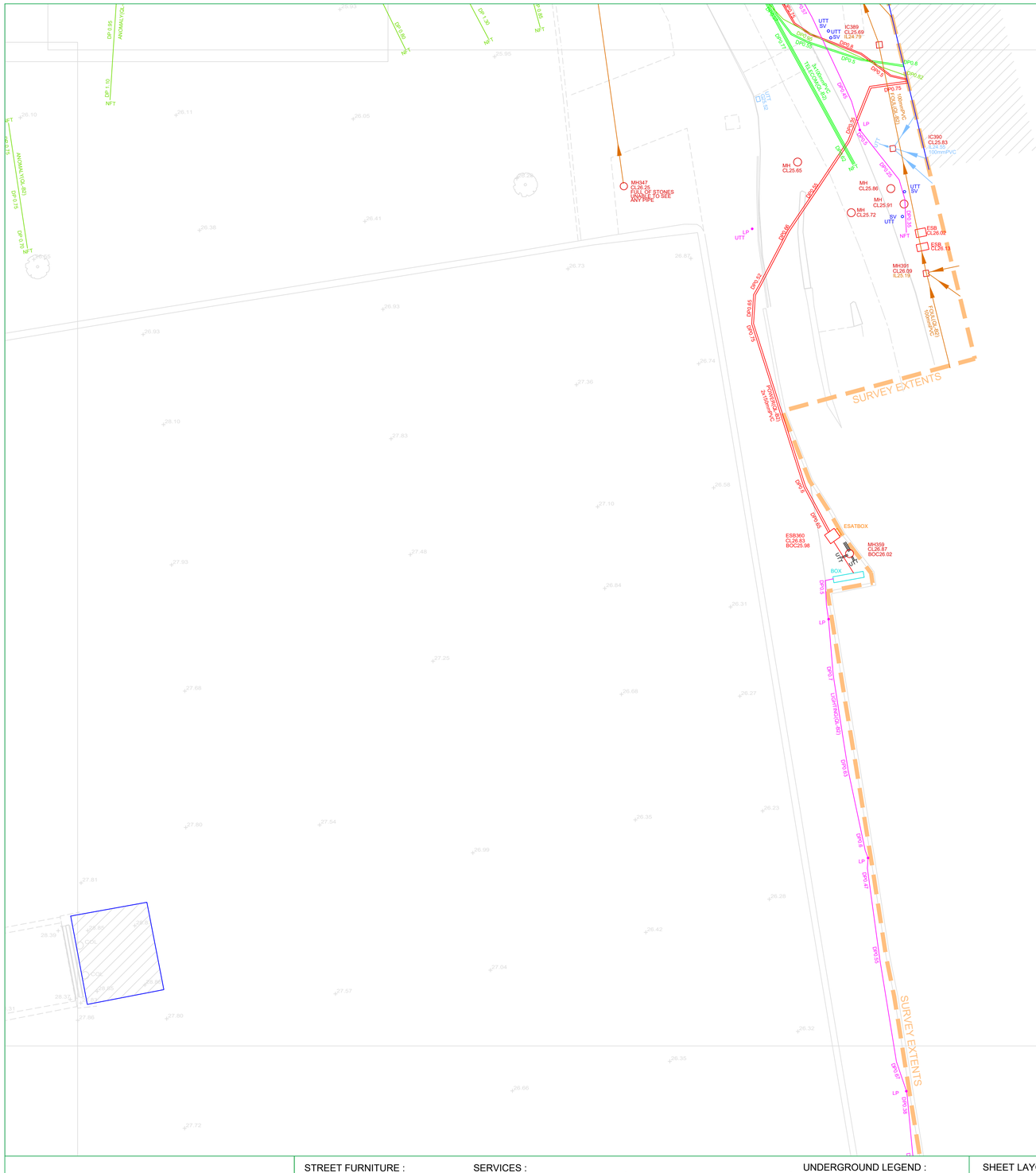
Emmet Road, Inchicore

GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	N/A	Original Drawing
002	09/2020	Additional Services Added

SCALE :	1/200 A1
DATE :	23/09/2020
DRG No:	4413
SHEET:	14 of 18
DESCRIPTION :	2D Utilities
SURVEYED BY :	M.T. / N.G.
PROCESSED BY :	Apex Surveys
CHECKED BY :	Alan Brady



PAS 128: 2014 (Quality of Survey Level Outputs):

DESKTOP UTILITY RECORDS SEARCH	
QL-D	Drafted from utility records
SITE RECONNAISSANCE	
QL-C	Location Demonstrated by visual reference to street furniture or evidence of previous streetworks, ie - reinstatement scars
DETECTION	
QL-B4	A segment of utility suspected to exist but has not been detected by a geophysical technique
QL-B3	Horizontal location only of the utility detected by one of the geophysical techniques used
QL-B2	Horizontal and vertical location of the utility detected by one of the geophysical techniques used
QL-B1	Horizontal and vertical location of the utility detected by multiple geophysical techniques
VERIFICATION	
QL-A	Horizontal and vertical location of the top and/or bottom of the utility

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The following is a non-exhaustive list of the limitations of utility surveys:

The Survey aims to map existing utilities subsurface utilities and provide information with respect to pipe size, material type and drainage connectivity. However utility surveying is limited by the following guidelines and it may not be possible to accurately survey, define and locate all services and sub-surface features.

- Depth of Utility: The depth and size of a utility affect the signal response and the degree with which a utility can be located.
  Due to attenuation of the radar signal with depth, resolution is restricted, hence making identification of utilities more difficult with increasing depth.
- Size of Utility: The smaller the diameter of a utility the more difficult it is to locate. This difficulty increases with depth.
- Ground Conditions: The depth penetration and quality of the data depends on the ground conditions of the site. GPR Surveying works best within high resistivity material. Clay overburden can impair GPR Surveying. Poor data may be a result of areas with high conductivity.
- Utility Congestion: Where different utilities converge together into a service corridor or cross paths it becomes difficult to isolate a specific utility and to map its route. The reflected signal will display a single response to multiple utilities. Therefore multiple utilities may appear to be a single utility. Where similar services run on close proximity, separation may be impossible.
- Signal Jumping: Signal from surrounding services may 'jump' to a highly conductive line masking its true identity.
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- Loss of signal: It is not always possible to trace the entire length of each underground service.
- Connections between manholes: Connections between manhole chambers are assumed to be straight.
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TELEPHONE POLE	TP •
EARTHING ROD	ER +
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MARKER POST	MKR +
SIGN POST	SIGN
TRAFFIC LIGHT	TL •
TELEPHONE BOX	TB
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STOPCOCK	ST •
SERVICE BOX (UNKNOWN)	BOX
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LEVELS :

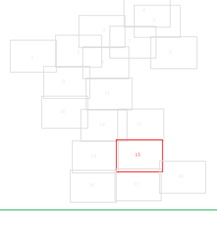
BED LEVEL	+ BED101.50
FLOOR LEVEL	+ FL101.50
INVERT LEVEL	+ IL101.50
ROAD LEVEL	+ 101.50
SOFFIT LEVEL	+ SL101.50
SPOT LEVEL	+ 101.50
TOP OF WALL LEVEL	+ TOW101.50
WATER LEVEL	+ WL101.50
SURVEY CONTROL STATION	

BOTTOM OF CHAMBER	BOC
CAST-IRON	C/I
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DIAMETER	DIA
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GPR ANOMALY	ANOMALY
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SHEET LAYOUT :



PLAN PRODUCED BY:

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GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

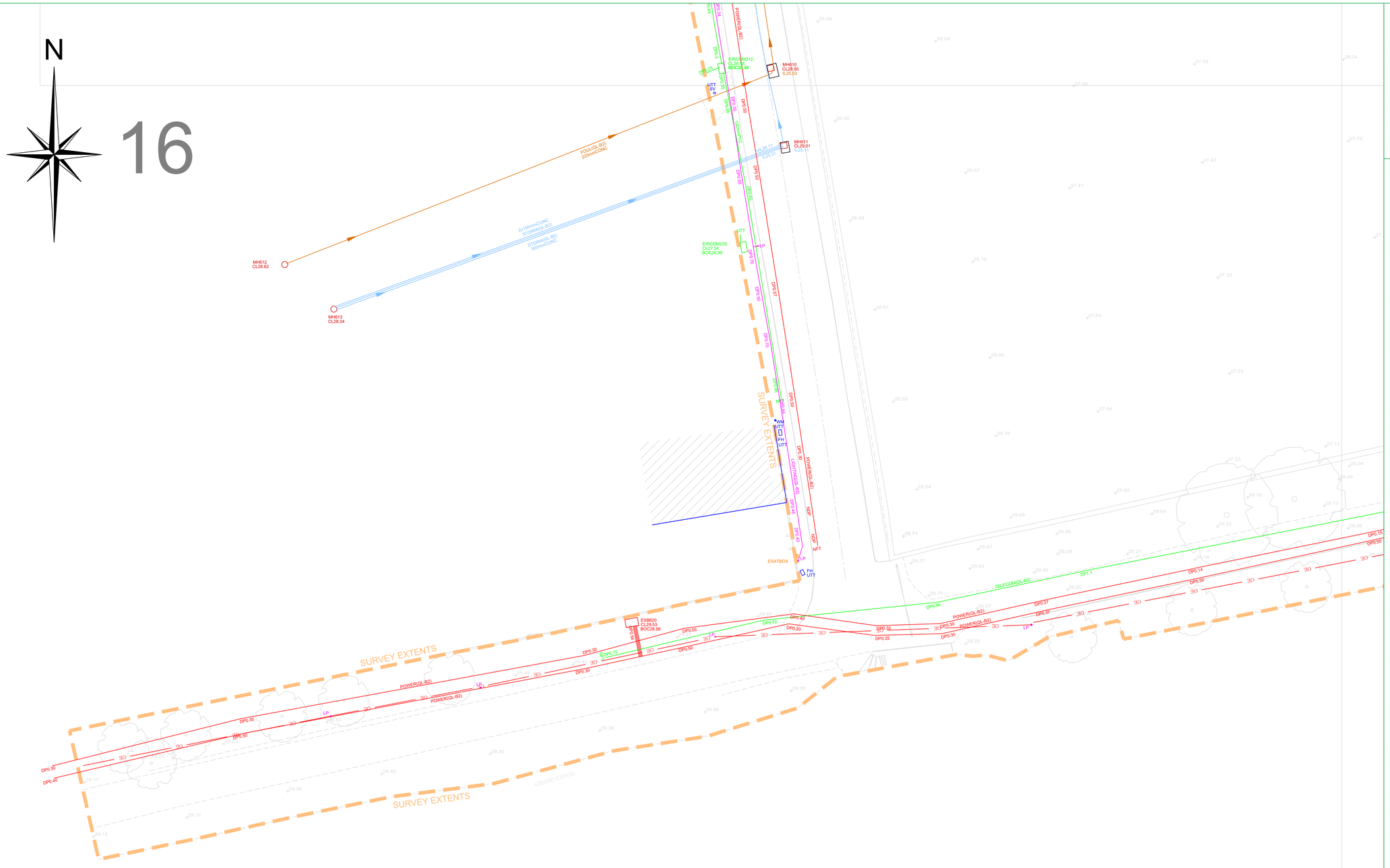
REVISIONS:

No.	Date	Description
001	N/A	Original Drawing
002	09/2020	Additional Services Added

PROJECT:

Emmet Road, Inchicore

SCALE :	1/200 A1
DRG No:	4413
SHEET:	15 of 18
DATE :	23/09/2020
DESCRIPTION :	2D Utilities
SURVEYED BY :	M.T. / N.G.
PROCESSED BY :	Apex Surveys
CHECKED BY :	Alan Brady



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BOLLARDS	BD •	AIR VALVE	AV
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DIAMETER	DIA	OFFSITE	O/S

SERVICES :

STOPCOCK	ST •
SERVICE BOX (UNKNOWN)	BOX
TRAFFIC COVER	TLIC
VENT	VENT •
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LEVELS :

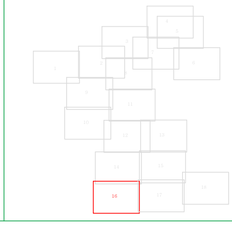
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FLOOR LEVEL	+ FL101.50
INVERT LEVEL	+ IL101.50
ROAD LEVEL	+ 101.50
SOFFIT LEVEL	+ SL101.50
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TOP OF WALL LEVEL	+ TOW101.50
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SURVEY CONTROL STATION	

START OF RUN	SOR
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SHEET LAYOUT :



PLAN PRODUCED BY:

APEX SURVEYS

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GRID SYSTEM:	Irish Transverse Mercator
DATUM:	Malin Head (OSGM15)
NOTES:	Drawing Contains Scale Factor

REVISIONS:

No.	Date	Description
001	N/A	Original Drawing
002	09/2020	Additional Services Added

SCALE : 1/200 A1

DATE : 23/09/2020

DRG No: 4413

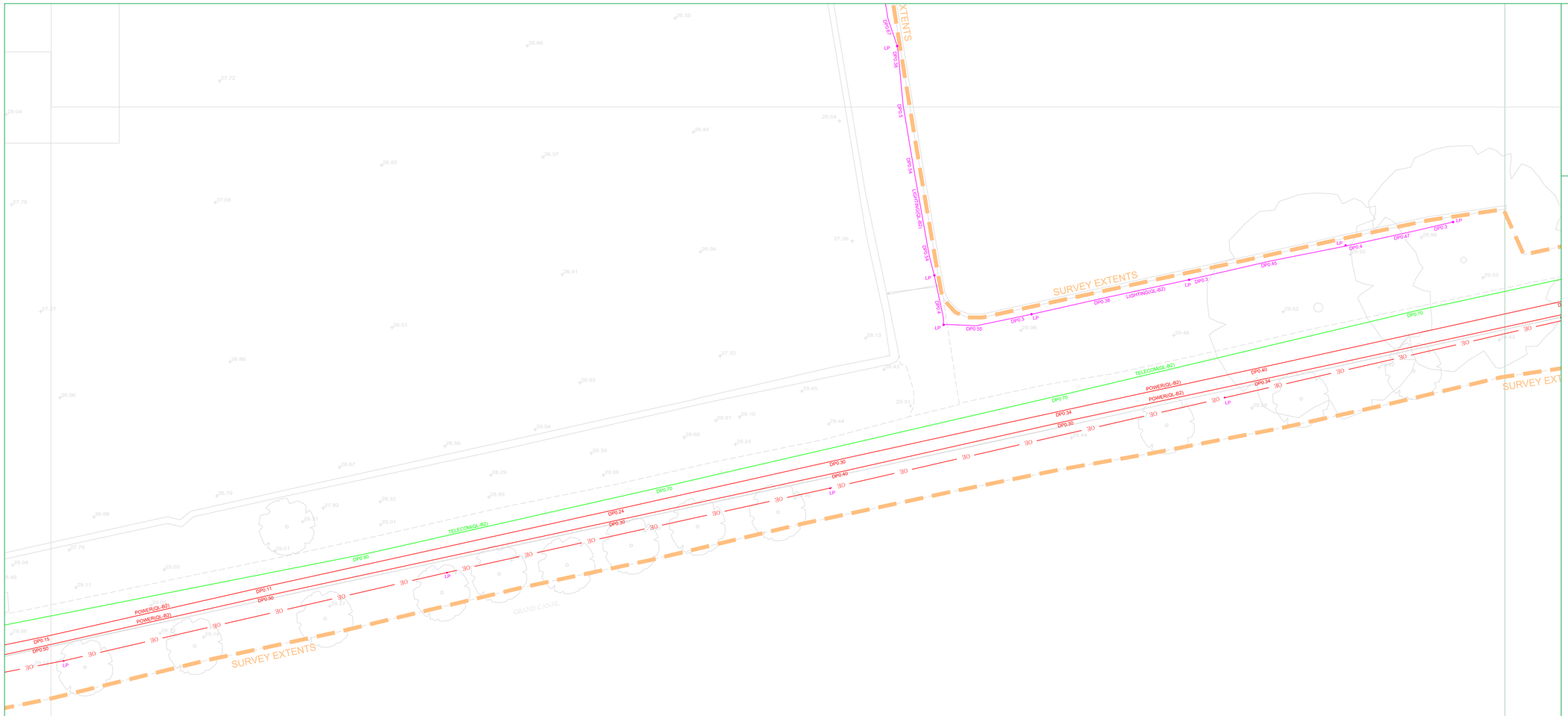
DESCRIPTION : 2D Utilities

SURVEYED BY : M.T. / N.G.

SHEET: 16 of 18

PROCESSED BY : Apex Surveys

CHECKED BY : Alan Brady



N

17

PAS 128: 2014 (Quality of Survey Level Outputs):

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CRASH BARRIER	CB	CONCRETE	CONC
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EARTHING ROD	ER +		
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SIGN POST	SIGN		
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POST	POST •		
POST BOX	POST BOX		
ROADSIGN	RS - RS		
BORE HOLE	BH +		
TRIAL PIT	TPIT +		

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CABLE TV IC	CATV	NO FURTHER TRACE	NFT
COVER LEVEL	CL	OFFSITE	O/S
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SEPTIC TANK	SEPTIC		
SLUICE VALVE	SV •		

STOPCOCK	ST •
SERVICE BOX (UNKNOWN)	BOX
TRAFFIC COVER	TLIC
VENT	VENT •
WATER METER	WM +

LEVELS :

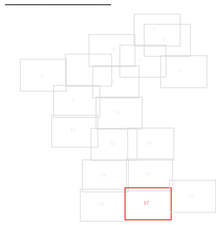
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SURVEY CONTROL STATION	

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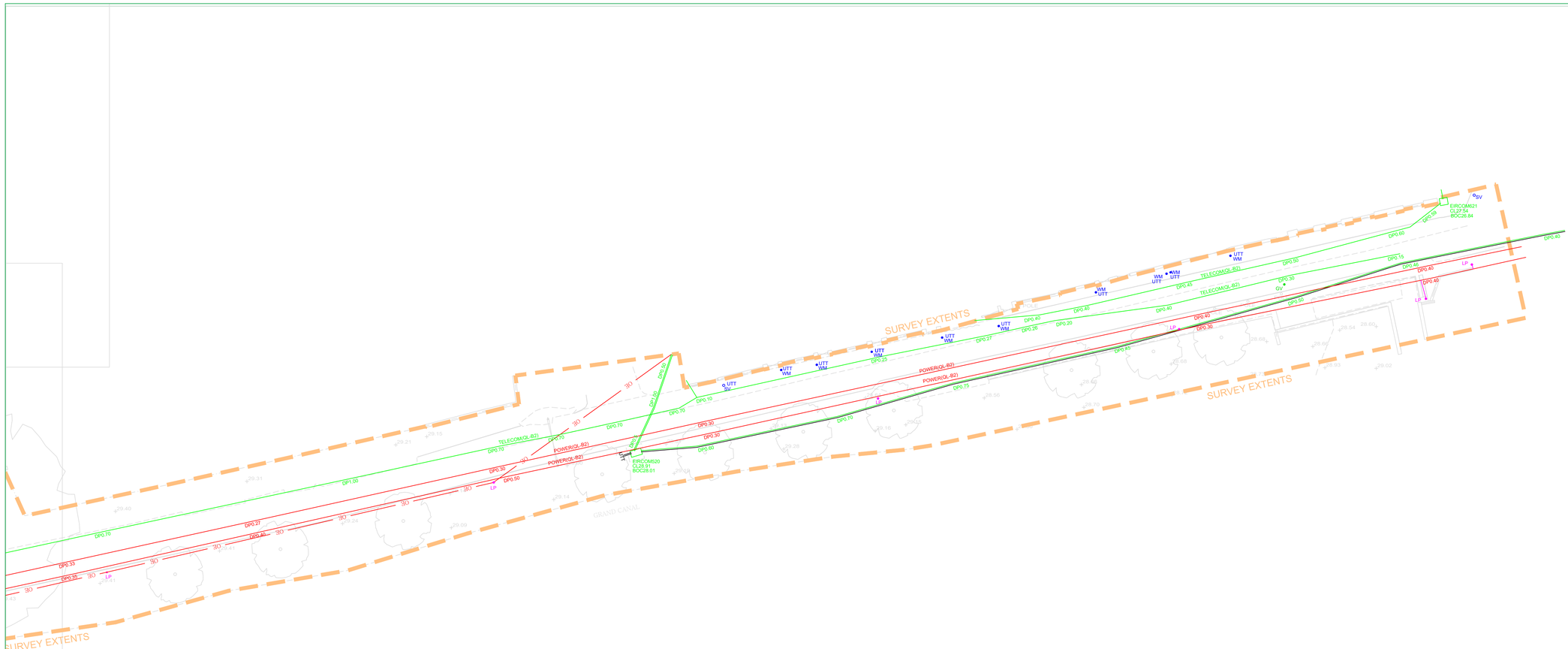
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SHEET:	17 of 18	PROCESSED BY :	Apex Surveys
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N

18

PAS 128: 2014 (Quality of Survey Level Outputs):

DESKTOP UTILITY RECORDS SEARCH	
QL-D	Drafted from utility records
SITE RECONNAISSANCE	
QL-C	Location Demonstrated by visual reference to street furniture or evidence of previous streetworks, ie - reinstatement scars
DETECTION	
QL-B4	A segment of utility suspected to exist but has not been detected by a geophysical technique
QL-B3	Horizontal location only of the utility detected by one of the geophysical techniques used
QL-B2	Horizontal and vertical location of the utility detected by one of the geophysical techniques used
QL-B1	Horizontal and vertical location of the utility detected by multiple geophysical techniques
VERIFICATION	
QL-A	Horizontal and vertical location of the top and/or bottom of the utility

Apex Surveys Ltd. Disclaimer - Utility Survey

The interpretative nature and the non-intrusive, indirect and non-destructive survey methods must be taken into account when considering the results of the surveys. Therefore Apex Surveys, while using appropriate practice to execute, interpret and present the data, gives no guarantees that all underground utilities and underground structures will be located and mapped. Furthermore, Apex Surveys cannot guarantee the accuracy of the utility depths annotated on the survey drawings.
Apex Survey shall not be liable for any omissions or inaccuracies in the survey which arise due to the limitations of the service. No liability shall attach to Apex Surveys, in any circumstances, howsoever arising, in respect of any consequential loss or damages suffered by the Client.

The following is a non-exhaustive list of the limitations of utility surveys:

The Survey aims to map existing utilities subsurface utilities and provide information with respect to pipe size, material type and drainage connectivity. However utility surveying is limited by the following guidelines and it may not be possible to accurately survey, define and locate all services and sub-surface features.

- Depth of Utility: The depth and size of a utility affect the signal response and the degree with which a utility can be located.
  Due to attenuation of the radar signal with depth, resolution is restricted, hence making identification of utilities more difficult with increasing depth.
- Size of Utility: The smaller the diameter of a utility the more difficult it is to locate. This difficulty increases with depth.
- Ground Conditions: The depth penetration and quality of the data depends on the ground conditions of the site. GPR Surveying works best within high resistivity material. Clay overburden can impair GPR Surveying. Poor data may be a result of areas with high conductivity.
- Utility Congestion: Where different utilities converge together into a service corridor or cross paths it becomes difficult to isolate a specific utility and to map its route. The reflected signal will display a single response to multiple utilities. Therefore multiple utilities may appear to be a single utility. Where similar services run on close proximity, separation may be impossible.
- Signal Jumping: Signal from surrounding services may 'jump' to a highly conductive line masking its true identity.
- Shadowing: (of deeper utilities by shallower objects) Shallow utilities will mask the existence of deeper utilities where they are in close proximity. Also, high reflective materials close to the surface i.e rebar may hide deeper anomalies.
- Surface Obstructions: The GPR system relies on a relatively flat and even surface on which to perform radar passes. If ground obstructions such as vehicles, organic material (long grass, scrub) or undulating ground surface are present then the acquired data will be of lower resolution and in some cases not viable.
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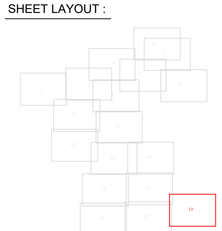
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SURVEY CONTROL STATION	CS

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APPENDIX D – MATERIAL ASSETS - WASTE MANAGEMENT

Appendix D1 Resource and Waste Management Plan (RWMP) prepared by Byrne Environmental

Appendix D2 Operational Waste Management Plan (OWMP) prepared by Byrne Environmental

Appendix D1 Resource and Waste Management Plan (RWMP) prepared by Byrne Environmental

Byrne Environmental
CONSULTING LTD

ENVIRONMENTAL MONITORING, ASSESSMENT & MANAGEMENT
Acoustics, Air Quality, Environmental Impact Assessment
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RESOURCE & WASTE MANAGEMENT PLAN

FOR

DUBLIN CITY COUNCIL

RELATING TO A MIXED-USE DEVELOPMENT AT

EMMET ROAD,
INCHICORE
DUBLIN 8

27th September 2022



Ian Byrne MSc, MIOA, Dip Environmental & Planning Law

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1.0 INTRODUCTION

This document presents the Resource and Waste Management Plan (RWMP) for the control, management and monitoring of resources and waste associated with a proposed mixed-use development at Emmet Road, Inchicore, Dublin 8 comprising of 578 no. residential units, community facilities, a creche and retail units.

The RWMP has been prepared to demonstrate how the Construction Phase will comply with the following relevant legislation, relevant Best Practice Guidelines and Local Authority Waste Management Policies:

Waste Management Acts 1996-2011

Waste Management (Collection Permit) Regulations 2007 (SI No. 820 of 2007)

Waste Management (Collection Permit) Amendment Regulations 2008 (SI No. 87 of 2008)

EPA Best Practice Guidelines for the preparation of resource management plans for construction and demolition projects, April 2021

The Eastern-Midlands Region Waste Management Plan

Draft Dublin City Council Development Plan 2022-2028

EPA "Guidance on Soil and Stone By-Products in the context of Article 27 of the European Communities (Waste Directive) Regulations – Version 3 June 2019

The Key Aspects of this RWMP are:

1 To maximise the use of resources in the Design and Construction Phases and to minimise the generation of waste with regard to the following principals:

Green Procurement and Design
Resource Re-Use, Recycling and Management
Waste Prevention and Segregation

2 To maximise the segregation of construction and demolition waste materials on-site to produce uncontaminated waste streams for re-use and recycling both on-site and off-site.

2.0 DUBLIN CITY COUNCIL DEVELOPMENT PLAN WASTE POLICIES

The Draft *Dublin City Development Plan 2022-2028* includes specific Objectives relating to the management of Construction and Demolition Waste as follows:

DCC Policy S127
Sustainable Waste Management
To support the principles of the circular economy, good waste management and the implementation of best practice in relation to waste management in order for Dublin City and the Region to become self-sufficient in terms of resource and waste management and to provide a waste management infrastructure that supports this objective.

DCC Policy 128
Sustainable Waste Management
To prevent and minimise waste generation and disposal, and to prioritise prevention, recycling, preparation for reuse and recovery in order to safeguard against environmental pollution.

DCC Chapter 15.18.2 Waste Management
All planning applications in excess of 30 or more residential units and / or 1,000 sq. m. of commercial development shall be accompanied by both and Construction and Operational Waste Management Plan. The construction waste management plan may form part of the overall construction management plan and shall detail the strategy in relation to on site waste storage, segregation and disposal. Development proposals shall recycle demolition material and re-use existing building materials where possible. In all developments of 30 or more housing units or commercial developments in excess of 1,000 sq. m, a materials source and management plan showing type of materials / proportion of re use/ recycled materials to be used shall be implemented by the developer.

The *Dublin City Development Plan 2016-2022* includes specific Objectives relating to the management of Construction and Demolition Waste as follows:

DCC Policy SIO17
To promote the re-use of building materials, recycling of demolition material and the reuse of materials from renewable sources.

DCC Policy SIO19
To implement the Eastern-Midlands Region Waste Management Plan and achieve the plan targets and objectives

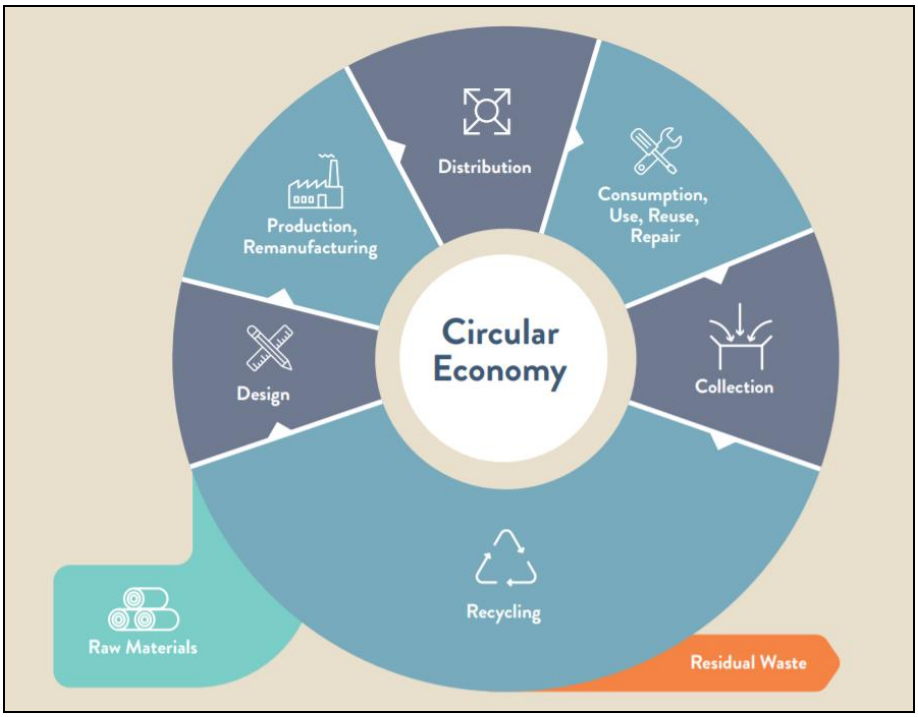
3.0 THE CIRCULAR ECONOMY

Ireland's national waste policy is *'A Waste Action Plan for A Circular Economy – Ireland's National Waste Policy 2020 – 2025 '.*The policy, published September 2020, is intended to move Ireland toward a circular economy in which focus is shifted away from waste disposal, favouring circularity and sustainability by identifying and maximising the value of material through improved design, durability, repair and recycling. By extending the time resources are kept within the local economy, both environmental and economic benefits are foreseen.

The proposed development will implement the above policy as follows:

- Re-Use on-site of all excavated soils and stones as fill material and as landscaping material.
- The purchase of construction materials as needed to prevent over supply and potential for damage whilst in storage.
- The segregation of construction waste streams into separate storage containers to maximise the potential for the re-use of the materials.
- The import of Article 27 soils where possible.
- The Developer of the Project is committed to implementing the relevant aspects of the Circular Economy Policy throughout the construction phase of the development.

FIGURE 1 THE CIRCULAR ECONOMY



It is Dublin City Council's intention to conform to the waste hierarchy (Figure 2), whereby waste prevention is the most preferred strategy. Where waste generation is unavoidable, re-use is the most preferred fate, followed by recycling and then energy recovery, with disposal (e.g. to landfill) being the least preferred fate.

Figure 2 The Waste Hierarchy



4.0 PROJECT DESCRIPTION

4.1 Proposed Development

The development will comprise 578 no. apartments, community facilities including a Library/Community Hub, Creche, Retail/Retail services, Café units, a supermarket and a public plaza fronting onto Emmet Road.

Figure 3 Site Location



4.2 Site History

The central and southern area of the site consists of the former St. Michaels Estate which has been demolished and exists now as open space. The north section of the site comprises a partially demolished building, as well as active recreational, social and community facilities with associated landscaping and car parking. The northern part of the site contains a number of structures which will be demolished to make way for the proposed development including St. Michaels Community Centre and the HSE Health Centre which were permitted under PRR 2221/21 The Inchicore Community Sport Centre (outside the site area) shall be retained and integrated into the design of the proposed scheme.

4.3 Existing Structures

The subject site at Emmet Road consists of a grassed area (the former St. Michael's Estate), a former halting site, former health centre building and a former community centre building.

4.4 Site Clearance

The site is currently comprised of a large grassed area (the former St. Michael's Estate), hard surfaced areas comprised of concrete and tarmacadam and buildings. The former halting site area contains historically dumped waste which will be analysed for the presence of Asbestos Containing Materials (ACM) prior to its removal off-site.

The former health centre building and a former community centre building, wall structures and hardstanding areas are to be demolished to facilitate the development.

4.5 Material Balance Cut and Fill

The estimated Cut volume is c.35,289m^3.

4.6 Site contamination

Soils at the site have been classified by *O'Connor Sutton Cronin (Report Dated Jan 2021)* following sampling, analysis and the utilisation of the *HazWasteOnline software WM3V.1.1*. The results are presented in Table 1 below.

Table 1 Soil Classification Results

A	B1	B2	C1	C2	D	D
Inert – Waste Permitted or Recovery Sites	e.g. IMS Landfill	e.g. IMS Landfill Inert Inc. Limits	Non-Haz	Non-Haz Quantifiable asbestos	Hazardous	Hazardous with Asbestos > 0.1%
11	98	30	26	1	16	1

The Waste Soil Classification Grids are presented in Appendix I.

4.7 Invasive Species

Species listed on the *Third Schedule of S.I. 477/2011 (as amended)*

An invasive species survey conducted by *Enviroguide* identified the presence of Buddleia in the northern section of the site.

An ecological assessment of the site prepared by Enviroguide has identified the presence of Buddleia plant species on the subject site. The management of the species shall be managed by cutting Buddleia plants to a basal stump during active growth (late spring to early summer) and immediately treating the total cut surface with herbicide concentrate. Monitoring will be required and retreatment, as necessary.

4.8 Asbestos

Asbestos was identified in 2. No. soil samples with values ranging between 0.003% - 0.176%.

Historically fly-tipped waste in the former halting site area shall be investigated to determine if asbestos is present.

4.9 Project Phasing

The sequence of development works are detailed below in Table 2.

Table 2 Sequence of Construction Works

Activity Sequence	General Description
Site access and security	Set up site access point and erect site hoarding
Invasive Species	Removal of Buddlea
Historic Waste	Testing and removal of waste materials
Identification of Existing Utility Services	Set up bunting, mark location of live services, including E.S.B., Gas etc.
Facilities	Install site offices and welfare units
Compounds	Establish materials storage compound and waste management compound
Demolition	Removal of existing structures
Removal of Vegetation	e.g. Trees and vegetation
Site Preparation	Soil stripping, stockpiling, export
Infrastructure installation	Drainage, Utility ducts, power, internal roads
Substructure	Foundations
Superstructure	Steel Frame
External Envelope	Place façade to superstructure
Internal Finishes	Mechanical & Electrical
External Landscaping	Hard and soft landscaping, road surfacing

5.0 RWMP ROLES AND RESPONSIBILITIES

5.1 Project Director / Manager

The Project Director will be responsible for the overall implementation of the RWMP and providing the budget for its implementation and management. The Project Director will ensure that the reporting and recording requirements are met and all necessary resources are in place to support the implementation of the RWMP from Design Stage to Project Completion.

5.2 Resource and Waste Manager

The Resource and Waste Manager (RWM) will be responsible for:

- Implementing all aspects of the RWMP throughout the Construction Phase.
- Assisting the Project Manager on the implementing of the aspects of the Circular Economy.
- Ensuring that all resources are managed throughout the Construction Phase
- Recording the volumes and types of construction wastes generated.
- Communicating with the Local Authority on waste related matters and issuing of waste records.
- Management of the waste storage compound to ensure that all construction waste streams are stored separately and that cross-contamination does not occur.
- Maintaining a file of all Waste Collection Permits and Waste Facility Permits / Waste Licences that each waste load is exported to.
- Ensuring that all waste loads exiting the site are contained in a vehicle displaying an appropriate NWCPO Permit number.
- Maintaining a receipt of each waste load delivered to authorised facilities.
- Identifying and reporting on damaged construction materials and identifying how damage to resources and materials shall be prevented.
- Preparation of monthly waste management report detailing waste volumes generated, re-use and recycling rates and details on damaged raw materials and how they can be returned for repair and future re-use.
- Conducting Resource and Waste Management Audits
- Communicating with the EPA regarding Article 27 By-Product determinations

- The name and contact details of the Resource and Waste Manager shall be forwarded to the Waste Management Section of the Local Authority on appointment.

5.3 Site Personnel

All personnel on site will be responsible for the effective implementation of the RWMP. All staff will receive Induction and Tool-Box training on resource management and waste prevention, segregation and disposal.

5.4 Gate Person

Gate Person duties will include the inspection of all vehicles exiting site with waste to ensure that they have a Waste Collection Permit (WCP) Number displayed on the side of the vehicle.

If the vehicle does not have a WCP Number displayed, the vehicle will be refused exit and the RWM will ensure that the waste load is returned to the site area from where it came.

5.5 Staff Training

Copies of the RWMP will be made available to all relevant personnel on site. The RWM will arrange for all site personnel and contractors to be instructed about / receive training on the objectives of the RWMP and materials management, and be informed of the responsibilities that fall upon them as a consequence of its implementation The topics to be covered will include;

- Project programme and requirements
- Health and Safety requirements
- RWMP
- Materials to be segregated
- Segregation systems and protocols
- Arrangement for the storage and handling of reusable materials and recyclables
- Document control requirements

Where source segregation and materials re-use techniques apply, each member of staff will be given instructions on how to comply with the RWMP and will be displayed for the benefit of site staff.

Table 2 Principal Project Staff

Title	Name	Contact Details
Project Director	TBC	
Construction Director	TBC	
Construction Manager	TBC	
Resource & Waste Manager	TBC	
Engineer	TBC	
Quantity Surveyor	TBC	
Design Lead	TBC	

TBC To be confirmed by contractor when appointed.

6.0 RESOURCE AND WASTE MANAGEMENT DESIGN APPROACH

This section provides details on how resource optimisation and the management and minimisation of waste streams shall be implemented from design phase through to completion of the project.

6.1 Site Preparation

- Reuse site hoardings and staff welfare units from previous Projects.
- Minimise concrete use in site compounds.

6.2 Re-Use of existing site elements

- Identify materials prior to demolition that can be re-used or recycled on-site to minimise the use of virgin materials.
- Hard surfaces comprised of concrete and tarmacadam may be re-used to form the ground surface of the site compound.

6.3 The Use of Recycled materials and surplus materials

- Use recycled aggregates where possible to minimise the use of virgin materials.
- Identify materials which have a % of recycled material contained within them e.g., Asphalt may include recycled glass or recycled asphalt.
- Where material surpluses arise, they shall be stored to prevent damage and re-used on other projects or returned to the supplier.

6.4 Materials Procurement

- Identify suppliers that can supply low environmental impact products and materials
- Identify recycled materials to be used on the project
- Minimise over-ordering to reduce over storage and to minimise potential of damage to materials
- Request that material suppliers take back damaged materials for repair and re-use.
- Request that suppliers minimise packaging on all materials

6.5 Off-Site Construction

The use of pre-constructed building elements is an efficient process that minimises the generation of construction site waste.

- Steel frames and wall and ceiling panels shall be constructed off-site and assembled on-site.
- Use of prefabricated composite wall panels
- Use of prefabricated concrete wall and roof panels
- Use of modular bathroom and kitchen units

7.0 DESCRIPTION OF WASTE ARISINGS

The expected construction and demolition waste quantities that will be generated throughout the course of the development are described in Table 3 below.

The calculated construction waste tonnage with the exception of soils and stones has been derived from the Building Research Establishment Environmental Assessment Method (BREEAM) which specifies that 11.1 tonnes of construction waste is generated for every 100m^2 of development area.

Table 3 Predicted construction waste

LoW Code	Description	Volume Generated (tonnes)	Prevention (tonnes) Non Waste	Reused (tonnes) Non-Waste	Recycled (tonnes) Waste	Recovered (tonnes) Waste	Disposed (tonnes) Waste
17 01 01	Concrete	0					
17 01 02	Brick	0					
17 01 03	Tiles and Ceramics	0					
17 01 07	Mix of concrete, brick, tiles, ceramics	341			114	114	113
17 02 01	Wood	0					
17 02 02	Glass	0					
17 02 03	Plastic	0					
17 03 02	Bituminous Material	62					62
17 04 01	Copper, Bronze, Brass	0					
17 04 02	Aluminium	0					
17 04 03	Lead	0					
17 04 04	Zinc	0					
17 04 05	Iron and Steel	0					
17 04 06	Tin	0					
17 04 07	Mixed Metals	123			123		
17 04 11	Cables	0					
17 05 04	Soil and Stone	52,670					52,670
17 06 04	Insulation Material	0					
17 08 02	Gypsum	0					
17 09 04	Mixed C&D Waste	213			71	71	71
17 01 06*	Mix of concrete, bricks tiles containing hazardous substances	0					
17 02 04*	Glass, Plastic and Wood containing hazardous substances	0					
17 03 01*	Bituminous mixtures containing coal tar	0					
17 05 03*	Soils and Stones containing hazardous substances	0					
17 04 09*	Metal waste containing hazardous substances	0					

Table 3 contd. Predicted construction waste

LoW Code	Description	Volume Generated (tonnes)	Prevention (tonnes) Non Waste	Reused (tonnes) Non-Waste	Recycled (tonnes) Waste	Recovered (tonnes) Waste	Disposed (tonnes) Waste
17 06 05*	Construction materials containing asbestos	0					
13 07 01*	Fuel Oils and Diesel	0					
20 01 05*	WEEE	0					
20 01 08	Biodegradable Canteen Waste	5					5
20 03 01	Mixed Municipal Waste	20					20
20 01 01	Paper & Cardboard	1			1		0

Table 4 Predicted demolition waste

LoW Code	Description	Volume Generated (tonnes)	Prevention (tonnes) Non Waste	Reused (tonnes) Non-Waste	Recycled (tonnes) Waste	Recovered (tonnes) Waste	Disposed (tonnes) Waste
17 01 01	Concrete	1947			389	973.5	973.5
17 03 02	Bituminous materials	1904					1904
17 04 07	Mixed Metals	12			12		

Figures referenced from Garland Report and Survey dated February 2021 Planning Reg. Ref. 2221/21

8.0 CONSTRUCTION WASTE MANAGEMENT

- It is proposed that from the outset of construction activities, a dedicated and secure compound containing bins, and skips, and storage areas, into which all waste materials generated by construction site activities, will be established within the active construction phase of the development site.

- Spill kits shall be located within the site compound with clearly labelled instructions on how they shall be used to clean up fuel/oil spills.

- All vehicle and plant oils and liquid construction materials shall be stored in secure impermeable storage units.

- All diesel-powered generators shall be inspected on at least a weekly basis by a delegate of the project manager to ensure it is not leaking diesel or oils.

- All empty containers containing residual quantities of oils, greases and hydrocarbon-based liquids shall be stored in a dedicated, clearly labelled impermeable container.

- In order to ensure that the construction contractor correctly segregate waste materials, it is the responsibility of the site construction manager to ensure all staff are informed by means of clear signage and verbal instruction and made responsible for ensuring site housekeeping and the proper segregation of construction waste materials.

- It will be the responsibility of the Resource and Waste Manager (RWM) to ensure that a written record of all quantities and natures of wastes exported off-site are maintained on-site in a Waste File at the Project office.

- It is the responsibility of the RWM that all contracted waste haulage drivers hold an appropriate Waste Collection Permit for the transport of waste loads and that all waste materials are delivered to an appropriately licenced or permitted waste facility in compliance with the following relevant Regulations:
  Waste Management (Collection Permit) Regulations 2007 (SI No. 820 of 2007)
  Waste Management (Collection Permit) Amendment Regulations 2008 (SI No. 87 of 2008)
  Waste Management (Facility Permit and Registration) Regulations S.I.821 of 2007 and the Waste Facility Permit under the Waste Management (Facility Permit and Registration) Amendment Regulations S.I.86 of 2008.

- It is proposed that waste materials will be collected and stored in separate clearly labelled skips and suitable containers in a defined and separate waste storage area in the site compound and that these materials will be collected by a Permitted Waste Contractor holding an appropriate Waste Collection permit in compliance with *Waste Management (Collection Permit) Regulations 2007 (SI No. 820 of 2007) and Waste Management (Collection Permit) Amendment Regulations 2008 (SI No. 87 of 2008)* and that they will be sent for disposal or further processing to appropriately Permitted / Licensed Waste Facilities in compliance with *Waste Management (Facility Permit and Registration) Regulations S.I. No. 821 of 2007 and the Waste Management (Facility Permit and Registration) Amendment Regulations S.I. No. 86 of 2008.*

- Prior to the commencement of the Project, the RWM shall identify a permitted Waste Contractor(s) who shall be engaged to collect and dispose of all inert and hazardous wastes arising from the project works.

- The RWM shall maintain copies of all Waste Collection Permits and copies of the Waste Facility Permit or Waste Licence to which waste materials are exported to. The RWM shall ensure that all Permits/Licences are within date.

- All waste soils prior to being exported off-site, shall be classified as inert, non-hazardous or hazardous in accordance with the *EPA's Waste Classification Guidance – List of Waste & Determining if Waste is Hazardous or Non-Hazardous* document to ensure that the waste material is transferred by an appropriately permitted waste collection permit holder and brought to an appropriately permitted or licensed waste facility.

Figure 2 Construction Waste segregation compound design concept



Figure 3 Oil Spill Kit



Figure 4 Bund for waste oil container storage



9.0 ON-SITE RESOURCE MANAGEMENT & WASTE REUSE RECYCLING AND MANAGEMENT

This section of the RWMP describes how construction waste shall be minimised and how the re-use and recycling of wastes shall be maximised

- Materials shall be ordered on an *"as needed"* basis to prevent over supply and preventing damage to bulk orders stored on-site.
- Materials shall be stored and handled in a manner that minimises the generation of damaged materials
- Materials shall be ordered in appropriate sequence to minimise materials stored on site
- All staff and Sub contractors shall be advised through inductions and tool box talks on how to dispose of their waste correctly on-site.
- Broken concrete blocks and excess aggregate materials shall be segregated and stored off-site for use as hard standing material on future projects. This will result in the following positive impacts:
    - Reduction in the requirement for virgin aggregate materials from quarries
    - Reduction in energy required to extract, process and transport virgin aggregates
    - Reduced HGV movements associated with the delivery of imported aggregates to the site
    - Reduction in the amount of landfill space required to accept C&D waste
- Excess wood will be segregated in separate skips and sent for recycling.
- Plastic arising from general waste or packaging will be segregated and stored in separate skips.
- Metals waste shall be stored in dedicated skips
- Top soil that is stripped shall be retained in managed bunds to prevent erosion and reduce the leaching of minerals from the soil.
- Any hazardous material (e.g., unknown hotspot, underground tanks) discovered during the course of the construction phase shall be isolated and the removal of contaminated materials shall be managed by the RWM.

10.0 WASTE SOILS & STONES EXPORT & ARTICLE 27 DECLARATIONS

Excavated excess soils that are required to be exported off-site shall be tested to determine their classification as hazardous or non-hazardous in accordance with EPA *Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous. Non-Hazardous soils may be suitable for re-use in other construction sites and may be declared as a by-product in accordance with Article 27* of the *European Communities (Waste Directive) Regulations 2011*. Article 27 requires that the material classified not a waste but a by-product must meet specific criteria and that that a declaration of a material as a by-product is notified to the EPA. The EPA publication *"Guidance on Soil and Stone By-Products in the context of Article 27 of the European Communities (Waste Directive) Regulations – Version 3 June 2019* shall be considered in this regard. Appendix I presents the schematic process by which a material is determined as a waste or a by-product.

The records of all Article 27 declarations and WAC Analytical Tests and *Haz Online* assessments shall be maintained on-site by the RWM.

11.0 WASTE RECORD KEEPING

It is the responsibility of the RWM that a record of all quantities and natures of all wastes reused / recycled and exported off-site during the project are maintained in a Waste File at the Project office.

The following information shall be recorded for each load of waste exported off-site:

- Waste Type EWC Code and description.
- Volume of waste collected.
- Waste collection contractor's Waste Collection Permit Number and collection receipt including vehicle registration number.
- Destination of waste load including Waste Permit / Licence number of facility.
- Description of how waste at facility shall be treated i.e. disposal / recovery / export

An indicative template is contained in Figure 4, to ensure the full traceability of waste materials to their final destination.

Verifiable and validated tracking and authorisation documentation will be maintained for all wastes destined for re-use, recovery, recycling or disposal. Justification will also be provided where a disposal option had been employed.

The waste records shall be issued to Fingal County Council as required / requested.

12.0 RESOURCE & CONSTRUCTION WASTE MANAGEMENT AUDITING

The effectiveness of a Resource and Waste Management Plan and its implementation, will be subject to quarterly audits by the RWM throughout the duration of the construction phase.

Audits will focus on materials inputs to the project and the waste outputs identifying:

Resources
How resource management was integrated into the design of project buildings and areas

Re-use, recycling of existing on-site materials prior to development including soils, buildings, structures.

Re-using surplus materials from previous development projects e.g., office cabins, fencing, aggregates, concrete products.

Additional opportunities for future resource management.

Waste
The audits will also investigate the operational factors and management policies that contribute to the generation of waste and identify appropriate corrective actions, where necessary.

Performance targets will be developed, e.g., an 85% overall recycling target, successes and failures will be recorded and Action Plans will be developed to address any issue which arise.

Inspections of the waste storage areas will be undertaken and recorded on a weekly basis, issues relating to housekeeping, inappropriate storage and segregation of wastes.

The RWM will record the findings of the audits, including types and quantities of waste arising, final treatments and costs, in a quarterly audit report.

The Final Waste Audit will examine the manner of how resources are managed and how and where the waste is produced and how waste generation can be reduced in future projects.

13.0 WASTE EXPORT PERMITS/LICENCES

All vehicles exiting the site containing any waste material shall be inspected by the gate man to ensure that they display on the side of the vehicle a Waste Collection Permit#.

Where a Waste Collection Permit# is not displayed the RWM shall be notified and the vehicle shall be instructed to return the waste load to the specific area on the site and will not be allowed exit the site with the waste load.

Once a Demolition Contractor, Groundworks contractor and a Main Contractor have been appointed, the associated Waste Collection Permits for vehicles exporting materials off-site and the receiving facility Waste Facility Permits / Waste Licenses shall be maintained by the RWM and issued to Dublin City Council.

Table 4 Register of Waste Collection Permits and Waste Facility Permits / Licences

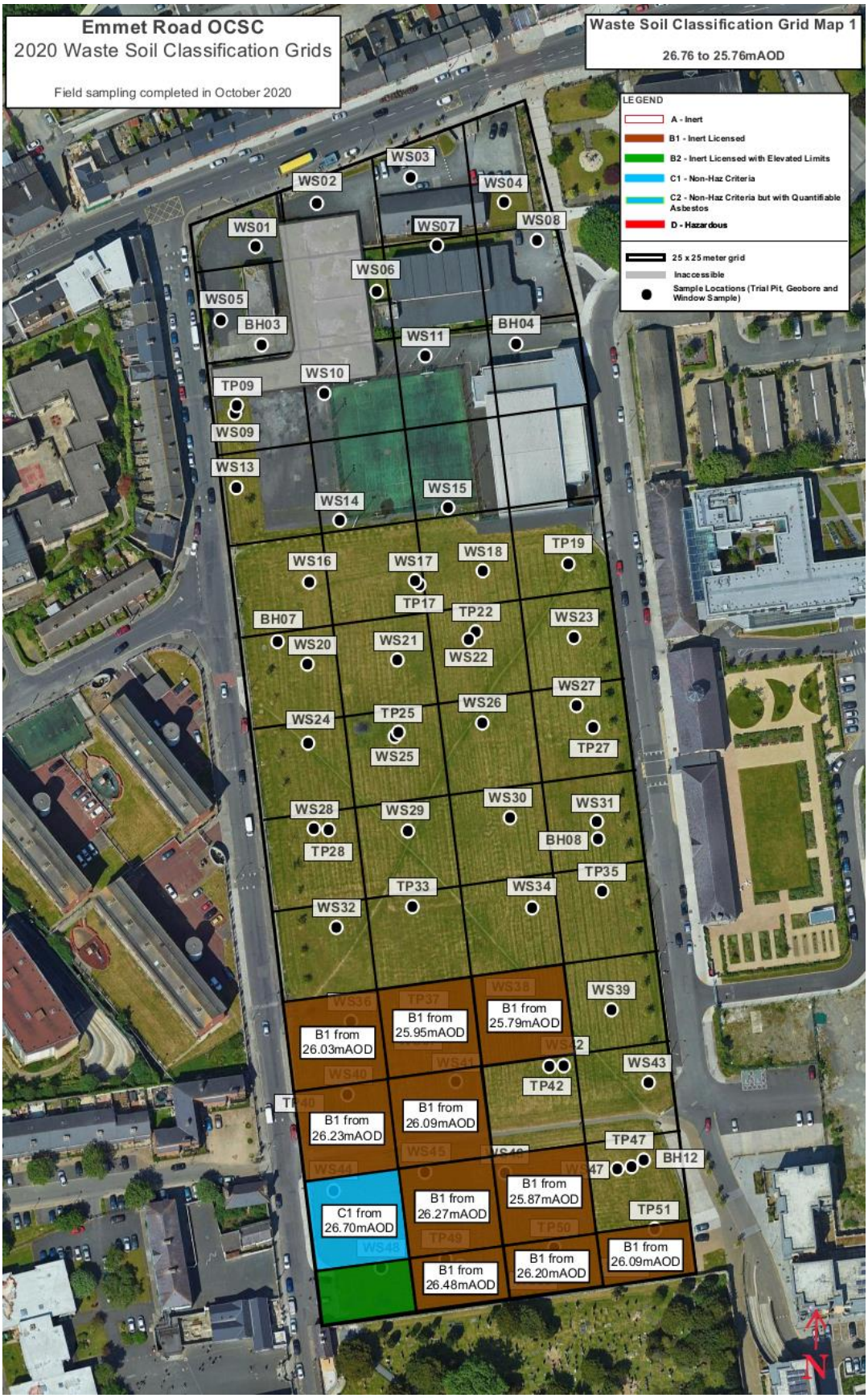
Contractor	Address & Contact	Waste Collection Permit #	Expiry Date	Receiving Facility	Waste Facility Permit / Licence #	Expiry Date
TBC	TBC	TBC	TBC	TBC	TBC	TBC

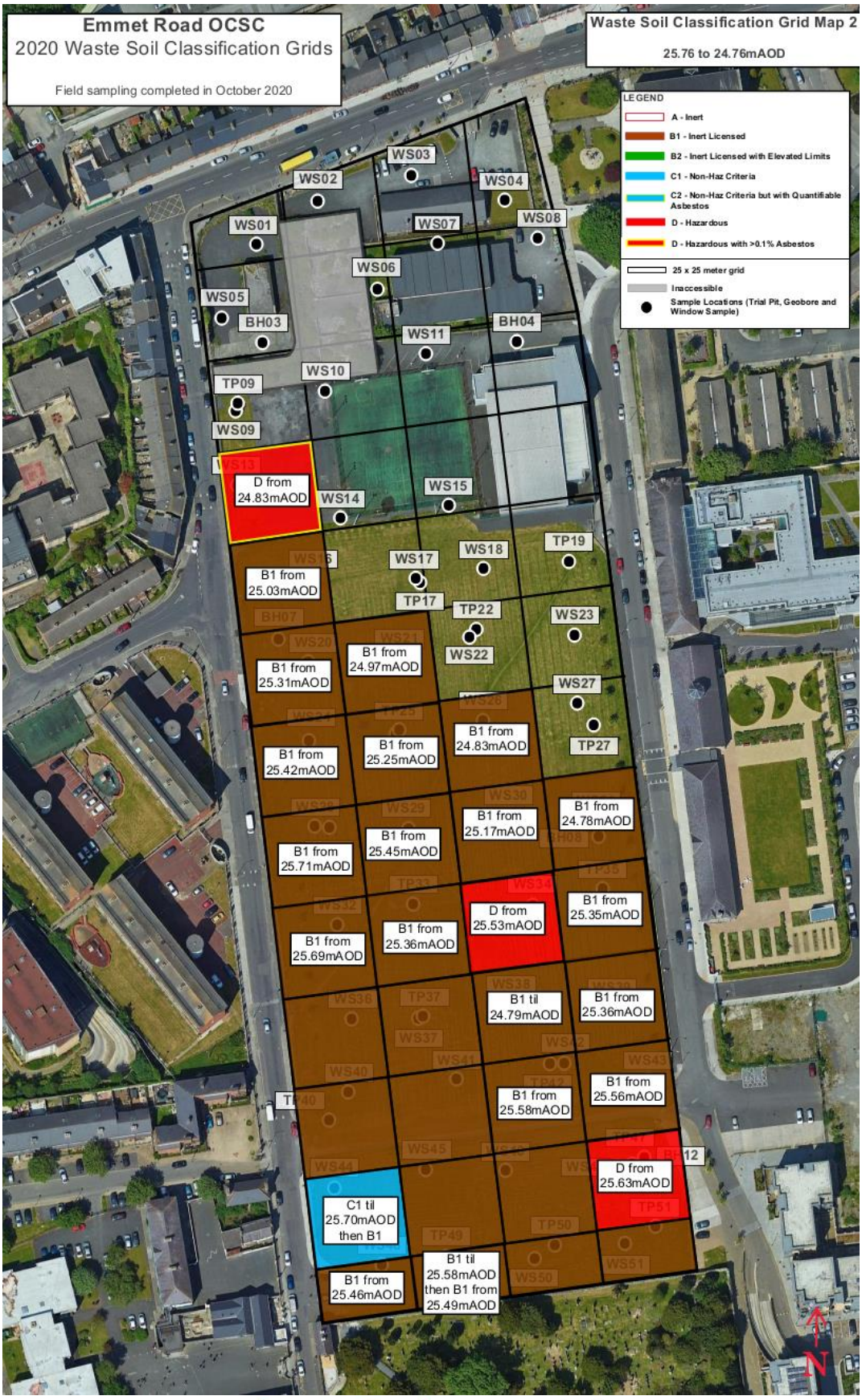
TBC To be confirmed by contractor when appointed.

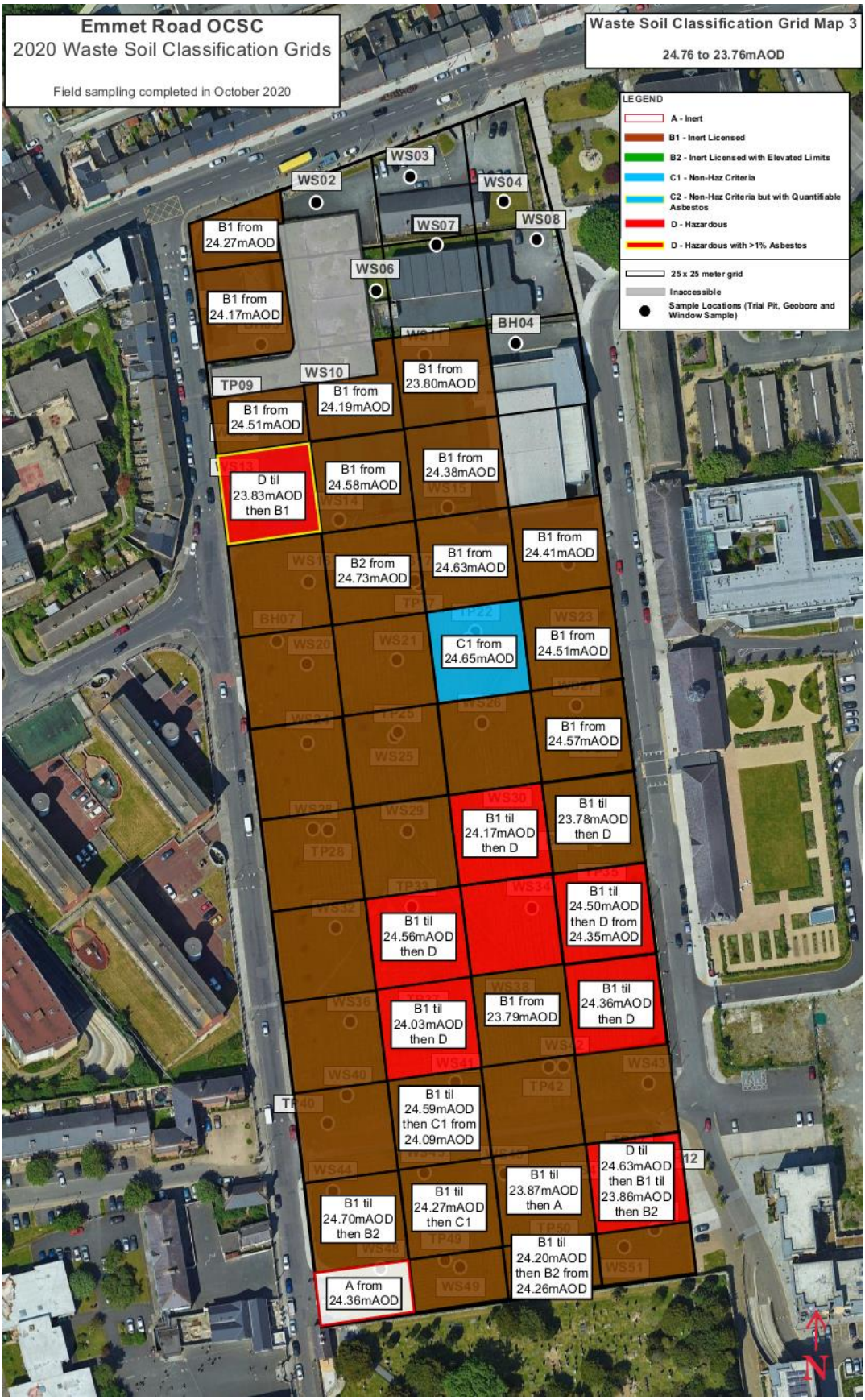
Figure 5 Example of Waste Tracking Template

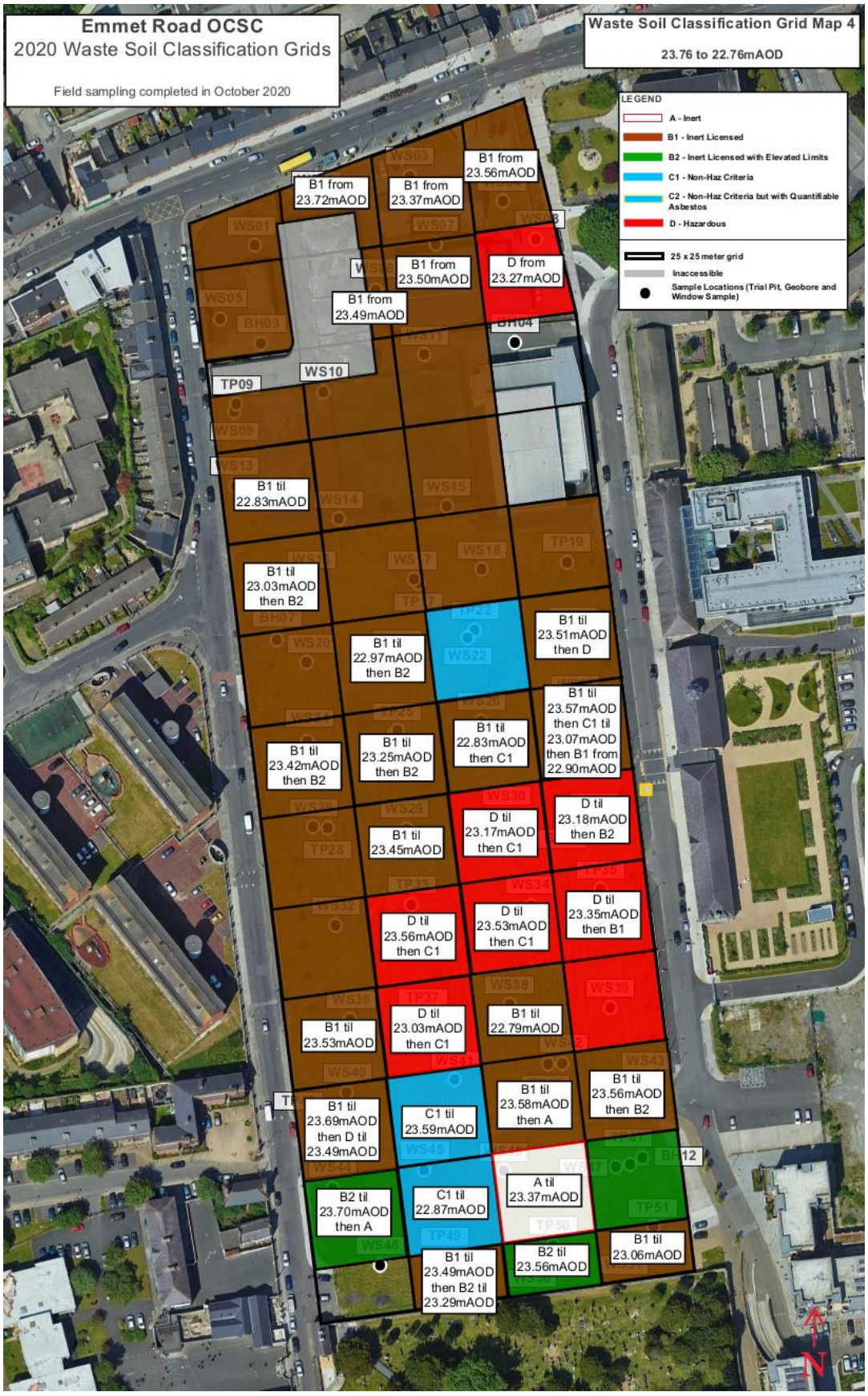
Waste Source	Waste Type	LoW Code	Haulier	Acceptance Facility Permit #	Tonnage	Date	Vehicle Reg NWCPO#
Site 1	Inert Soil & Stone	17 05 04	Murphy	Huntstown Quarry Wfpfg09000601	20	10.10.21	22D1234 NWCPO-ABC123
Site 1	Metals	17 04 07	O' Reilly	Hammond Lane P1002-01	10	11.10.21	22D5678 NWCPO-123ABC
Site 1	Concrete	17 01 01	Smyth	IMS Hollywood W0129-02	30	12.10.21	22D1234 NWCPO-ABC123

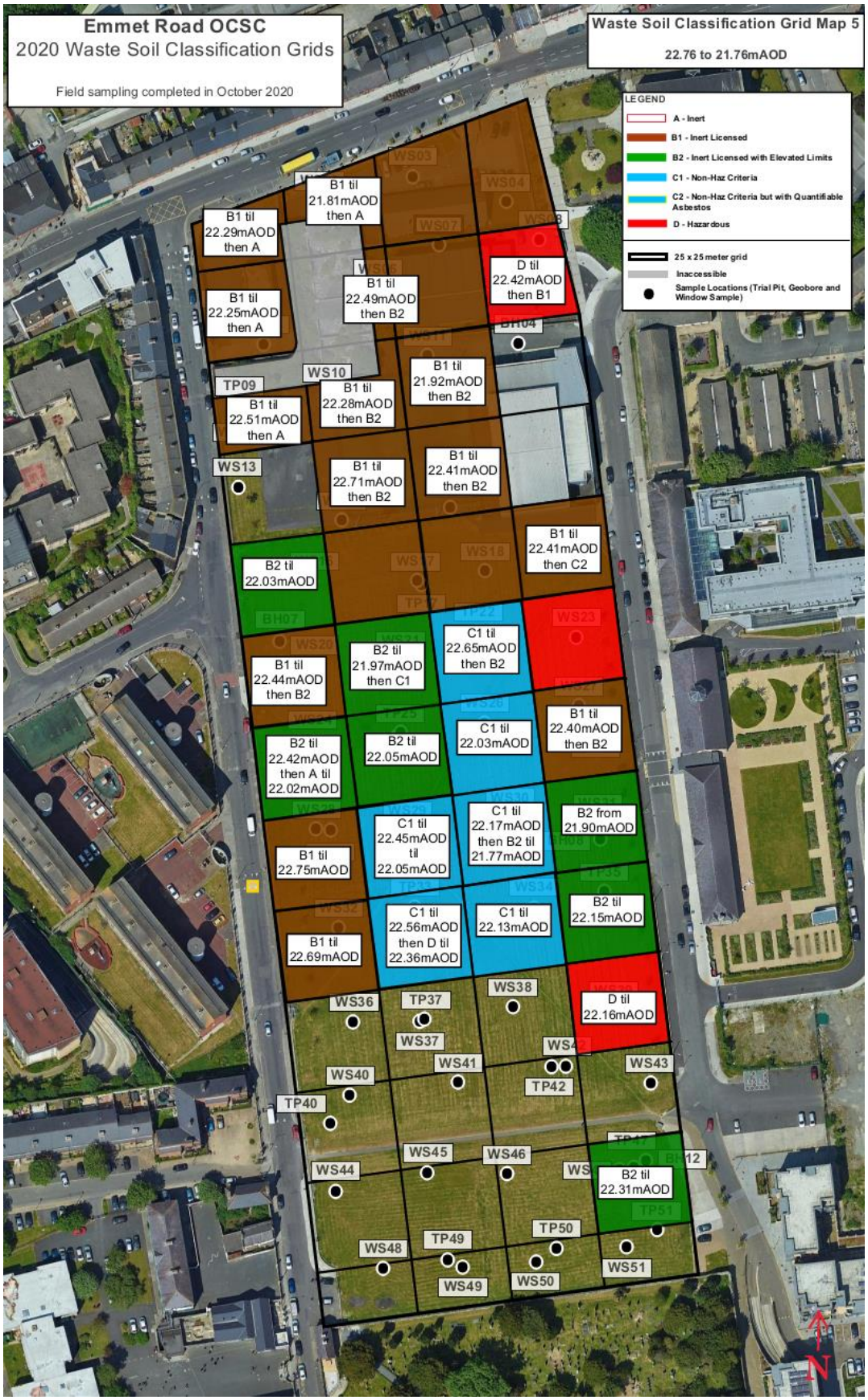
Appendix I
Waste Soil Classification Grids

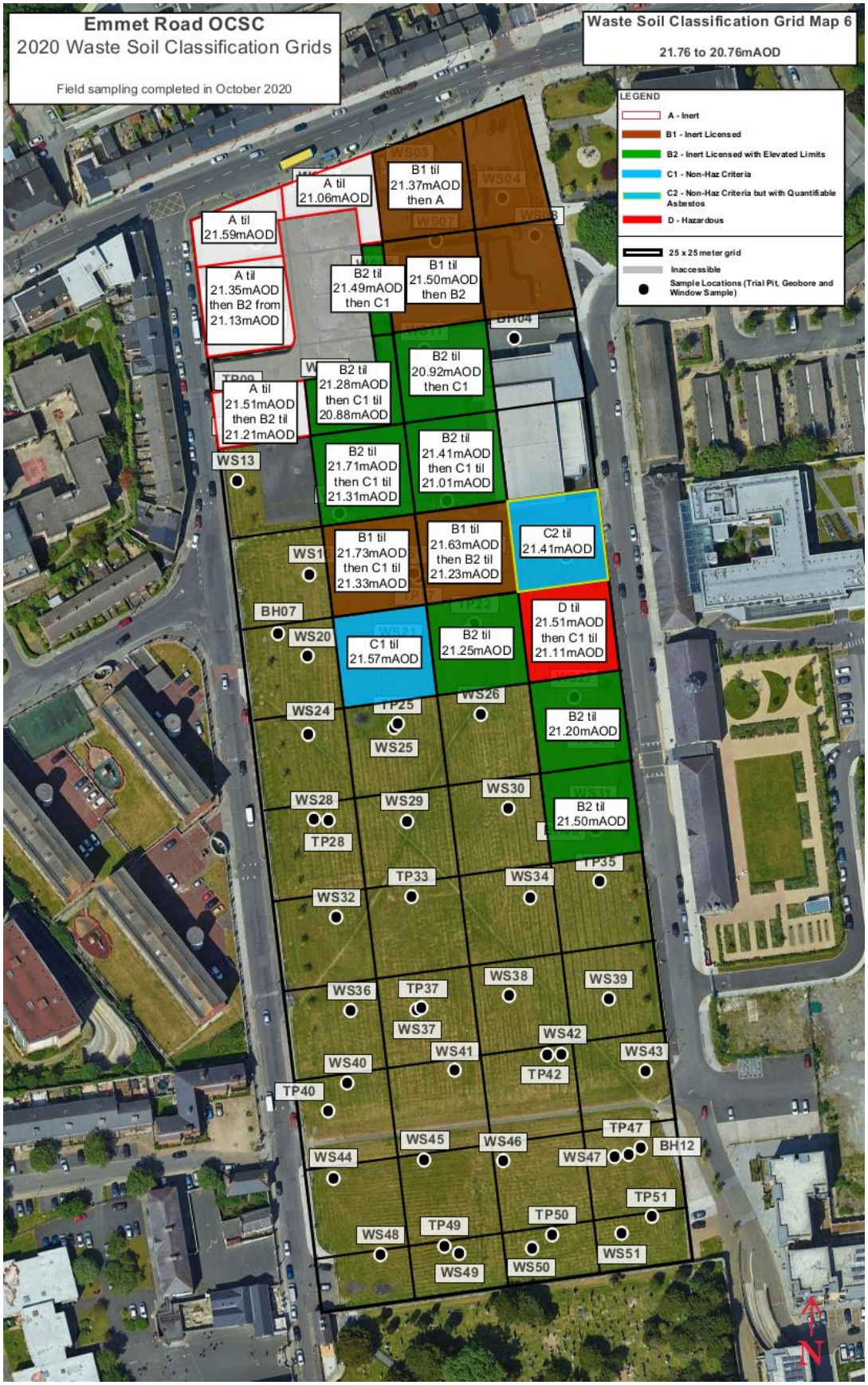

Emmet Road OCSC
2020 Waste Soil Classification Grids
Field sampling completed in October 2020
Waste Soil Classification Grid Map 1
26.76 to 25.76mAOD
LEGEND
A - Inert
B1 - Inert Licensed
B2 - Inert Licensed with Elevated Limits
C1 - Non-Haz Criteria
C2 - Non-Haz Criteria but with Quantifiable Asbestos
D - Hazardous
25 x 25 meter grid
Inaccessible
Sample Locations (Trial Pit, Geobore and Window Sample)
WS01
WS02
WS03
WS04
WS05
WS06
WS07
WS08
BH03
BH04
WS09
WS10
WS11
TP09
WS13
WS14
WS15
WS16
WS17
WS18
TP19
TP17
TP22
WS23
BH07
WS20
WS21
WS22
WS24
TP25
WS25
WS26
WS27
TP27
WS28
WS29
WS30
WS31
BH08
TP28
TP33
WS34
TP35
WS32
WS39
WS43
TP42
TP47
BH12
TP51
B1 from 26.03mAOD
B1 from 25.95mAOD
B1 from 25.79mAOD
B1 from 26.23mAOD
B1 from 26.09mAOD
B1 from 25.87mAOD
C1 from 26.70mAOD
B1 from 26.27mAOD
B1 from 26.48mAOD
B1 from 26.20mAOD
B1 from 26.09mAOD
N

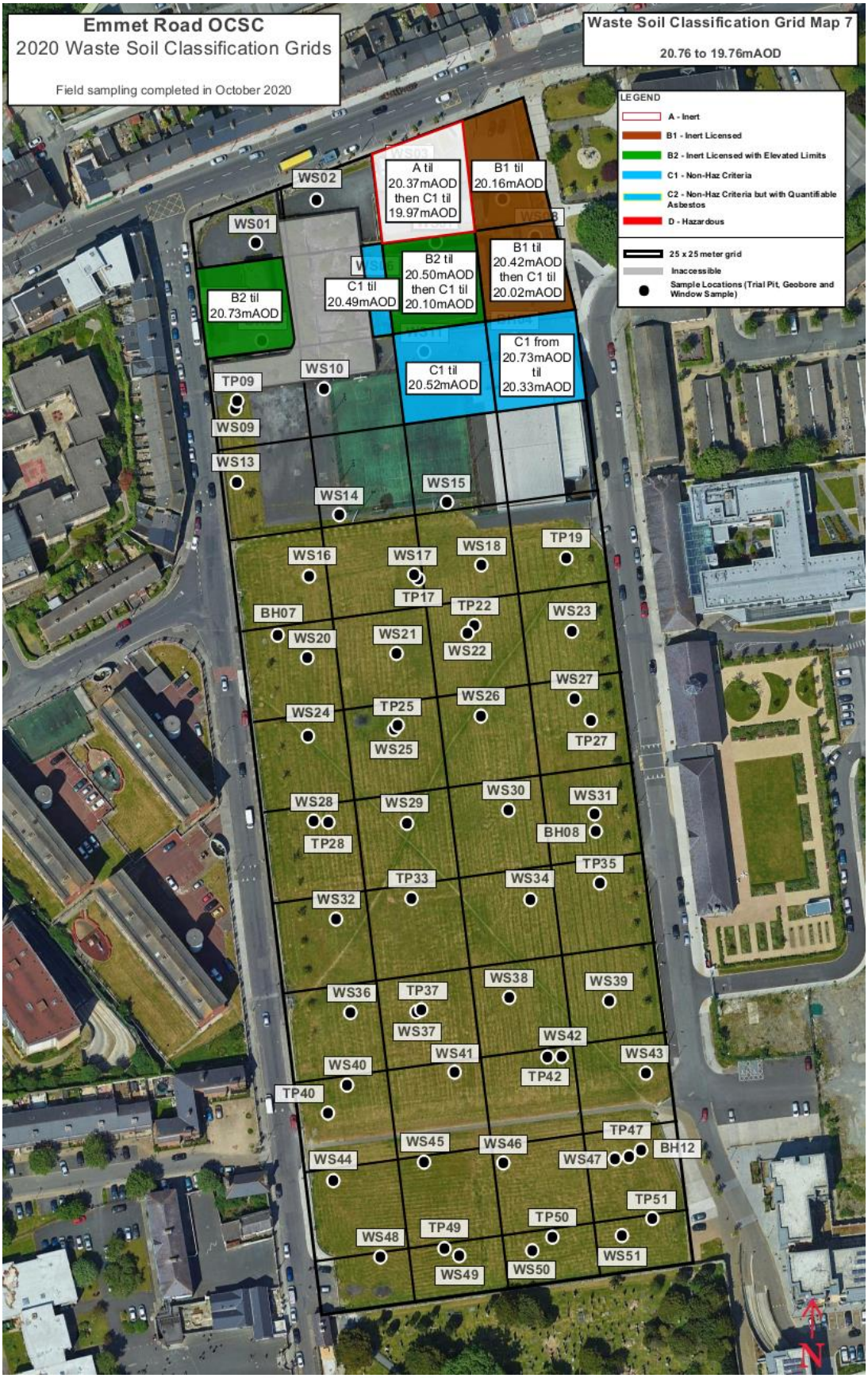

Emmet Road OCSC
2020 Waste Soil Classification Grids
Field sampling completed in October 2020
Waste Soil Classification Grid Map 2
25.76 to 24.76mAOD
LEGEND
A - Inert
B1 - Inert Licensed
B2 - Inert Licensed with Elevated Limits
C1 - Non-Haz Criteria
C2 - Non-Haz Criteria but with Quantifiable Asbestos
D - Hazardous
D - Hazardous with >0.1% Asbestos
25 x 25 meter grid
Inaccessible
Sample Locations (Trial Pit, Geobore and Window Sample)
WS01
WS02
WS03
WS04
WS05
WS06
WS07
WS08
BH03
BH04
WS10
WS11
TP09
WS09
WS13
WS14
WS15
WS16
WS17
WS18
TP19
TP17
TP22
WS22
WS23
WS27
TP27
WS20
WS21
WS26
TP25
WS24
WS29
WS30
TP33
WS32
WS34
WS38
TP37
WS37
WS39
WS40
WS41
WS42
WS43
TP42
TP40
WS44
WS45
WS46
WS47
TP49
TP50
TP51
WS50
WS51
D from 24.83mAOD
B1 from 25.03mAOD
B1 from 24.97mAOD
B1 from 25.31mAOD
B1 from 25.42mAOD
B1 from 25.25mAOD
B1 from 24.83mAOD
B1 from 24.78mAOD
B1 from 25.17mAOD
B1 from 25.45mAOD
B1 from 25.71mAOD
D from 25.53mAOD
B1 from 25.35mAOD
B1 from 25.36mAOD
B1 from 25.69mAOD
B1 til 24.79mAOD
B1 from 25.36mAOD
B1 from 25.58mAOD
B1 from 25.56mAOD
D from 25.63mAOD
C1 til 25.70mAOD then B1
B1 from 25.46mAOD
B1 til 25.58mAOD then B1 from 25.49mAOD
N


Emmet Road OCSC
2020 Waste Soil Classification Grids
Field sampling completed in October 2020
Waste Soil Classification Grid Map 3
24.76 to 23.76mAOD
LEGEND
A - Inert
B1 - Inert Licensed
B2 - Inert Licensed with Elevated Limits
C1 - Non-Haz Criteria
C2 - Non-Haz Criteria but with Quantifiable Asbestos
D - Hazardous
D - Hazardous with >1% Asbestos
25 x 25 meter grid
Inaccessible
Sample Locations (Trial Pit, Geobore and Window Sample)
WS02
WS03
WS04
WS06
WS07
WS08
BH04
WS10
TP09
B1 from 24.27mAOD
B1 from 24.17mAOD
B1 from 24.51mAOD
B1 from 24.19mAOD
B1 from 23.80mAOD
D til 23.83mAOD then B1
B1 from 24.58mAOD
B1 from 24.38mAOD
B2 from 24.73mAOD
B1 from 24.63mAOD
B1 from 24.41mAOD
C1 from 24.65mAOD
B1 from 24.51mAOD
B1 from 24.57mAOD
B1 til 24.17mAOD then D
B1 til 23.78mAOD then D
B1 til 24.56mAOD then D
B1 til 24.50mAOD then D from 24.35mAOD
B1 til 24.03mAOD then D
B1 from 23.79mAOD
B1 til 24.36mAOD then D
B1 til 24.59mAOD then C1 from 24.09mAOD
B1 til 24.70mAOD then B2
B1 til 24.27mAOD then C1
B1 til 23.87mAOD then A
D til 24.63mAOD then B1 til 23.86mAOD then B2
B1 til 24.20mAOD then B2 from 24.26mAOD
A from 24.36mAOD
N

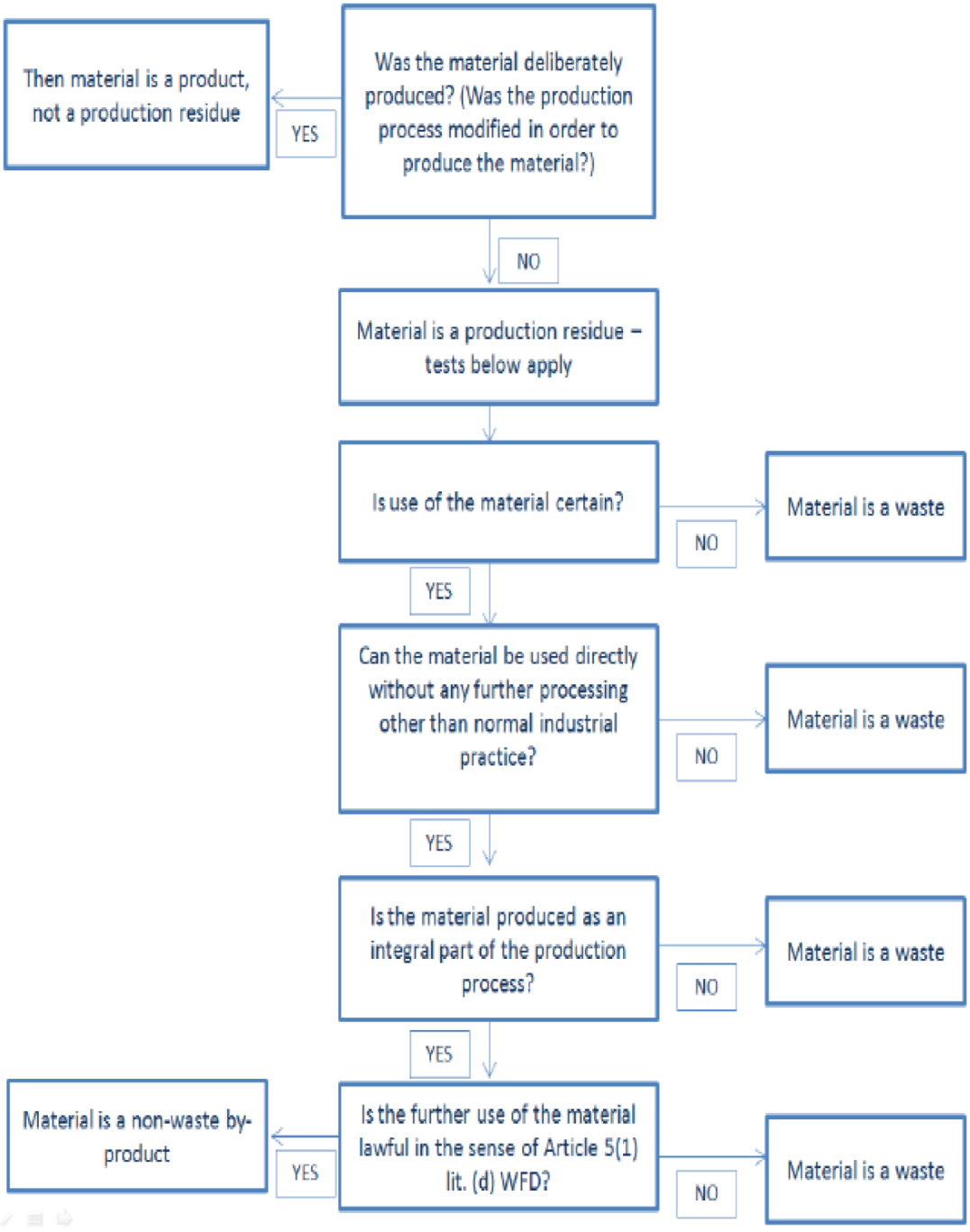

Emmet Road OCSC
2020 Waste Soil Classification Grids
Field sampling completed in October 2020
Waste Soil Classification Grid Map 4
23.76 to 22.76mAOD
LEGEND
A - Inert
B1 - Inert Licensed
B2 - Inert Licensed with Elevated Limits
C1 - Non-Haz Criteria
C2 - Non-Haz Criteria but with Quantifiable Asbestos
D - Hazardous
25 x 25 meter grid
Inaccessible
Sample Locations (Trial Pit, Geobore and Window Sample)
B1 from 23.72mAOD
B1 from 23.37mAOD
B1 from 23.56mAOD
B1 from 23.50mAOD
D from 23.27mAOD
B1 from 23.49mAOD
WS10
TP09
B1 til 22.83mAOD
B1 til 23.03mAOD then B2
B1 til 22.97mAOD then B2
B1 til 23.51mAOD then D
B1 til 23.57mAOD then C1 til 23.07mAOD then B1 from 22.90mAOD
B1 til 23.42mAOD then B2
B1 til 23.25mAOD then B2
B1 til 22.83mAOD then C1
B1 til 23.45mAOD
D til 23.17mAOD then C1
D til 23.18mAOD then B2
D til 23.56mAOD then C1
D til 23.53mAOD then C1
D til 23.35mAOD then B1
B1 til 23.53mAOD
D til 23.03mAOD then C1
B1 til 22.79mAOD
B1 til 23.69mAOD then D til 23.49mAOD
C1 til 23.59mAOD
B1 til 23.58mAOD then A
B1 til 23.56mAOD then B2
A til 23.37mAOD
B2 til 23.70mAOD then A
C1 til 22.87mAOD
B1 til 23.49mAOD then B2 til 23.29mAOD
B2 til 23.56mAOD
B1 til 23.06mAOD
N


Emmet Road OCSC
2020 Waste Soil Classification Grids
Field sampling completed in October 2020
Waste Soil Classification Grid Map 5
22.76 to 21.76mAOD
LEGEND
A - Inert
B1 - Inert Licensed
B2 - Inert Licensed with Elevated Limits
C1 - Non-Haz Criteria
C2 - Non-Haz Criteria but with Quantifiable Asbestos
D - Hazardous
25 x 25 meter grid
Inaccessible
Sample Locations (Trial Pit, Geobore and Window Sample)
B1 til 21.81mAOD then A
B1 til 22.29mAOD then A
B1 til 22.25mAOD then A
B1 til 22.49mAOD then B2
D til 22.42mAOD then B1
B1 til 21.92mAOD then B2
B1 til 22.28mAOD then B2
B1 til 22.51mAOD then A
B1 til 22.71mAOD then B2
B1 til 22.41mAOD then B2
B1 til 22.41mAOD then C2
B2 til 22.03mAOD
C1 til 22.65mAOD then B2
B2 til 21.97mAOD then C1
B1 til 22.44mAOD then B2
B1 til 22.40mAOD then B2
C1 til 22.03mAOD
B2 til 22.42mAOD then A til 22.02mAOD
B2 til 22.05mAOD
B2 from 21.90mAOD
C1 til 22.17mAOD then B2 til 21.77mAOD
C1 til 22.45mAOD til 22.05mAOD
B1 til 22.75mAOD
B2 til 22.15mAOD
C1 til 22.56mAOD then D til 22.36mAOD
C1 til 22.13mAOD
B1 til 22.69mAOD
D til 22.16mAOD
B2 til 22.31mAOD
WS03
WS04
WS07
WS10
WS11
WS13
WS18
WS20
WS23
WS27
WS32
WS34
WS36
TP37
WS37
WS38
WS40
WS41
WS43
TP40
TP42
WS44
WS45
WS46
WS48
TP49
TP50
WS49
WS50
WS51
TP51
BH04
BH07
TP09
N


Emmet Road OCSC
2020 Waste Soil Classification Grids
Field sampling completed in October 2020
Waste Soil Classification Grid Map 6
21.76 to 20.76mAOD
LEGEND
A - Inert
B1 - Inert Licensed
B2 - Inert Licensed with Elevated Limits
C1 - Non-Haz Criteria
C2 - Non-Haz Criteria but with Quantifiable Asbestos
D - Hazardous
25 x 25 meter grid
Inaccessible
Sample Locations (Trial Pit, Geobore and Window Sample)
A til 21.06mAOD
B1 til 21.37mAOD then A
A til 21.59mAOD
A til 21.35mAOD then B2 from 21.13mAOD
B2 til 21.49mAOD then C1
B1 til 21.50mAOD then B2
B2 til 20.92mAOD then C1
A til 21.51mAOD then B2 til 21.2mAOD
B2 til 21.28mAOD then C1 til 20.88mAOD
B2 til 21.41mAOD then C1 til 21.01mAOD
B2 til 21.71mAOD then C1 til 21.31mAOD
B1 til 21.73mAOD then C1 til 21.33mAOD
B1 til 21.63mAOD then B2 til 21.23mAOD
C2 til 21.41mAOD
D til 21.51mAOD then C1 til 21.11mAOD
C1 til 21.57mAOD
B2 til 21.25mAOD
B2 til 21.20mAOD
B2 til 21.50mAOD
WS1
WS13
WS20
WS24
WS25
WS26
WS28
WS29
WS30
TP28
TP33
WS32
WS34
TP35
WS36
TP37
WS38
WS39
WS37
WS42
WS41
WS43
WS40
TP42
TP40
WS45
WS46
TP47
BH12
WS44
WS47
TP51
TP50
TP49
WS48
WS51
WS49
WS50
BH04
BH07
TP25
N


Emmet Road OCSC
2020 Waste Soil Classification Grids
Field sampling completed in October 2020
Waste Soil Classification Grid Map 7
20.76 to 19.76mAOD
LEGEND
A - Inert
B1 - Inert Licensed
B2 - Inert Licensed with Elevated Limits
C1 - Non-Haz Criteria
C2 - Non-Haz Criteria but with Quantifiable Asbestos
D - Hazardous
25 x 25 meter grid
Inaccessible
Sample Locations (Trial Pit, Geobore and Window Sample)
A til 20.37mAOD then C1 til 19.97mAOD
B1 til 20.16mAOD
B1 til 20.42mAOD then C1 til 20.02mAOD
B2 til 20.50mAOD then C1 til 20.10mAOD
C1 til 20.49mAOD
B2 til 20.73mAOD
C1 from 20.73mAOD til 20.33mAOD
C1 til 20.52mAOD
WS01
WS02
WS09
WS10
WS13
WS14
WS15
WS16
WS17
WS18
WS20
WS21
WS22
WS23
WS24
WS25
WS26
WS27
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WS44
WS45
WS46
WS47
WS48
WS49
WS50
WS51
TP09
TP17
TP19
TP22
TP25
TP27
TP28
TP33
TP35
TP37
TP40
TP42
TP47
TP49
TP50
TP51
BH07
BH08
BH12
N

Appendix II
Decision tree for determining whether a material is a by-product



Appendix D2 Operational Waste Management Plan (OWMP) prepared by Byrne Environmental

Byrne Environmental
CONSULTING LTD

ENVIRONMENTAL MONITORING, ASSESSMENT & MANAGEMENT
Acoustics, Air Quality, Environmental Impact Assessment
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OPERATIONAL WASTE MANAGEMENT PLAN

FOR

DUBLIN CITY COUNCIL

RELATING TO

EMMET ROAD MIXED-USE DEVELOPMENT

27th September 2022



Ian Byrne MSc, MIOA, Dip Environmental & Planning Law

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Appendix I Bin Store and Bin Collection Locations

1.0 INTRODUCTION

This document presents the Operational Waste Management Plan (OWMP) for the control, management and monitoring of waste associated with a proposed mixed-use development at Emmet Road, Dublin 8.

The development will comprise 578 no. apartments, community facilities (including Library/Community Hub, Creche, Retail/Retail services and Café units), a supermarket, a public plaza fronting onto Emmet Road.

The **Objective of this Waste Management Plan** for the operation of the development is to maximise the quantity of waste recycled by providing sufficient waste recycling infrastructure, and to provide waste reduction initiatives and waste collection and waste management information to the residents of the development.

The **Goal of this Waste Management Plan** is to achieve a residential recycling rate of 50% of managed municipal waste in accordance with the current *Eastern-Midlands Region Waste Management Plan.*

The Waste Management Plan shall be integrated into the design and operation of the development to ensure the following:

- That sufficient waste management infrastructure is included in the design of the development to assist residents minimise the generation of mixed waste streams.
- That the principle of waste segregation at source is the integrated into the development by the provision of separate bin systems, signage and notifications.
- That the development's facility management company shall record the volumes and types of waste generated by the development to assess on an annual basis if the 50% recycling rate is being achieved.
- That all waste materials generated by site activities are removed from site by appropriately permitted waste haulage contractors and that all wastes are disposed of at approved waste licensed / permitted facilities in compliance with the Waste Management Act 1996 and all associated Waste Management Regulations.
- That the Facilities Management Company will manage wastes storage areas and provide annual bulky waste collection services to facilitate residents.

2.0 OPERATIONAL PHASE WASTE MANAGEMENT PLAN

This Operational Waste Management Plan has been prepared in accordance with the current *Eastern-Midlands Region Waste Management Plan* which defines the following Waste Targets:

- 1% reduction per annum in the quantity of household waste generated per capita over the period of the plan.

- Achieve a recycling rate of 50% of managed municipal waste.

- Reduce to 0% the direct disposal of unprocessed residual municipal waste to landfill.

The Operational Phase of the Waste Management Plan has been prepared with regard to relevant waste management policies and objectives of the *Dublin City Council Development Plan 2016 – 2022* as detailed below:

It is the Policy of Dublin City Council:	
SI19:	To support the principles of good waste management and the implementation of best international practice in relation to waste management in order for Dublin city and the region to become self-reliant in terms of waste management.
SI20:	To prevent and minimise waste and to encourage and support material sorting and recycling.
SI21:	To minimise the amount of waste which cannot be prevented and ensure it is managed and treated without causing environmental pollution.
SI22:	To ensure that effect is given as far as possible to the 'polluter pays' principle.
It is an Objective of Dublin City Council:	
SIO15:	To provide for municipal/public recycling and recovery facilities in accessible locations throughout the city.
SIO16:	To require the provision of adequately-sized recycling facilities in new commercial and large-scale residential developments, where appropriate.
SIO19:	To implement the Eastern-Midlands Regional Waste Management Plan 2015–2021 and achieve the plan targets and objectives.

The communal waste storage areas shall be designed in accordance with *Appendix 10 – Guidelines for Waste Storage Facilities – Dublin City Council Development Plan 2016 – 2022 as reproduced below:*

10.1 Standards for Apartments

Waste storage issues should be considered at the initial apartment design stage to ensure access for all (including people with disabilities) in a brightly lit, safe and well-signed area, spacious enough for easy manoeuvrability, good ventilation and ready access if required for the control of potential vermin. Where storage is provided in a basement area, sufficient access and egress must be provided to enable receptacles to be moved easily from the storage area to an appropriate collection point on the public street nearby.

The following are also requirements:

- Receptacles that are designed for reuse, with the exception of a specific area designated by a local authority as being only suitable for the collection of non-reusable receptacles such as bags, ideally of 1,100 litre capacity, must be used
- To provide a three-bin collection system for residents in communal collection schemes, for each type of waste: general waste, dry recyclables and organic food/garden waste. A proposal on the three-bin system including bin quantity, type and frequency of collection must be submitted in writing to the Waste Regulation Unit in Dublin City Council for agreement.
- Sufficient space must be provided to accommodate the collection of dry recyclables and organic kitchen waste/ garden waste.
- Suitable wastewater drainage points should be installed in the receptacle bin storage area for cleaning and disinfecting purposes.

The Operational Phase of the Waste Management Plan has also been prepared with regard to relevant waste management policies and objectives of the draft *Dublin City Council Development Plan 2022 – 2028* as detailed below:

It is the Policy of Dublin City Council:	
SI27	**Sustainable Waste Management** To support the principles of the circular economy, good waste management and the implementation of best practice in relation to waste management in order for Dublin City and the Region to become self-sufficient in terms of resource and waste management and to provide a waste management infrastructure that supports this objective.
SI28	**Sustainable Waste Management** To prevent and minimise waste generation and disposal, and to prioritise prevention, recycling, preparation for reuse and recovery in order to safeguard against environmental pollution.
SI29	**Segregated Storage and Collection of Waste Streams** To require new commercial and residential developments, to include adequate and easily accessible storage space that supports the separate collection of as many waste and recycling streams as possible, but at a minimum general domestic waste, dry recyclables and food waste as appropriate (for further guidance see Appendix 7).
SI30	**Waste Management in Apartment Schemes** To require that the storage and collection of mixed dry recyclables, organic and residual waste materials within proposed apartment schemes have regard to the Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities 2018 (or and any future updated versions of these guidelines produced during the lifetime of this plan).
SI31	**Provision of Public Recycling Facilities in Large Retail Developments** To require new retail developments in excess of 1,000sq.m (net) in size to provide for a local bring centre/ public reuse and recycling facilities on-site, where feasible, in line with the principles of the 15-minute city. The facilities should be adequately-sized and located to be easily accessible to the general public and should specifically provide for textile and glass bottle recycling (for further guidance see Section 15.18.3).

Appendix 7 – 1.0 Design Considerations – 1.1 Standards for Residential Developments / Apartments and 1.2 Standards for Commercial/Industrial Developments of the *Draft Dublin City Council Development Plan 2022 – 2028* is reproduced below.

Appendix 7 1.1 Standards for Residential Developments / Apartments

Waste storage issues should be considered at the initial design and pre planning stage of all residential developments to ensure access for all (including people with disabilities), in a brightly lit, safe and well-signed area, spacious enough for easy manoeuvrability, with good ventilation and ready access if required for the control of potential vermin. Where storage is provided in a basement area, sufficient access and egress must be provided to enable receptacles to be moved easily from the storage area to an appropriate collection point on the public street nearby. Provision shall also be made for the storage and collection of waste materials in apartment schemes in accordance with the Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities 2018.

The following are also requirements:

- Receptacles that are designed for reuse, with the exception of a specific area designated by a local authority as being only suitable for the collection of non-reusable receptacles such as bags, ideally of 1,100 litre capacity, must be used.
- To provide a three-bin collection system for residents in communal collection schemes, for each type of waste: general waste, dry recyclables and organic food/garden waste. A proposal on the three-bin system including bin quantity, type and frequency of collection must be submitted in writing to the Waste Regulation Unit in Dublin City Council for agreement.
- Sufficient space must be provided to accommodate the collection of dry recyclables and organic kitchen waste/ garden waste.
- Suitable wastewater drainage points should be installed in the receptacle bin storage area for cleaning and disinfecting purposes.

Appendix 7 1.2 Standards for Commercial / Industrial Developments

- Receptacles that are designed for reuse, with the exception of in specific areas designated by a local authority as being only suitable for the collection of non-reusable receptacles such as bags, ideally of 1,100 Litre capacity, must be used.
- Adequate storage space for a minimum of one No. 1,100 Litre receptacle.
- Sufficient space must be provided to accommodate the collection of dry recyclables and organic kitchen waste/ garden waste.
- Adequate space and height for a standard refuse collection vehicle (RCV) to access site.
- Sufficient access and egress must be provided to enable receptacles to be moved easily from the storage area to an appropriate collection point on the public street nearby.
- Receptacle storage areas must not be on a public street nor be visible or accessible from there.
- The receptacle storage areas should be designed so that each bin within the storage area is accessible to occupants/ employees of the development (including people with disabilities).
- Suitable wastewater drainage points should be installed in the bin storage area for cleaning and disinfecting purposes.
- Waste storage areas should not present any safety risks to users and should be well-lit.
- Adequate ventilation of waste storage areas so as to minimise odours and potential nuisance from vermin/flies.

Section 3.0 below defines how the management of domestic wastes including 3 - bin waste systems for the segregation of waste at source together with the communal waste storage areas have been designed with regard to *Section's 4.8 and 4.9 Refuse Storage* of *The Department of Housing, Planning and Local Government – Sustainable Urban Housing : Design Standards for New Apartments – Guidelines for Planning Authorities. 2018 which is reproduced below.*

Refuse Storage

4.8 Provision shall be made for the storage and collection of waste materials in apartment schemes. Refuse facilities shall be accessible to each apartment stair/ lift core and designed with regard to the projected level of waste generation and types and quantities of receptacles required. Within apartments, there should be adequate provision for the temporary storage of segregated materials prior to deposition in communal waste storage and in-sink macerators are discouraged as they place a burden on drainage systems.

4.9 The following general design considerations should be taken into account in the provision of refuse storage facilities:

- Sufficient communal storage area to satisfy the three-bin system for the collection of mixed dry recyclables, organic waste and residual waste;
- In larger apartment schemes, consideration should also be given to the provision of separate collection facilities for other recyclables such as glass and plastics;
- Waste storage areas must be adequately ventilated so as to minimise odours and potential nuisance from vermin/flies and taking account the avoidance of nuisance for habitable rooms nearby;
- Provision in the layout for sufficient access for waste collectors, proximity of, or ease of access to, waste storage areas from individual apartments, including access by disabled people;
- Waste storage areas should not present any safety risks to users and should be well-lit;
- Waste storage areas should not be on the public street, and should not be visible to or accessible by the general public. Appropriate visual screening should be provided, particularly in the vicinity of apartment buildings;
- Waste storage areas in basement car parks should be avoided where possible, but where provided, must ensure adequate manoeuvring space for collection vehicles;
- The capacity for washing down waste storage areas, with wastewater discharging to the sewer.

Ref. Section's 4.8 and 4.9 Refuse Storage of *The Department of Housing, Planning and Local Government – Sustainable Urban Housing : Design Standards for New Apartments – Guidelines for Planning Authorities. 2018.*

The OWMP has also been prepared with regard to *British Standard BS 5906:2005 Waste Management in Buildings-Code of Practice* which provides guidance on methods of storage, collection, segregation for recycling and recovery for residential building.

Key Aspects to achieve Waste Targets

- All residential apartment units shall be provided with information on the segregation of waste at source and how to reduce the generation of waste by the Facilities Management Company.

- All units shall have sufficient space for the storage of a 3-bin waste system within the kitchen areas to facilitate the segregation of waste at source.

- All waste handling and storage activities shall occur in the dedicated communal apartment waste storage areas.

- The development's Facility Management Company shall appoint a dedicated Waste Services Manager to ensure that waste is correctly and efficiently managed throughout the development.

- The Operational Phase of the Waste Management Plan is defined by the following stages of waste management for both the residential and commercial aspects of the development:

  Stage 1 Occupier Source Segregation
  Stage 2 Occupier Deposit and Storage
  Stage 3 Bulk Storage and On-Site Management
  Stage 4 On-site treatment and Off-Site Removal
  Stage 5 End Destination of wastes

The operational phase of the WMP has been prepared with regard to *British Standard BS 5906:2005 Waste Management in Buildings-Code of Practice* which provides guidance on methods of storage, collection, segregation for recycling and recovery for residential building and with consideration of Dublin City Council's domestic waste reduction and segregation at source requirements.

3.0 RESIDENTIAL UNITS DOMESTIC WASTE MANAGEMENT

The Facilities Management Company shall be responsible for the implementation of all aspects of the Domestic Waste Management Plan which are detailed as follows.

The Facilities Management Company shall employ an appropriately qualified and experienced staff member who will be responsible for all aspects of waste management at the development.

All accommodation units shall be provided with a Waste Management Information document, prepared by the Facilities Management Company, which shall clearly state the methods of source waste segregation, storage, and recycling initiatives that shall apply to the Management of the development. This Information document shall be issued to all residential units on an annual basis.

Residential Units
The design of all residential units shall provide sufficient internal kitchen space for the storage of up to 10kg of general domestic waste, green recyclable waste and organic waste. Each apartment / unit shall include waste storage bins which will be of such a size that will allow their easy manual handling to be brought to the communal waste storage areas.

It shall be the responsibility of the Facilities Management Company to ensure that appropriate signage is provided in each apartment lobby/entrance hall notifying apartment residents of their obligations to recycle domestic waste items in accordance with the requirements of the contracted Waste Collection contractor and to inform residents of the location of the closest civic amenity centres and bring- banks (Grangegorman and Collins Avenue) and the nature of waste material that can be accepted.

It shall be the responsibility of the Facilities Management Company to ensure that all domestic waste generated by apartment residents is managed to ensure correct storage prior to collection by an appropriately waste permitted waste collection company on a weekly basis.

Image of typical domestic kitchen 3 bin waste systems





Apartments - Common Waste Storage Areas
The residential apartment blocks shall be served by communal waste storage areas at ground level and shall include clearly visible guidelines on the appropriate segregation of different waste types.

Signage to inform residents indicating the location of the local Recycling Centres and the nature of waste materials that can be brought and deposited there.

Signage to inform residents of their obligations to reduce waste, segregate waste within the home and dispose of waste in the correct bin will be clearly posted within the waste storage area.

All waste storage bins shall be clearly labelled with exactly what type of waste materials may be deposited within them.
The communal waste storage areas shall be designed to include the following aspects:

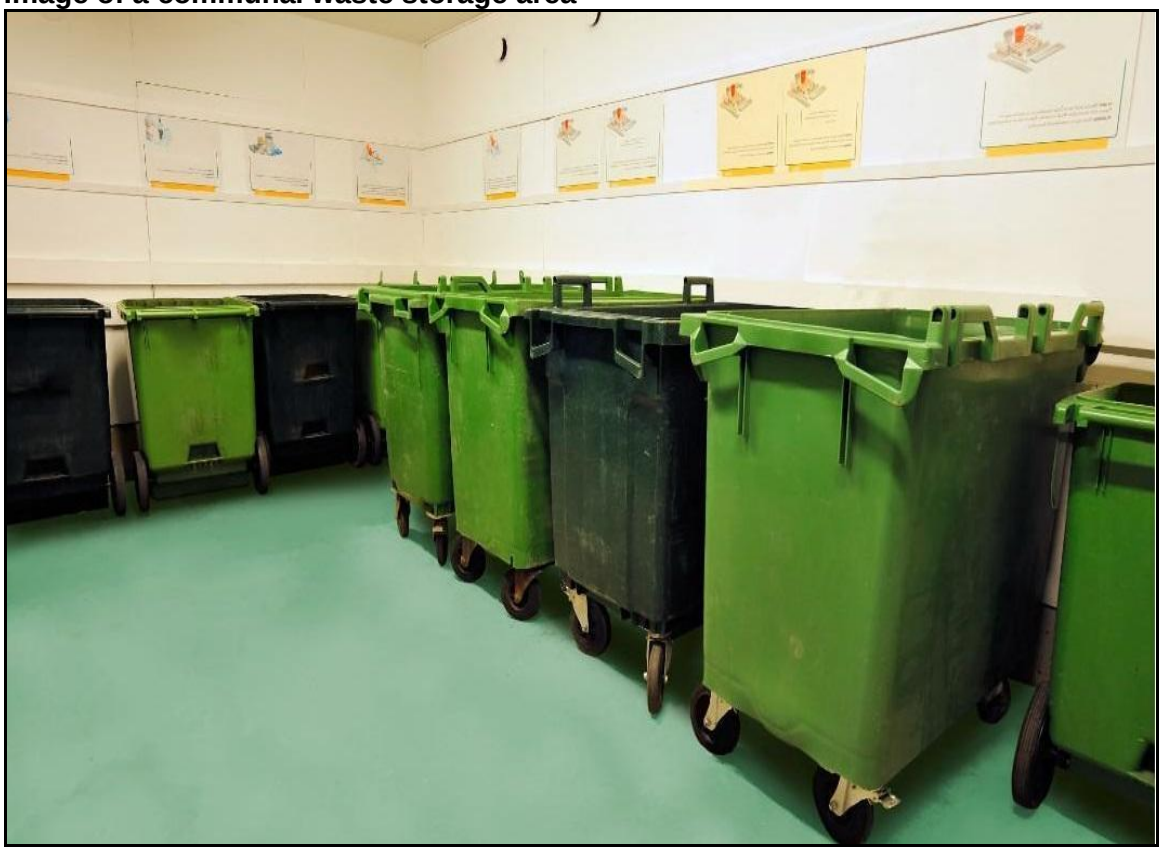
- A defined pedestrian route shall be marked from the apartment buildings to the waste storage area.
- A non-slip surface shall be provided within the waste storage area.
- The waste storage area shall be located in a delineated area adjacent the apartment building.
- The waste storage shall be passively ventilated.
- The waste storage area shall be fitted with sensor lighting.
- The waste storage area shall be fitted with CCTV cameras and associated signage.
- The waste storage area shall be designed to provide safe access from the apartment units by mobility impaired persons.
- A dedicated and clearly labelled area shall be provided in which mobility impaired persons may place wastes into receptacles at a lower level which will be subsequently transferred to the bulk storage bins on a daily basis by the Facilities Management Company.
- The waste storage area shall include ground drainage to allow for its regular cleaning and disinfection.
- The Facilities Management Company shall engage a mobile bin cleaning service provider to clean waste bins on a monthly basis.
- Sufficient domestic waste storage areas shall be provided throughout the development.
- Each communal waste storage area shall contain brown organic waste bulk bins. Appropriate signage shall be placed on all brown bins informing residents of the exact nature of organic waste that can be placed in the bin. Signage will also state that all organic waste must be placed within biodegradable bags before placing in the bulk bin.
- Each communal waste storage area shall contain a biodegradable waste bag dispenser which will facilitate and encourage residents of apartments and duplexes to separately segregate food and organic waste within their apartments in a dedicated bin.
- A waste battery box shall be provided in each bin store area which shall be periodically emptied by the Facility Management Company at a facility that accepts waste batteries.

The Facilities Management Company shall conduct at least weekly inspections of the waste storage areas and shall sign a weekly check list which shall be displayed within the area.

The Facilities Management Company shall ensure that an adequate supply of biodegradable organic waste bags are in place at all times.

It shall be the responsibility of the Facilities Management Company to maintain and ensure the cleanliness of all waste storage areas to prevent odours and the attraction of vermin.

Image of a communal waste storage area



A battery box and a WEEE Bin shall also be provided in the communal waste storage areas, an example of which is shown in the following image. This shall be managed by a specialist waste contractor who will be responsible for its routine collection.



Waste Collection Contractor
The Facilities Management Company shall appoint a Waste Collection contractor capable of collecting Grey (mixed waste bins), Green (dry recyclable bins) and Brown (organic waste bins) from the waste storage areas on a weekly basis. The name of the waste collection contractor once appointed shall be forwarded to the Environment Department of Dublin City Council.

Waste Management & Record Keeping
The Facilities Management Company shall maintain a weekly register detailing the quantities and breakdown of general mixed domestic waste, recyclable waste and organic waste wastes removed from the development. Supporting documentation shall be provided by the Waste Collection Contractor on a monthly basis. This will allow for waste recycling targets to be tracked to achieve the 50% recycling target.

The Facilities Management Company shall prepare an annual information report for all residential units detailing the quantities and waste types generated by the development for the previous year. The report shall include reminder information on the correct segregation at source procedures and the correct placement of wastes in the waste storage area. Other aspects of ongoing waste management continuous improvement shall also be stated. This annual report shall also be submitted to Dublin City Council's Environment Department.

Annual Bulky Waste Collections
The Facilities Management Company shall provide a bulky waste collection and transport service to the closest recycling centres on an annual basis which will allow residents to have bulky items such as appliances and furniture removed from their houses and apartments and transported to a licenced facility. This initiative will also reduce the potential for illegal waste collections and fly-tipping in the local area.

4.0 WASTE MANAGEMENT DUTIES OF THE FACILITY MANAGEMENT COMPANY

The Facilities Management Company shall be responsible for the implementation of all aspects of the Domestic and Amenity Areas Waste Management Plan which are detailed as follows:

- The Facilities Management Company shall employ an appropriately qualified and experienced staff member who will be responsible for all aspects of waste management at the development.

- All accommodation units shall be provided with a Waste Management Information document, prepared by the Facilities Management Company, which shall clearly state the methods of source waste segregation, storage, and recycling initiatives that shall apply to the Management of the development. This Information document shall be issued to all residential units on an annual basis.

- It shall be the responsibility of the Facilities Management Company to ensure that appropriate signage is provided in each apartment lobby/entrance halls notifying apartment residents of their obligations to recycle domestic waste items at source.

- It shall be the responsibility of the Facilities Management Company to ensure that all domestic waste generated by apartment residents is managed to ensure correct storage prior to collection by an appropriately waste permitted waste collection company on a weekly basis.

- The Facilities Management Company shall conduct daily inspections of the waste storage areas and shall sign a daily check list which shall be displayed within the area.

- The Facilities Management Company shall ensure that an adequate supply of biodegradable organic waste bags are in place at all times.

- It shall be the responsibility of the Facilities Management Company to maintain and ensure the cleanliness of all waste storage areas to prevent odours and the attraction of vermin.

- The Facilities Management Company shall engage a specialist cleaning contractor on a regular basis to clean and sterilise all communal waste storage areas.

- The name of the waste collection contractor(s) once appointed shall be forwarded to the Environment Department of Dublin City Council.

- The Facilities Management Company shall be responsible for the maintenance of all waste bins located in the following communal spaces :

- Community Facilities
- Landscaped areas

- The Facilities management company shall manage waste generated at all communal spaces and shall similarly be segregated into grey (mixed waste), green (dry recyclable), brown (organic) and cardboard packaging waste.

5.0 WASTE MANAGEMENT IN COMMUNAL AMENITY AREAS

The communal areas of the development will include 3-bin waste segregation systems.

Colour coded and clearly labelled waste bins for recyclable materials, organic materials and non-recyclable general waste shall be installed in communal areas/rooms for easy and clear segregation by residents, an example of which is shown below.

Image of a communal space waste segregation recycling bin



6.0 WASTE MANAGEMENT AT THE CRECHE

Waste generated by the creche shall be separately managed by the operators of the creche who shall engage a commercial waste contractor to collected waste generated.

Wastes from the creche shall be stored within the curtilage of the premises and shall be segregated into grey (mixed waste), green (dry recyclable), brown (organic) and cardboard packaging waste.

7.0 WASTE MANAGEMENT AT THE RETAIL / COMMERCIAL UNITS

Waste generated by the commercial and retail units shall be managed by the operators of the units who shall engage a commercial waste contractor to collected waste generated.

Wastes from these units shall be stored within a dedicated, separate and lockable commercial waste areas within the basement bin store and shall be segregated into grey (mixed waste), green (dry recyclable), brown (organic) and cardboard packaging waste.

8.0 WASTE TYPES & QUANTITIES GENERATED

Residential Waste

The most recent *EPA National Waste Statistics Report for 2018, published 2020* on household waste generation states 600kg is produced per person per year. (Pandemic Years 2019-2020 not considered as biasedly higher as a result of higher than normal domestic consumption of goods and associated waste generation).

A value of 1.6kg of waste generated per person per day has been therefore assumed for the purposes of this report to estimate the volume of waste to be generated at the proposed fully occupied development as detailed in Table 1. Residential waste quantities in litres and m^3 have been evaluated with regard to *British Standard BS 5906:2005 Waste Management in Buildings-Code of Practice.*

Table 1 Domestic waste generation per day/week

Unit	Per Day	Per Week
Kg	19,272	134,904
Litres	9,200	64,400
m^3	9.2	64.4

Commercial Waste

Non-Residential waste quantities have been evaluated with regard to *British Standard BS 5906:2005 Waste Management in Buildings-Code of Practice* as detailed in Table 2.

Table 2 Non-Domestic waste generation per week

Unit	Litres Per Week
Supermarket	11,250
Retail Unit	4320
Cafe	1090
Creche	6878
Library / Community Hub	1000

9.0 COMMUNAL WASTE STORAGE AREA DESIGN

The development shall have 4 no. ground level communal bin storage areas.

The dimensions of standard *EN840* 1100 litre bin are:

Width (mm)	1360
Depth (mm)	1080
Height (mm)	1455
Floor Area per bin (m^2)	1.5

To allow free access to the bins and provide sufficient space for their movement, the required bin store area = bin floor area x 1.5.

Table 3 Domestic Minimum Communal Bin Store Area Requirements

Bin Store Ref	Bin Storage Area (m^2)
1	53
2	45
3	100
4	31

Table 4 Non-Domestic Minimum Bin Store Area Requirements

Unit Ref	Bin Storage Area (m^2)
T5 Retail	15
T5 Supermarket	28
T5 Cafe	8
Creche	10
Library/Community Hub	8

10.0 WASTE COLLECTION STRATEGY

All bulk waste bins shall be brought from the apartments communal bin storage areas to the designated demarcated bin collection areas within the development at road-level by the Facilities Management staff.

The development shall include 3 No. waste bin collection points as follows:

Table 5 Minimum Collection Area Requirements

Collection Point Ref	Serving Bin Store	Bin Storage Area (m^2)
1	1	9
2 & 3	2	14
4	3	14
T5 Commercial	4	20

Emptied bins shall be returned to the bin storage areas immediately following collection. Appendix I presents the site plan showing the proposed bin storage areas and the associated bin collection points.

Image of bulk bin transport from bin stores to collection point



11.0 COMMUNITY RECYCLING CENTRE

A community recycling centre shall be installed within the development to facilitate the segregation of recyclable and re-useable materials such as clothing, glass and aluminium cans and which will further assist residents in the local area to divert these waste streams away from unsegregated domestic waste.

12.0 CONCLUSIONS

The proposed Emmet Road development shall be designed and managed to provide residents with the required waste management infrastructure to minimise the generation of un-segregated domestic waste and maximise the potential for segregating and recycling domestic waste fractions.

The **Objective** of this Waste Management Plan is to maximise the quantity of waste recycled by residents by providing sufficient waste recycling infrastructure, waste reduction initiatives and waste collection and waste management information services to the residents of the development.

The **Goal** of this Waste Management Plan is to achieve the current residential recycling rate of 50% of managed municipal waste (and future targets in subsequent Regional Waste Management Plans).

Residents will be provided with waste recycling and waste disposal information by the development's Facility Management Company who will be responsible for providing clean, safe and mobility impaired accessible communal waste storage areas for the apartment block.

The development shall be designed to provide adequate domestic waste storage and segregation space for each residential unit as a 3-bin kitchen system. This will promote the appropriate segregation at source of domestic generated waste from all residential units at the development.

The Facility Management Company shall maintain a register of all waste volumes and types collected from the development each year including a break-down of recyclable waste and where necessary, shall introduce initiatives to further encourage residents to maximise waste segregation at source and recycling.

They shall also provide an annual bulky waste collection service for all residents.

A community recycling centre shall be located within the development.

Communal waste bin storage areas shall be designed in a manner to ensure that appropriate information and signage for the correct disposal and recycling of waste is available for residents.

All commercial aspects of the development shall utile the separate commercial waste storage areas.

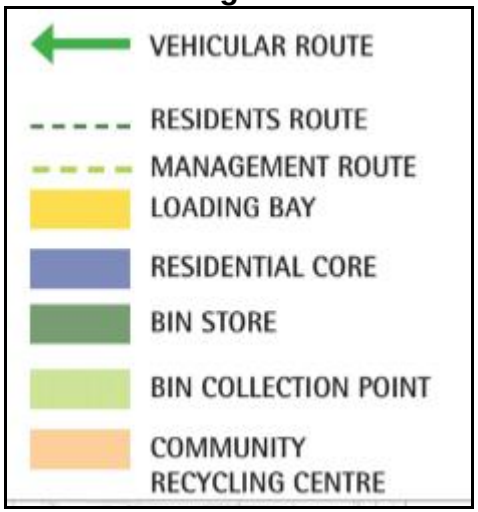
The Facility Management Company shall prepare an annual report for Dublin City Council and residents of the development on the quantities of waste generated within the development to demonstrate how waste reduction and recycling targets are being achieved with regard to the targets defined in the current *The Eastern-Midlands Region Waste Management Plan*

APPENDIX I

Waste Strategy showing Bin Stores and Bin Collection Points and Bin Collection Vehicle Routes



Legend


VEHICULAR ROUTE
RESIDENTS ROUTE
MANAGEMENT ROUTE
LOADING BAY
RESIDENTIAL CORE
BIN STORE
BIN COLLECTION POINT
COMMUNITY
RECYCLING CENTRE

APPENDIX E – CULTURAL HERITAGE - ARCHAEOLOGY

Appendix E1 Legislation Protecting the Archaeological Resource

Appendix E2 Impact Assessment and the Cultural Heritage Resource

Appendix E3 Mitigation Measures and the Cultural Heritage Resource

Appendix E4 Photographic Record

Appendix E5 Method Statement

Appendix E6 NIAH Description on Historic Buildings and Protected Structures

Appendix E1 Legislation Protecting the Archaeological Resource

PROTECTION OF CULTURAL HERITAGE

The cultural heritage in Ireland is safeguarded through national and international policy designed to secure the protection of the cultural heritage resource to the fullest possible extent (Department of Arts, Heritage, Gaeltacht and the Islands 1999, 35). This is undertaken in accordance with the provisions of the European Convention on the Protection of the Archaeological Heritage (Valletta Convention), ratified by Ireland in 1997.

THE ARCHAEOLOGICAL RESOURCE

The National Monuments Act 1930 to 2014 and relevant provisions of the National Cultural Institutions Act 1997 are the primary means of ensuring the satisfactory protection of archaeological remains, which includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. A National Monument is described as 'a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto' (National Monuments Act 1930 Section 2). A number of mechanisms under the National Monuments Act are applied to secure the protection of archaeological monuments. These include the Register of Historic Monuments, the Record of Monuments and Places, and the placing of Preservation Orders and Temporary Preservation Orders on endangered sites.

OWNERSHIP AND GUARDIANSHIP OF NATIONAL MONUMENTS

The Minister may acquire national monuments by agreement or by compulsory order. The state or local authority may assume guardianship of any national monument (other than dwellings). The owners of national monuments (other than dwellings) may also appoint the Minister or the local authority as guardian of that monument if the state or local authority agrees. Once the site is in ownership or guardianship of the state, it may not be interfered with without the written consent of the Minister.

REGISTER OF HISTORIC MONUMENTS

Section 5 of the 1987 Act requires the Minister to establish and maintain a Register of Historic Monuments. Historic monuments and archaeological areas present on the register are afforded statutory protection under the 1987 Act. Any interference with sites recorded on the register is illegal without the permission of the Minister. Two months' notice in writing is required prior to any work being undertaken on or in the vicinity of a registered monument. The register also includes sites under Preservation Orders and Temporary Preservation Orders. All registered monuments are included in the Record of Monuments and Places.

PRESERVATION ORDERS AND TEMPORARY PRESERVATION ORDERS

Sites deemed to be in danger of injury or destruction can be allocated Preservation Orders under the 1930 Act. Preservation Orders make any interference with the site illegal. Temporary Preservation Orders can be attached under the 1954 Act. These perform the same function as a Preservation Order but have a time limit of six months, after which the situation must be reviewed. Work may only be undertaken on or in the vicinity of sites under Preservation Orders with the written consent, and at the discretion, of the Minister.

RECORD OF MONUMENTS AND PLACES

Section 12(1) of the 1994 Act requires the Minister for Arts, Heritage, Gaeltacht and the Islands (now the Minister for the Department of Culture, Heritage and the Gaeltacht) to establish and maintain a record of monuments and places where the Minister believes that such monuments exist. The record comprises a list of monuments and relevant places and a map/s showing each monument and relevant place in respect of each county in the state. All sites recorded on the Record of Monuments and Places receive statutory protection under the National Monuments Act 1994. All recorded monuments on the proposed development site are represented on the accompanying maps.

Section 12(3) of the 1994 Act provides that 'where the owner or occupier (other than the Minister for Arts, Heritage, Gaeltacht and the Islands) of a monument or place included in the Record, or any other person, proposes to carry out, or to cause or permit the carrying out of, any work at or in relation to such a monument or place, he or she shall give notice in writing to the Minister of Arts, Heritage, Gaeltacht and the Islands to carry out work and shall not, except in case of urgent necessity and with the consent of the Minister, commence the work until two months after giving of notice'.

Under the National Monuments (Amendment) Act 2004, anyone who demolishes or in any way interferes with a recorded site is liable to a fine not exceeding €3,000 or imprisonment for up to 6 months. On summary conviction

and on conviction of indictment, a fine not exceeding €10,000 or imprisonment for up to 5 years is the penalty. In addition, they are liable for costs for the repair of the damage caused.

In addition to this, under the *European Communities (Environmental Impact Assessment) Regulations 1989,* Environmental Impact Statements (EIS) are required for various classes and sizes of development project to assess the impact the proposed development will have on the existing environment, which includes the cultural, archaeological and built heritage resources. These document's recommendations are typically incorporated into the conditions under which the proposed development must proceed, and thus offer an additional layer of protection for monuments which have not been listed on the RMP.

THE PLANNING AND DEVELOPMENT ACT 2000
Under planning legislation, each local authority is obliged to draw up a Development Plan setting out their aims and policies with regard to the growth of the area over a five-year period. They cover a range of issues including archaeology and built heritage, setting out their policies and objectives with regard to the protection and enhancement of both. These policies can vary from county to county. The Planning and Development Act 2000 recognises that proper planning and sustainable development includes the protection of the archaeological heritage. Conditions relating to archaeology may be attached to individual planning permissions.

Dublin City Council Development Plan 2016-2022

It is the policy of Dublin City Council

CHC9: To protect and preserve National Monuments.

To protect archaeological material in situ by ensuring that only minimal impact on archaeological layers is allowed, by way of the re-use of buildings, light buildings, foundation design or the omission of basements in the Zones of Archaeological Interest.

That where preservation in situ is not feasible, sites of archaeological interest shall be subject to 'preservation by record' according to best practice in advance of re-development.

That sites within Zones of Archaeological Interest will be subject to consultation with the City Archaeologist and archaeological assessment prior to a planning application being lodged.

That the National Monuments Service will be consulted in assessing proposals for development which relate to Monuments and Zones of Archaeological Interest.

To preserve known burial grounds and disused historic graveyards, where appropriate, to ensure that human remain are re-interred, except where otherwise agreed with the National Museum of Ireland.

That in evaluating proposals for development in the vicinity of the surviving sections of the city wall that due recognition be given to their national significance and their special character.

To have regard to the Shipwreck inventory maintained by the DAHG. Proposed developments that may have potential to impact on riverine, inter-tidal and sub-tidal environments shall be subject to an underwater archaeological assessment in advance of works.

To have regard to DAHG policy documents and guidelines relating to archaeology.

It is an Objective of Dublin City Council:

CHCO10:
To implement the archaeological actions of the Dublin City Heritage Plan 2002-6 in light of the Dublin City Heritage Plan Review 2012.

To prepare and implement conservation plans for National Monuments and Monuments in DCC care (City Walls, St Luke's Church, St James's Graveyard, St. Thomas's Abbey, St Canice's Graveyard etc).

To maintain, develop and promote the Dublin City Archaeological Archive (DCAA) at Pearse Street Library and Archives.

To ensure the public dissemination of the findings of licensed archaeological activity in Dublin through the Dublin County Archaeology GIS.

To develop a long-term management plan to promote the conservation, management and interpretation of archaeological sites and monuments and to identify areas for strategic research.

To have regard to the city's industrial heritage and Dublin City Industrial Heritage Record (DCIHR) in the preparation of Local Area Plans (LAPs) and the assessment of planning applications and to publish the DCIHR online. To review the DCIHR in accordance with Ministerial recommendations arising from the national Inventory of Architectural Heritage (NIAH) survey of Dublin City and in accordance with the Strategic Approach set out in Section 11.1.4 of this Chapter

To promote awareness of, and access to, the city's archaeological inheritance and foster high-quality public archaeology.

To promote archaeological best practice in Dublin city.

To promote the awareness of the international significance of Viking Dublin and to support post-excavation research into the Wood Quay excavations 1962-81.

To develop a strategy for the former Civic Museum collection and for other collections of civic interest and importance.

To investigate the potential for the erection of Columbarium Walls.

To support the implementation of the Kilmainham Mill Conservation Plan.

Dublin City Council will seek to work with Diageo to undertake a more comprehensive industrial heritage survey of the constituent historic buildings within the Guinness Brewery complex at Saint James's Gate.

To implement and promote The Dublin Principles (ICOMOS 2011) as guiding principles to assist in the documentation, protection, conservation and appreciation of industrial heritage as part of the heritage of Dublin and Ireland.

To continue to implement actions of the Saint Luke's Conservation Plan on the basis of funds available to conserve the monument, recover the graveyard, provide visitor access, improve visual amenity and secure an appropriate new use.

Draft Dublin City Development Plan 2016-2022

It is the policy of Dublin City Council:

BHA26:

Archaeological Heritage

To protect and preserve Sites and Zones of Archaeological interest which have been identified in the Record of Monuments and Places and the Historic Environment Viewer (www.archaeology.ie).

2To protect archaeological material in situ by ensuring that only minimal impact on archaeological layers is allowed, by way of re-use of standing buildings, the construction of light buildings, low impact foundation design, or the omission of basements (except in exceptional circumstances) in the Zones of Archaeological Interest.

To seek the preservation in situ (or where this is not possible or appropriate, as a minimum, preservation by record) of all archaeological monuments included in the Record of Monuments and Places, and of previously unknown sites, features and objects of archaeological interest that become revealed through development activity. In respect of decision making on development proposals affecting sites listed in the Record of Monuments and Places, the Council will have regard to the advice and/or recommendations of the Department of Housing, Heritage and Local Government.

Development proposals within Sites and Zones of Archaeological Interest, of sites over 0.5 hectares size and of sites listed in the Dublin City Industrial Heritage Record, will be subject to consultation with the City Archaeologist and archaeological assessment prior to a planning application being lodged.

To preserve known burial grounds and disused historic graveyards. Where disturbance of ancient or historic human remains is unavoidable, they will be excavated according to best archaeological practice and reburied or permanently curated.

Preserve the character, setting and amenity of upstanding and below ground town wall defences.

Development proposals in marine, lacustrine and riverine environments and areas of reclaimed land shall have regard to the Shipwreck Inventory maintained by the Department of Culture, Heritage and the Gaeltacht and be subject to an appropriate level of archaeological assessment.

To have regard to national policy documents and guidelines relating to archaeology and to best practice guidance published by the Heritage Council, the Institute of Archaeologists of Ireland and Transport Infrastructure Ireland

Appendix E2 Impact Assessment and the Cultural Heritage Resource

POTENTIAL IMPACTS ON ARCHAEOLOGICAL AND HISTORICAL REMAINS

Impacts are defined as 'the degree of change in an environment resulting from a development' (Environmental Protection Agency 2017). They are described as profound, significant or slight impacts on archaeological remains. They may be negative, positive or neutral, direct, indirect or cumulative, temporary or permanent.

Impacts can be identified from detailed information about a project, the nature of the area affected, and the range of archaeological and historical resources potentially affected. Development can affect the archaeological and historical resource of a given landscape in a number of ways.

Permanent and temporary land-take, associated structures, landscape mounding, and their construction may result in damage to or loss of archaeological remains and deposits, or physical loss to the setting of historic monuments and to the physical coherence of the landscape.

Archaeological sites can be affected adversely in a number of ways: disturbance by excavation, topsoil stripping and the passage of heavy machinery; disturbance by vehicles working in unsuitable conditions; or burial of sites, limiting accessibility for future archaeological investigation.

Hydrological changes in groundwater or surface water levels can result from construction activities such as de-watering and spoil disposal, or longer-term changes in drainage patterns. These may desiccate archaeological remains and associated deposits.

Visual impacts on the historic landscape sometimes arise from construction traffic and facilities, built earthworks and structures, landscape mounding and planting, noise, fences and associated works. These features can impinge directly on historic monuments and historic landscape elements as well as their visual amenity value.

Landscape measures such as tree planting can damage sub-surface archaeological features, due to topsoil stripping and through the root action of trees and shrubs as they grow.

Ground consolidation by construction activities or the weight of permanent embankments can cause damage to buried archaeological remains, especially in colluviums or peat deposits.

Disruption due to construction also offers in general the potential for adversely affecting archaeological remains. This can include machinery, site offices, and service trenches.

Although not widely appreciated, positive impacts can accrue from developments. These can include positive resource management policies, improved maintenance and access to archaeological monuments, and the increased level of knowledge of a site or historic landscape as a result of archaeological assessment and fieldwork.

PREDICTED IMPACTS

The severity of a given level of land-take or visual intrusion varies with the type of monument, site or landscape features and its existing environment. Severity of impact can be judged taking the following into account:

The proportion of the feature affected and how far physical characteristics fundamental to the understanding of the feature would be lost;

Consideration of the type, date, survival/condition, fragility/vulnerability, rarity, potential and amenity value of the feature affected;

Assessment of the levels of noise, visual and hydrological impacts, either in general or site-specific terms, as may be provided by other specialists.

Appendix E3 Mitigation Measures and the Cultural Heritage Resource

POTENTIAL MITIGATION STRATEGIES FOR CULTURAL HERITAGE REMAINS

Mitigation is defined as features of the design or other measures of the proposed development that can be adopted to avoid, prevent, reduce or offset negative effects.

The best opportunities for avoiding damage to archaeological remains or intrusion on their setting and amenity arise when the site options for the development are being considered. Damage to the archaeological resource immediately adjacent to developments may be prevented by the selection of appropriate construction methods. Reducing adverse effects can be achieved by good design, for example by screening historic buildings or upstanding archaeological monuments or by burying archaeological sites undisturbed rather than destroying them. Offsetting adverse effects is probably best illustrated by the full investigation and recording of archaeological sites that cannot be preserved in situ.

DEFINITION OF MITIGATION STRATEGIES

ARCHAEOLOGICAL RESOURCE

The ideal mitigation for all archaeological sites is preservation in situ. This is not always a practical solution, however. Therefore, a series of recommendations are offered to provide ameliorative measures where avoidance and preservation in situ are not possible.

Archaeological Test Trenching can be defined as 'a limited programme of intrusive fieldwork which determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site on land, inter-tidal zone or underwater. If such archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their worth in a local, regional, national or international context as appropriate' (CIfA 2020a).

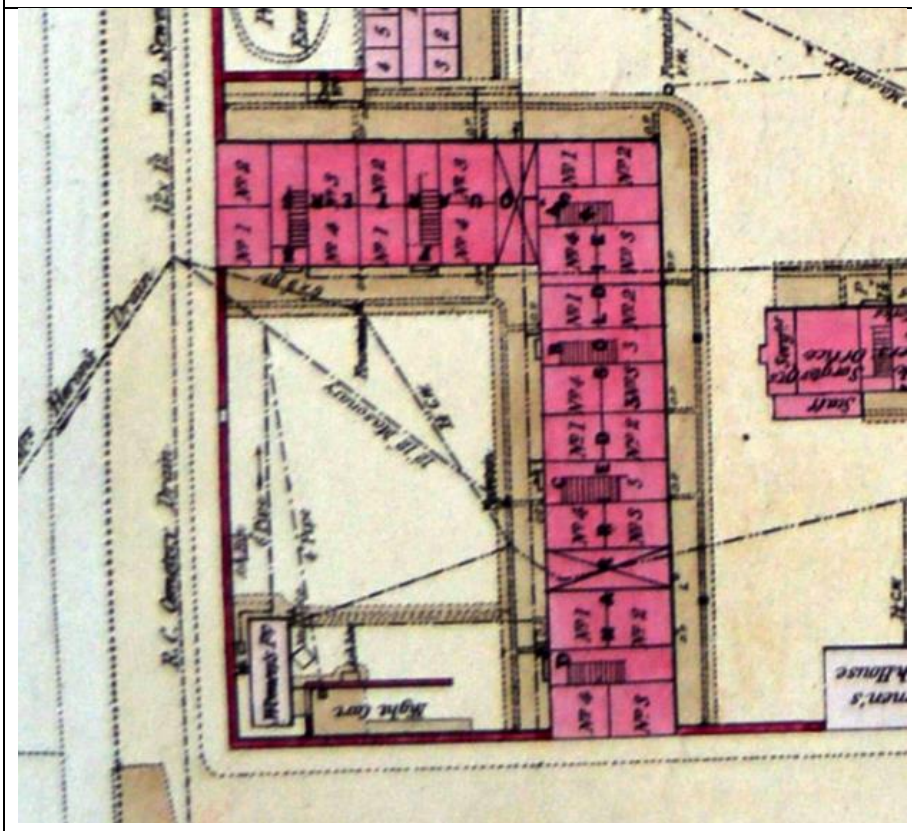
Full Archaeological Excavation can be defined as 'a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area or site on land, inter-tidal zone or underwater. The records made and objects gathered during fieldwork are studied and the results of that study published in detail appropriate to the project design' (CIfA 2020b).

Archaeological Monitoring can be defined as 'a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed. The programme will result in the preparation of a report and ordered archive (CIfA 2020c).

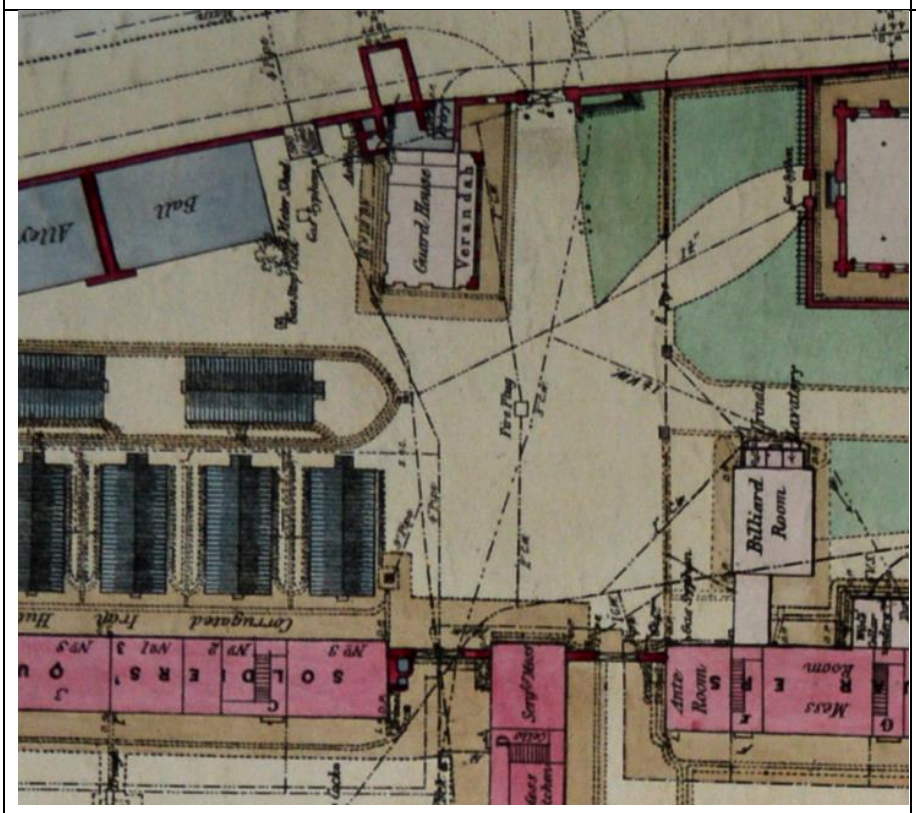
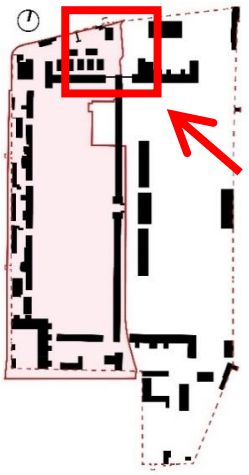
Underwater Archaeological Assessment consists of a programme of works carried out by a specialist underwater archaeologist, which can involve wade surveys, metal detection surveys and the excavation of test pits within the sea or riverbed. These assessments are able to access and assess the potential of an underwater environment to a much higher degree than terrestrial based assessments.

Appendix E4 Historic Photographic Record

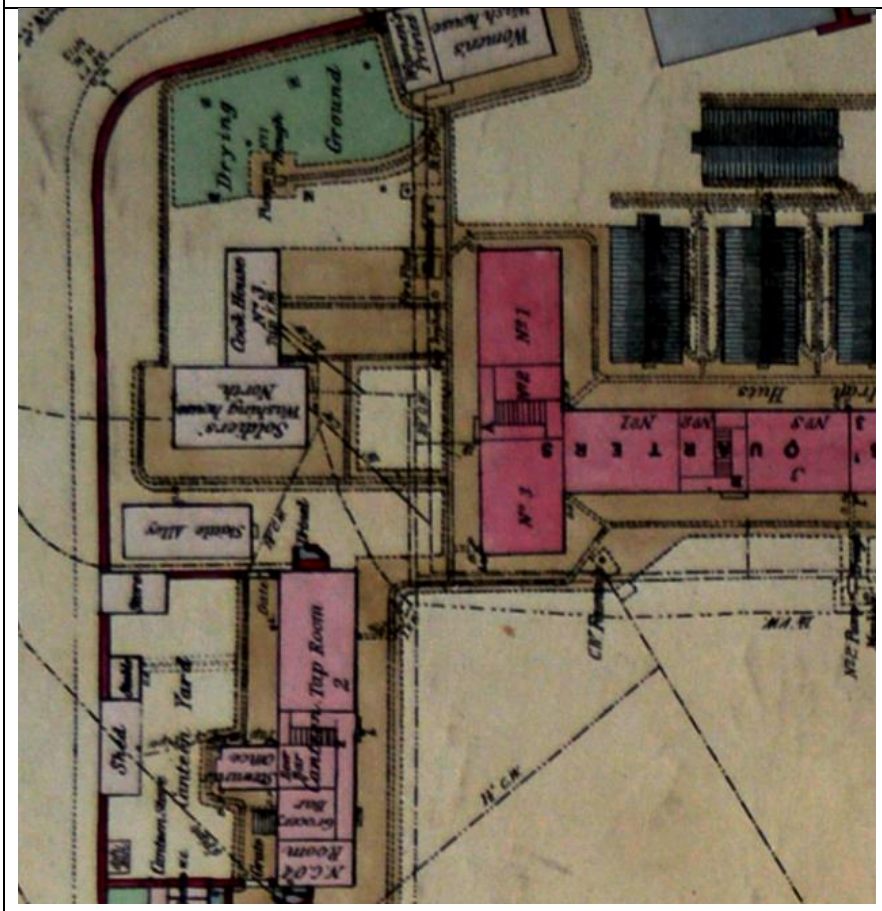
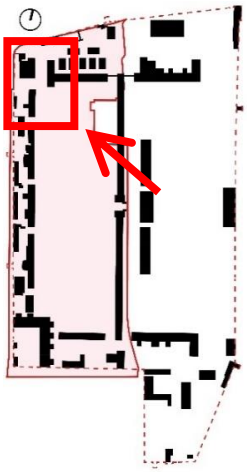
Historic photographic record

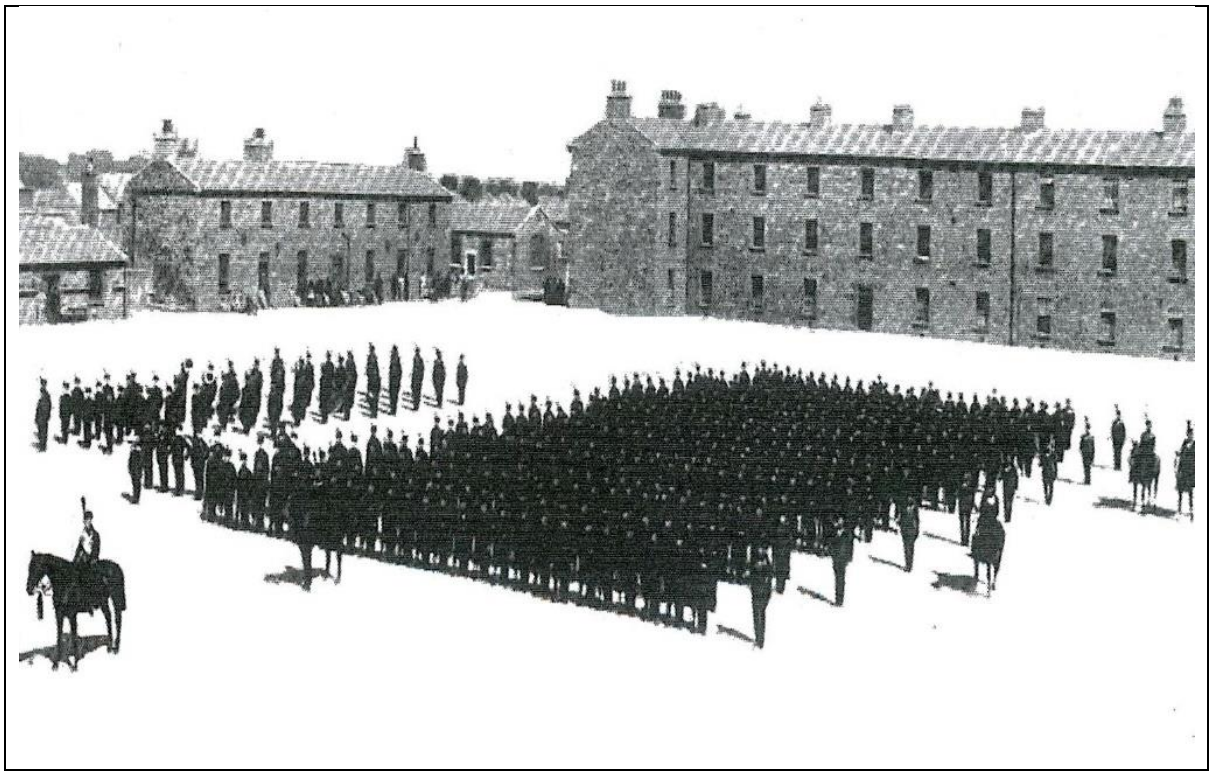
Married Soldiers Quarters	
	 The married quarters were located in the Southwest Corner of the site. Fronting onto their own courtyard which had a small pedestrian gate through the Barracks boundary wall.

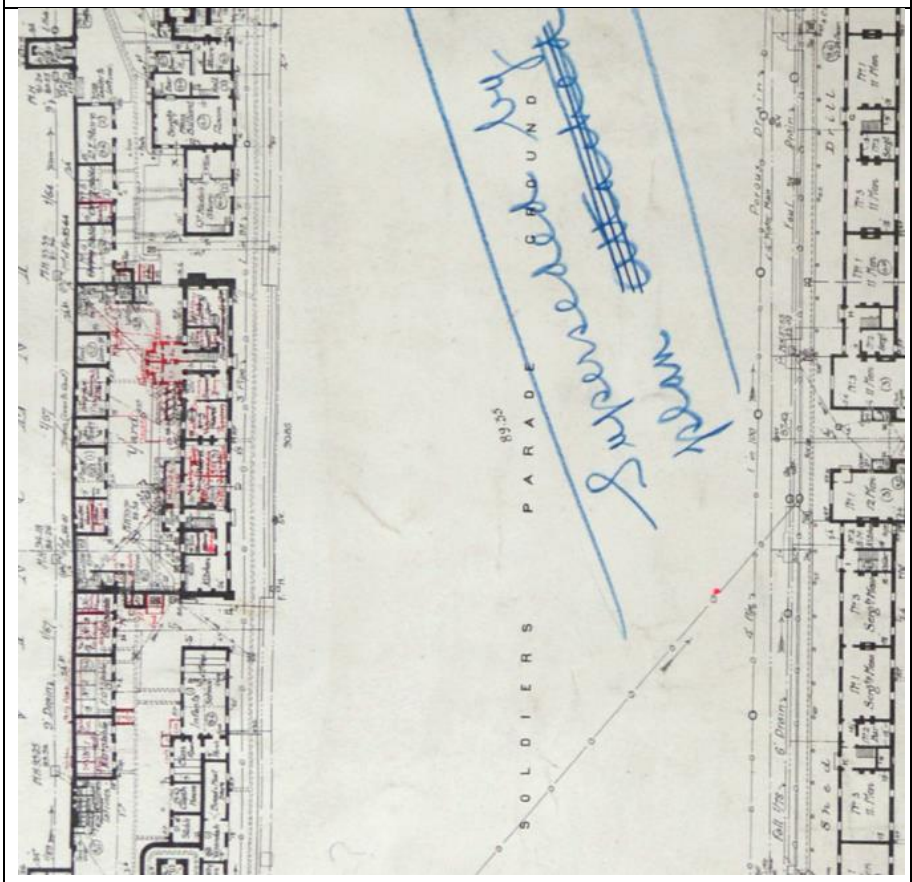
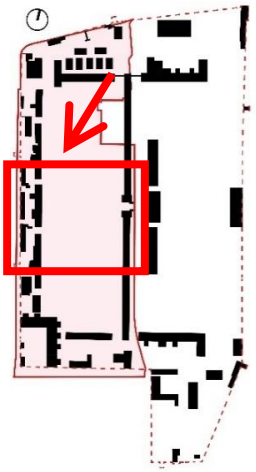


Guard House and Ball Alley	
	 Near the main entrance a cut-stone Guard House was located with a veranda to the elevation facing the gate. The corrugated iron huts appear to have been slated and look like permanent structures.

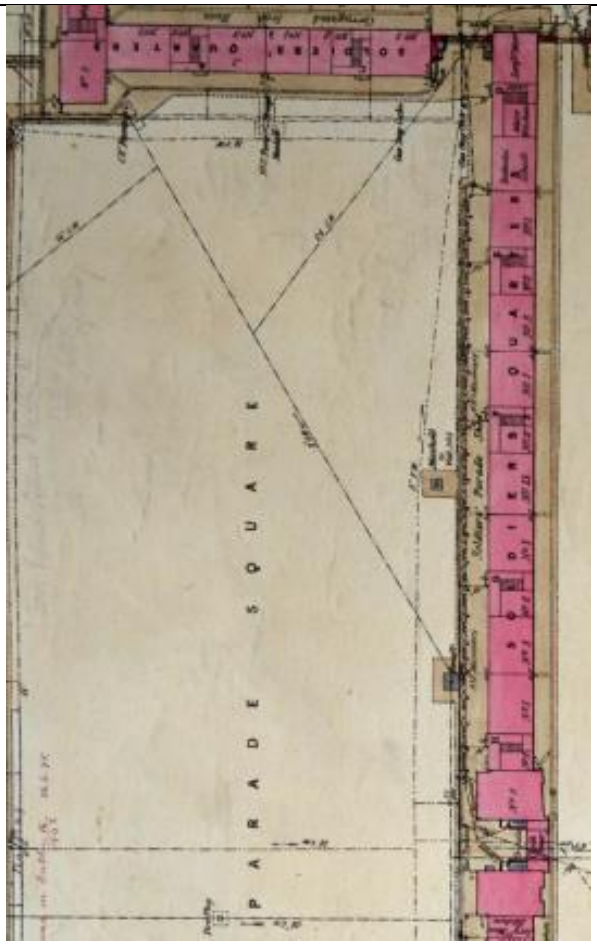


Canteen and Tap Room	
	 The North West of the site contained several utility buildings including a soldiers washing house, Canteen, Cook House, Drying Ground, Womens Washouse, Womens Privies, Canteen Yard, Grocery Bar and a skittle alley.



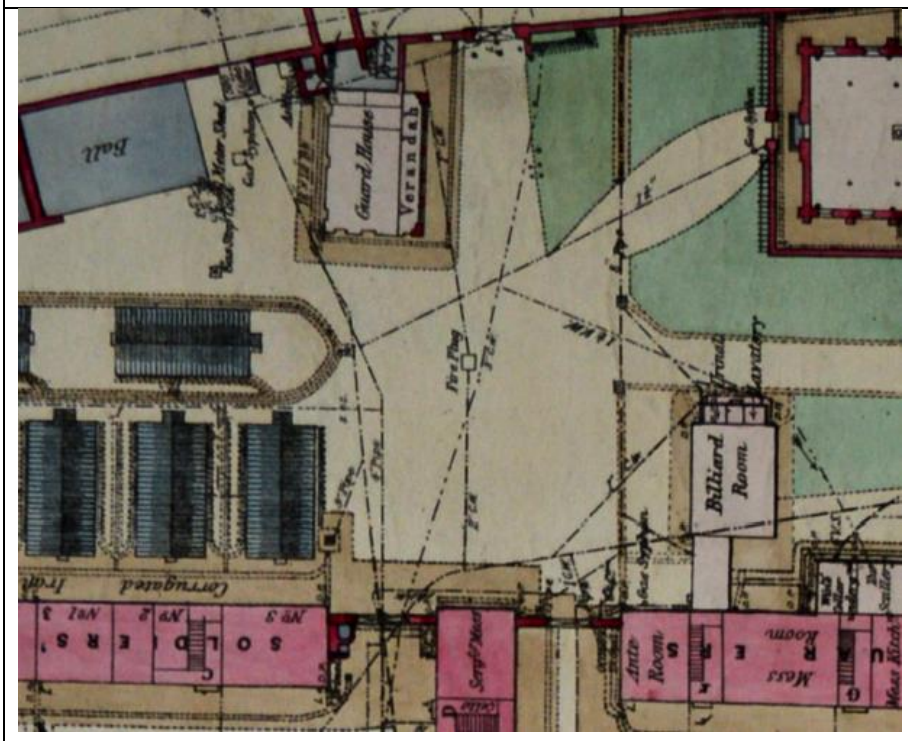
Soldiers Parade Ground	
	 Here we see a view of Soldiers Parade Ground with the hospital in the centre. The buildings on the right were later demolished and replaced with a kitchen and Cavalry Sergeants mess.



Parade Square	
	 View looking North towards the main entrance. Bell tower visible on right.



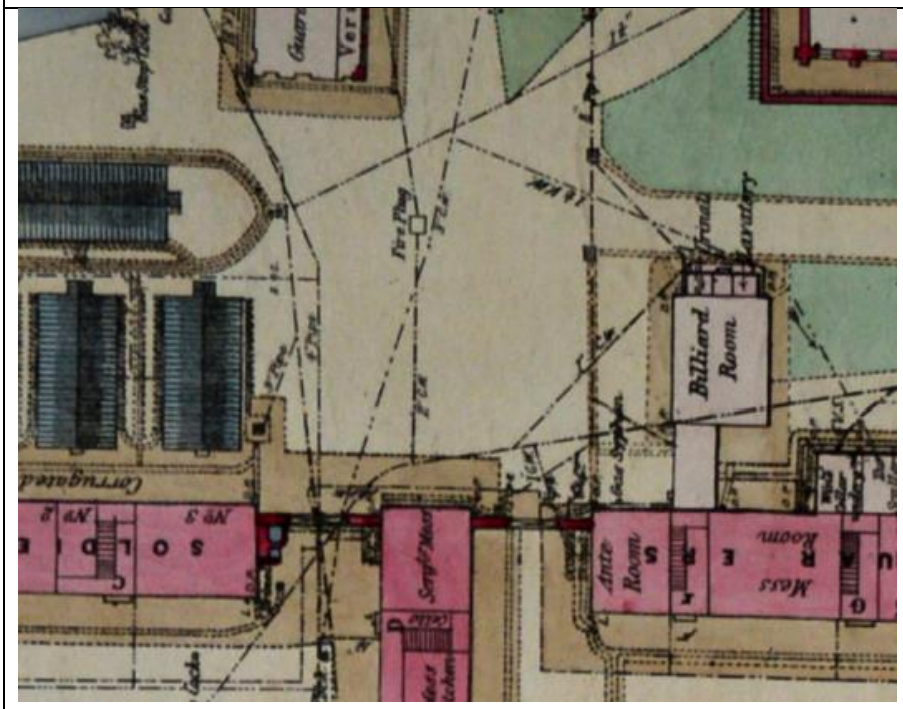
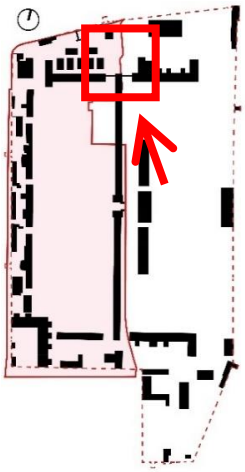
Guard House

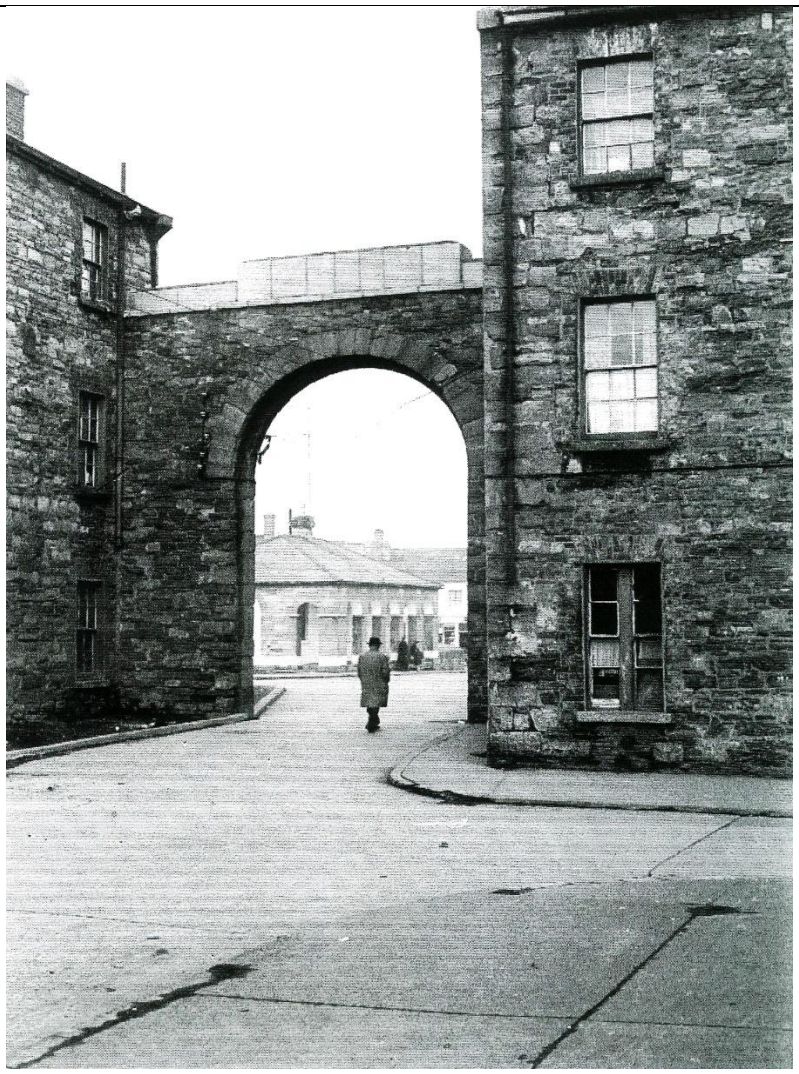




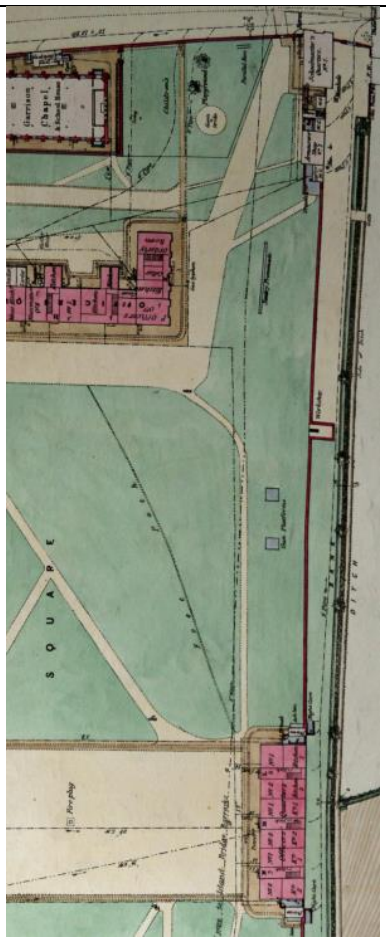
Another view of guardhouse. Main entrance arch visible on right.

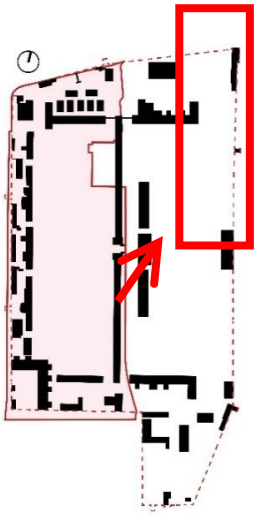

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Hospital and Billiard Room	
	 View through entrance to Officers Square with Guard House in background.

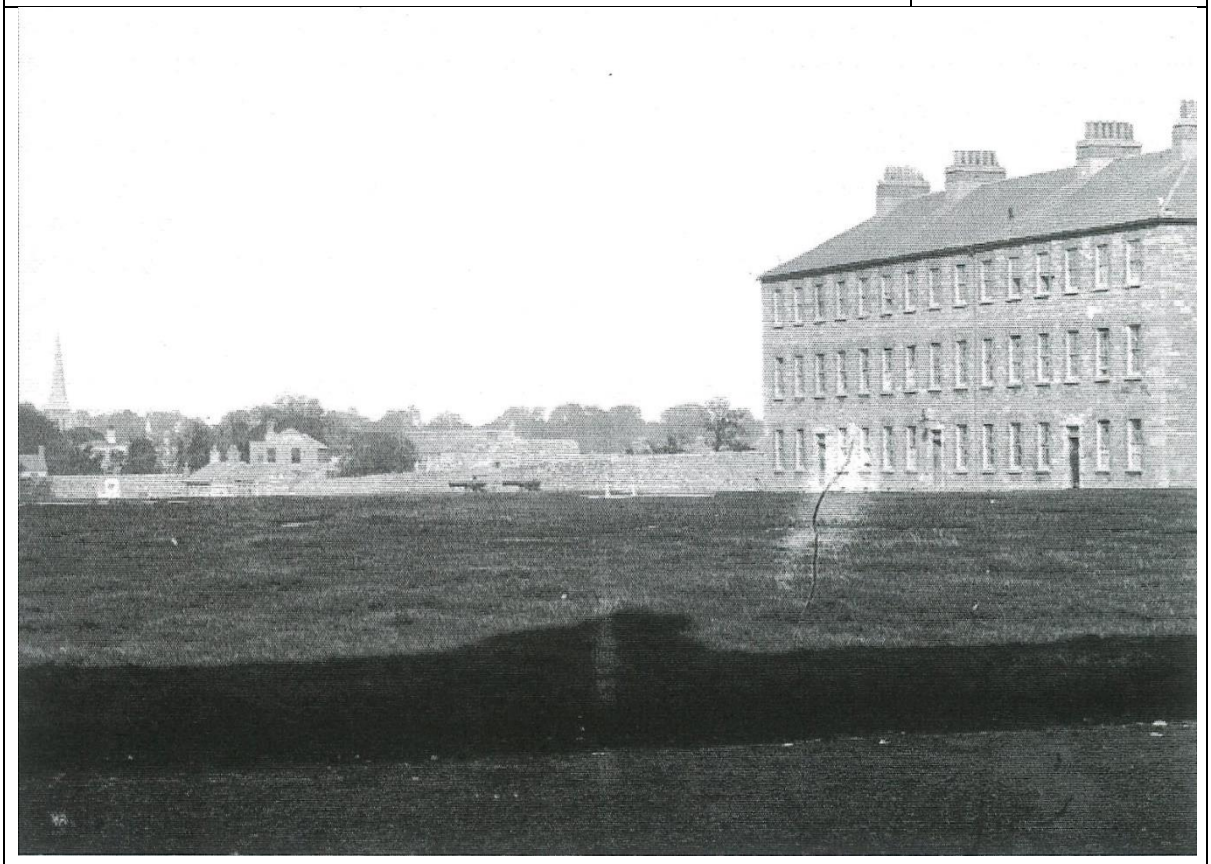


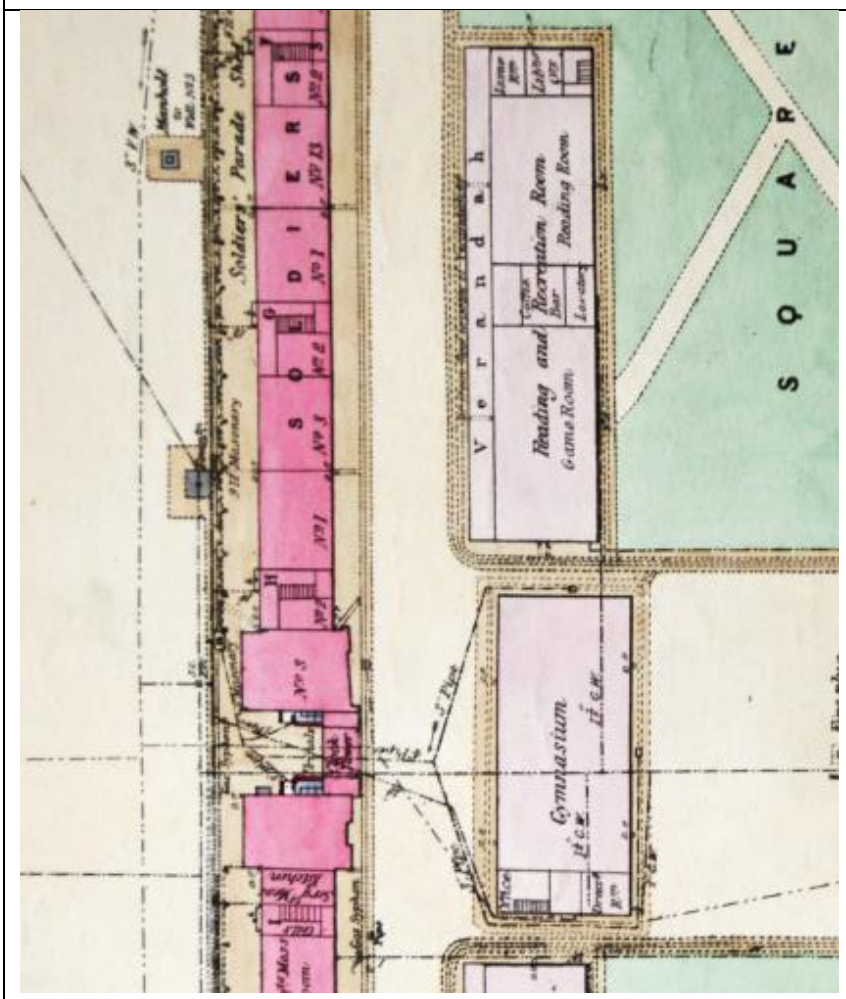
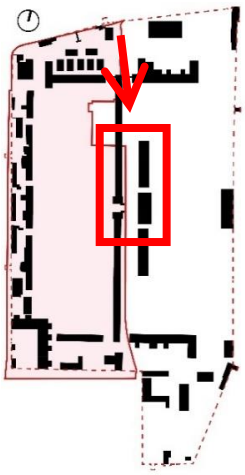
Officers Quarters	





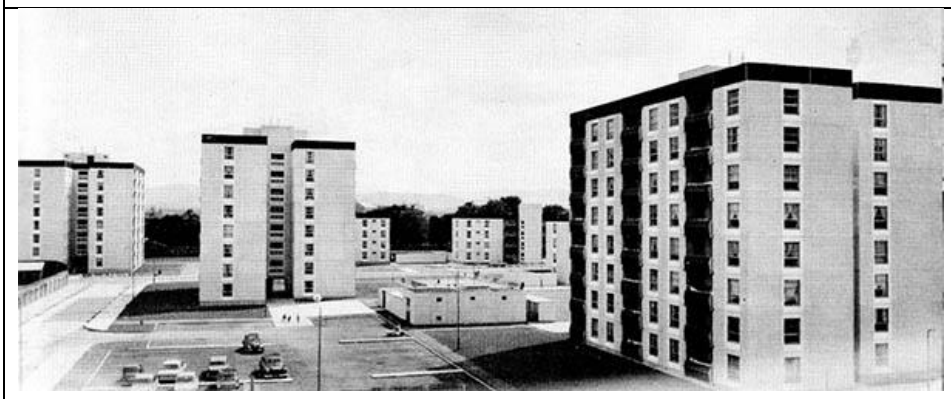
View of Officers Quarters, with St Judes Spire in background.

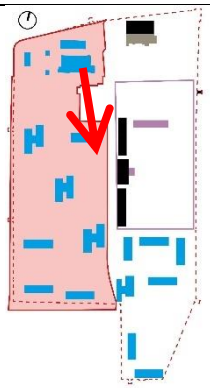


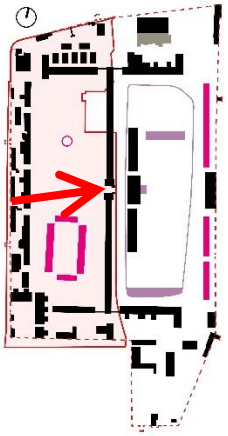
Gymnasium	
	 View looking south towards gymnasium. Verandah is visible on front elevation of Reading and recreation room.



St Michaels Estate

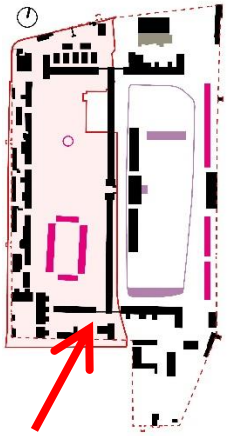




The Clocktower	
	
Looking at the clocktower, Keogh Square on the Right out of shot	

Southern End of Barracks





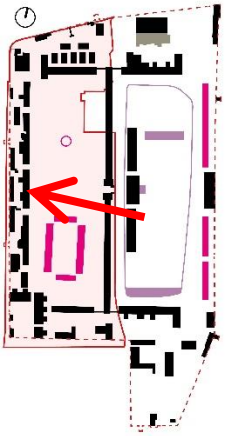
Rear Entrance (mid C20th)

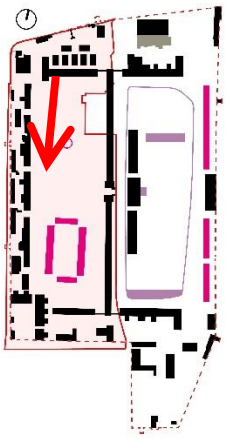
Married Quarters





Married Quarters and Converted Barracks Buildings as part of Keogh Square

Hospital Building	
	
Hospital (mid C20th)	

Keogh Square	
	

Keogh Square Cottages on left, hospital on right with Married Quarters in distance

Northern Archway

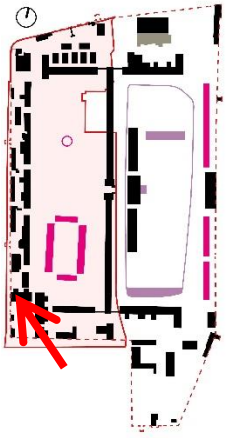




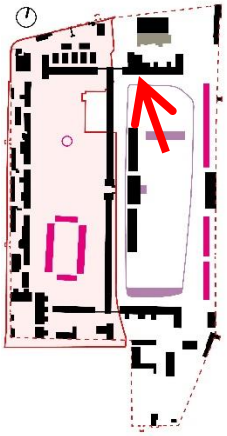
Entrance Arch Being Dismantled

Keogh Square



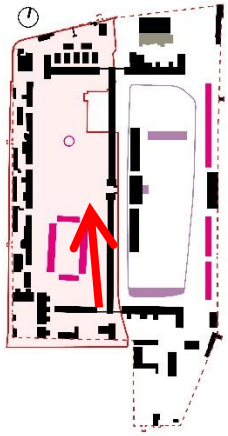


Keogh Square with Hospital and recently built Tyrone Place

Northern end of Officers Quarters	
	
Converted Officers Quarters building with wall of school grounds on left and new cottages on right.	

Mid-section of Soldiers Quarters	

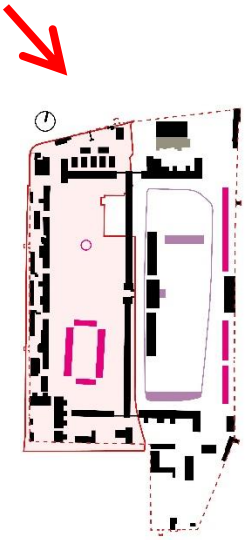




Gymnasium and Recreation halls on right, with partly demolished Soldiers Quarters on left.

Northern end of Soldiers Quarters

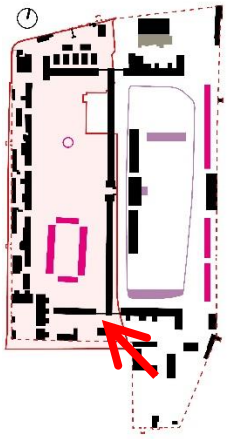




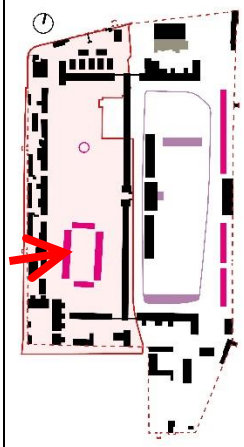
Church and Guard House on right, with a large number of Northern Barracks Buildings demolished and the central spine of Soldiers Quarters remaining

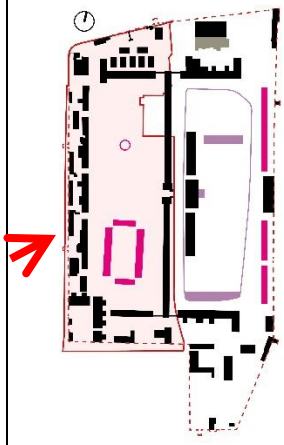
Southern end of Soldiers and Officers Quarters

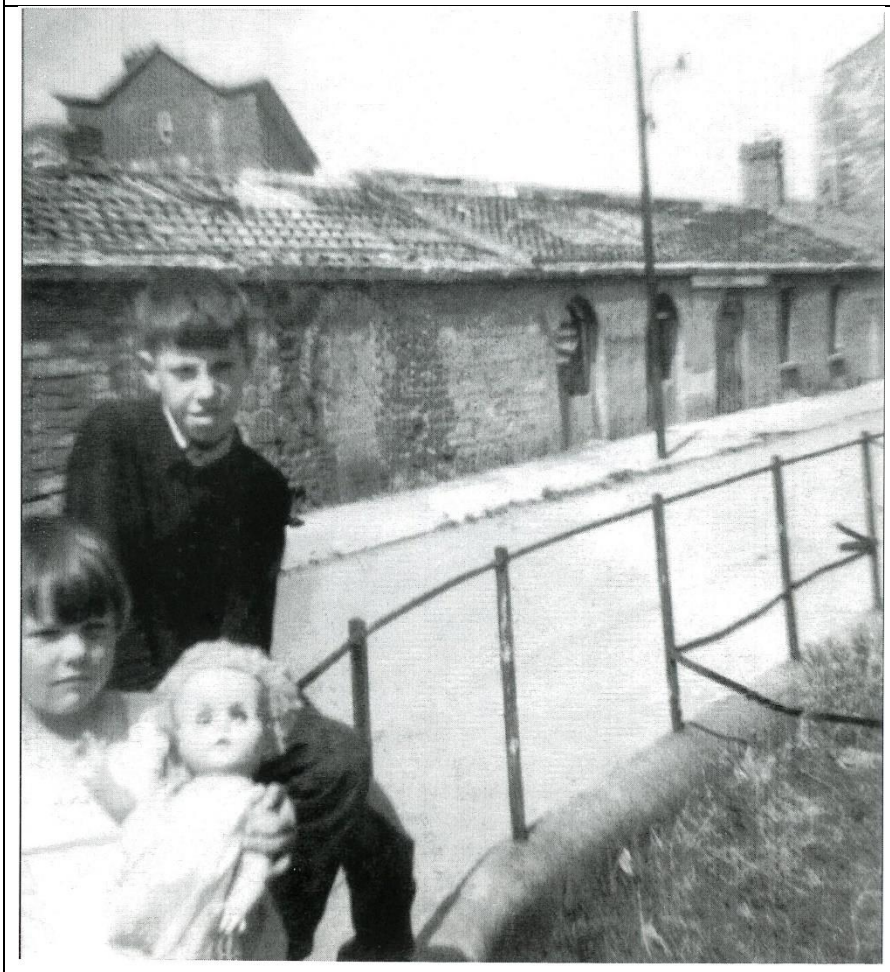
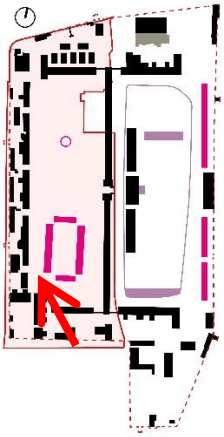




Rear arched entrances to Officers Square

Keogh Square	
	
Keogh Square in foreground, with Gymnasium (school) visible in background. The clocktower has been demolished.	

Hospital Building	
	
Hospital on left with converted barracks buildings on right.	

Keogh Square	
	
Railings of Keogh square gardens in foreground and ruined former Barracks buildings in background.	

Appendix E5 Method Statement

Part Six
Outline Methodologies

6.1 Method Statement

Preparation

- Prepare a Safety & Health Plan for the Works.
- Erect self-supporting scaffolding and protection in accordance with current Health and Safety Legislation to provide a safe working environment. Scaffold footings to be set out on paving below to spread loads so as to avoid depressions and/or damage to paving.
- Fabric to be inspected carefully by design team from the scaffold prior to works commencing. Allow the design team to carry out a full fabric and measured survey of the structure from all levels of the scaffold where pockets are to be opened up.

Works to Stonework

☐ Exact locations of stones to be removed to be identified from scaffold by Conservation Architect with Design Architect.
☐ Masons must have extensive knowledge and experience of medieval masonry repair, CV's of personnel to be submitted.
☐ All unstable stonework or stonework likely to be dismantled is to be numbered and photographed carefully to allow for reinstatement to original position. A planning frame may also be used for recording the position of stonework ensuring all stone is numbered to correspond with the frame.
☐ All soil and organic material to be removed prior to re-bedding stone.
☐ Carry out mortar analyses in order to provide mixes to be approved for use. Samples of lime mortars will be required for design team approval, prior to commencement.
☐ Source suitable local sands and aggregates for proposed mortar mix for approval of conservation architect.
☐ Source suitable local matching stone where stone are damaged during removal for approval of conservation architect.
☐ Sample panels of work for approval (stone re-bedding and pointing) to be provided in least visible area, prior to commencement of works. These are to be presented at the first site visit by the Design Team.
☐ Carry out facing stone repairs as agreed with conservation architect.
☐ Ensure that masonry is clean and sufficiently moistened prior to lime work commencing. Misting of finished pointing to take place during the initial curing period. The finishing of the pointing is to be carried out as specified. The mortar is to be tamped as required to close shrinkage cracks and produce the desired finish. The mortar may need to be tamped on several occasions. Under no circumstances will a brushed finish to the pointing be acceptable.
☐ All replacement stone to be bedded in a suitable lime mortar as specified.
☐ All structural repairs to be carried out as directed by design team. If structural voids are uncovered on site, inform design team immediately.
☐ Scaffolding to be protected by sheeting to prevent premature drying out of mortar. In addition, allowance to be made to fit vertical sheets of hessian, left in place for an appropriate time (minimum 6 weeks) to allow for sufficient moisture during curing. Hessian to be dampened down continually. Frost protection to be put in place if there is a chance of frost damage. No lime works to be carried out below 5°C or when the temperature is liable to fall below this temperature.
☐ All masonry repairs to be bonded into original.
☐ On completion, protection is to be left in place until the pointing has carbonated satisfactorily.

Appendix E6 NIAH Description on Historic Buildings and Protected Structures

Appendix A to Chapter 14: NIAH Description and Description of protected Structures & Buildings Listed within 100m of the site

Map Ref	RPS No	NIAH Ref No	Title	Period	Type of Structure	Distance From Site	Rating	
A	2639	50080092	Saint Michael's Church	1835 - 1935	Church	30m	Regional	

Description: Freestanding double-height cut limestone former Church of Ireland church, built c.1845, having gabled porch to west (entrance) elevation, eight-bay nave with entrance porch, chapel, and confessional projecting to north (street) elevation. Full-length addition to south elevation of nave, dated 1934, having flat-roofed entrance porches and confessional projections to south elevation of this. Flat-roofed sacristy to east (chancel) elevation. Later in use as school, now in use as Roman Catholic church. Pitched slate roofs having stepped cut stone coping, rooflights over chancel, cut stone bellcote to west elevation having pitched stone roof and carved stone cross finial, carved stone cross finial to east elevation, roof to later wing having copper ridge, carved stone finials to east and west elevations and stone chimneystack to east elevation. Copper roofs to sacristy and south entrance porches. Cast-iron rainwater goods. Cut limestone walls over chamfered cut stone plinth, having cut limestone buttresses to north and south elevations having cut stone shoulders and plinth. Pointed arch windows to all elevations, having cut stone surround, chamfered stone sills and leaded stained glass, paired lancet windows to entrance porches and side chapel, five-light arrangement of windows to east elevation having carved hood moulding, loop windows to confessional bays, north elevation, five-light window arrangement to east and west gables, later wing. Secondary glazing to all windows, with exception of sacristy. Pointed arch door openings with cut stone doorcases and carved stone hood mouldings having decorative stops, double-leaf timber panelled doors, cut stone steps, later ramp to main entrance. Carved marble fonts. Some blind door openings. Interior with painted plastered walls, exposed timber truss roofs, timber gallery over main entrance. Harry Clarke Studio stained glass windows to five lights to chancel. Later wing to south separated from main body of church by pointed arcade with octagonal columns having moulded capital and plinth. Carved timber confessionals within recessed alcoves, carved timber pews, marble altar rail to side altar. Plaque to side altar commemorating foundation of later wing. Set in own landscaped grounds, having shrine to west and site entrances to east and west, double-leaf wrought-iron gates flanked by square-profile cut stone piers. Site bounded by wrought-iron railings on rendered plinth wall.

Appraisal: Originally built as a garrison church for Richmond Barracks, Saint Michael's Church was used as a school in the early twentieth century and given over to the Roman Catholic Church when the barracks was decommissioned in 1926. The later south wing, a sensitive addition to the original building, was designed by architects Robinson and Keefe and built in 1934 as commemorated by a plaque in the church. The form and structure of this building is enhanced by the attention to detail and fine craftsmanship of the cut limestone construction and carved stone details, a testament to the skill and craftsmanship of stonemasons in the nineteenth century. The chancel windows from the studio of Harry Clarke are of particular note and add aesthetic appeal. The quality of materials, and composition and scale of the building, create a pleasing sense of uniformity of design, making a positive architectural contribution to the streetscape. The church has played a significant role in the history of Inchicore, and remains in active use by the local community, contributing to the social character of the area.

B	7817	50080099	Goldenbridge Cemetery Chapel	1825 - 1835	Mortuary Chapel	50m	Regional	

Description: Freestanding rectangular-plan double-height pedimented mortuary chapel, built c.1830, having pedimented prostyle Ionic portico to front (west) elevation. Pitched roof having cross finial to front elevation, moulded cornice, chimney and pediment to rear. Rendered walls over rendered plinth, corner pilasters having moulded cornice and base, rectangular recess to rear (east) elevation. Round-headed window openings to north and south elevations, having painted stone sills and moulded surround, fourteen-over-twelve pane timber sash windows, blocked internally. Interior having plastered ceiling with moulded panels having rosette to centre. Blocked window openings having timber sill and moulded surround. Blind arch to east elevation having moulded capitals to piers. Gravel surface to floor, having remnants of paving. Located on raised podium having granite steps, rendered surface and granite block perimeter, accessed by pathway in landscaped surrounds. Set in centre of cemetery.

Appraisal: This pedimented open chapel, built to designs by Patrick Byrne, remains the centre-piece of Goldenbridge Cemetery, an early nineteenth-century garden cemetery. Drawing from classical references, the elegantly composed façades create a pleasing architectural composition. Despite suffering loss of fabric, the chapel, which recently underwent refurbishment works retains much noteworthy fabric. Located to the centre of the cemetery, addressing a raised granite-edged podium, the building is enhanced by the surrounding mature landscaping.

C		50080100	Sextons House	1860 - 1900	Caretakers House	5m	Regional	

Description: Detached three-bay two-storey sexton's house, built c.1880, having single-storey flat-roofed extension to south elevation. Now disused. Pitched slate roof having terracotta ridge crestings and finial, having exposed timber end trusses, red brick chimneystacks, red brick eaves course and some cast-iron rainwater goods. Yellow brick walls laid in Flemish bond, having moulded red brick string course and plinth course, red brick quoins to all elevations, rendered walls to front (west) and south elevations. Square-headed window openings having cut stone sills, red brick block-and-start surrounds, all openings blocked, timber sash window evident in first floor opening to front elevation. Square-headed door openings to front and rear (east) elevations, having red brick block-and-start surrounds, all openings blocked, granite plinth blocks and steps to rear elevation opening. Located on street, within boundary of Goldenbridge Cemetery, having rear access from cemetery grounds and small yard with shed to south, having castellated brick walls, partially rendered. Square-profile granite War Department bollard to north-east corner of house.

Appraisal: This house completes the north-east boundary of the garden cemetery at Goldenbridge. This was the sexton or graveyard caretaker's house, and it addresses both the street and the entrance to the graveyard. The elegant brick façade is greatly enlivened by the use of decorative brick detailing to highlight key features such as window and door openings while an elegantly executed eaves course, decorative ridge tiles and exposed roof trusses further enhance the building's aesthetic appeal. The brick detailing is testament to the skill and craftsmanship of nineteenth-century brickworkers. Although some windows have been lost, much original fabric is retained. Despite suffering recent damage, it continues to make a positive contribution to Saint Vincent's Street West.

D		50080098	Goldenbridge Cemetery	1825 - 1830	Cemetery	0m	Regional	

	7818	**Description:** Enclosed Roman Catholic cemetery established 1829, with upright and recumbent grave markers of varying materials and designs, dating from 1829 to the beginning of the twenty-first century. Mortuary chapel to centre, on raised podium within mature landscaping. Sexton's house to north-east boundary having small yard to south. Calp limestone boundary walls with medallion motif, having rubble stone parapet to north boundary and north section of west boundary, wrought-iron railings over calp limestone plinth wall to south section of west boundary. Rendered entrance portal to north-east corner having rendered capping with cross finial, plaque with lettering 'D.O.M', segmental-headed opening having block-and-start cut granite surround and double-leaf wrought-iron entrance gates, giving access from Saint Vincent Street West. Located along the Grand Canal, Saint Vincent Street West and former Bulfin Street.
		Appraisal: Established in 1829, following the passing of the 'Act of Easement of Burial Bills' in 1824 , this was the first Roman Catholic cemetery to be opened following Catholic Emancipation in 1829, pre-dating Prospect Cemetery in Glasnevin by three years. The high boundary walls, rich landscaping and delineated paths are typical of a nineteenth-century garden cemetery, as opposed to a churchyard. The variety of designs found in the grave markers is significant in terms of artistic value. The site is further enhanced by the mortuary chapel, the sexton's house, the stone boundary walls and gates, and the mature trees and shrubs. W. T. Cosgrave, former president of the Irish Free State, was buried in Goldenbridge Cemetery in 1965. The cemetery is in no longer in active use but remains a significant part of the social fabric of the area, and an important social and historical reference.

E	50080101	Goldenbridge Cemetery Walls	1825 - 1830	Walls	0m	Regional	

	Description: Calp limestone boundary walls to Goldenbridge Cemetery, constructed c.1830, having entrance portal and gates to north-east corner. Rubble limestone walls having medallion detail to internal elevation. North boundary and north section of west boundary having rubble stone parapet, south section of west boundary having wrought-iron railings over calp limestone plinth wall with concrete capping, south boundary having rendered capping, curved niches and undulating parapet to east end. Sexton's house to north-east abutting boundary wall. Brick infill repairs to sections of south boundary wall. Boundary wall encloses garden cemetery, having gates to north-east corner giving access from Saint Vincent's Street West.
	Appraisal: The walls surrounding Goldenbridge Cemetery create a sense of enclosure within the landscaped burial grounds, typical of early nineteenth-century garden cemeteries. Despite some alterations, the original fabric remains intact, adding a patina of age to the surrounding streetscape. It forms part of a significant group of related structures at the cemetery, with the mortuary chapel and sexton's house.

F	50080093	Inchicore Primary Care Centre	1830 - 1870	Barracks	10m	Regional	

	Description: (NOTE: DESCRIPTION IS NOW SUPERSEDED DUE TO DATE OF NIAH ASSESSMENT) Detached twelve-bay single-storey former barracks, built c.1850, having two-bay entrance breakfront to front (west) elevation, half-dormer attic to north end and two-storey extension with pitched-roof to rear (east) elevation. Later in use as social housing, subsequently in use as school, now in use as health centre. Hipped slate roof with cut granite eaves course, having moulded brown brick chimneystack flanked by pair of hipped dormer windows to north elevation, parapet to breakfront having cut granite coping and carved limestone cross finial. Cast-iron rainwater goods. Snecked cut limestone walls over limestone plinth, having cut granite impost course and circular blind opening to pediment. Plaque commemorating poet and soldier Francis Ledwidge to north elevation. Round-headed recessed window openings with granite sills to front and south elevations, having cut limestone voussoirs, granite impost blocks and yellow brick reveals, nine-over-nine pane timber sash windows to front elevation, yellow brick infill in blocked window opening to south elevation. Round-headed window openings to dormer windows, having cut granite sills and red brick block-and-start surrounds, three-over-three pane timber sash windows. Square-headed window openings with stone sills to north elevation, ground floor, having red brick block-and-start surround and three-over-three pane timber sash windows. All openings having external secondary glazing. Glazed entrance doors having glazed upper section to breakfront, and timber panelled door having glazed upper section to north end of front elevation, in round-headed former window openings, having cut limestone voussoirs, granite impost blocks and yellow brick reveals. Round-headed blocked door opening to south elevation, having cut limestone voussoirs, granite impost blocks, yellow brick reveals and yellow brick infill. Square-headed blocked door opening to north elevation having red brick block-and-start surround and yellow brick infill. Located on street adjacent to two surviving barracks buildings, addressing the site of recently demolished Saint Michael's Estate housing complex.
	Appraisal: (NOTE: DESCRIPTION IS NOW SUPERSEDED DUE TO DATE OF NIAH ASSESSMENT) This building and the two adjacent barracks buildings were part of the Richmond Barracks complex dating from 1814, and form a focal point in the streetscape. The historic significance of the barracks is well-documented. All those arrested after the 1916 Rising were taken to Richmond Barracks for processing, including the leaders, who were held in the gymnasium prior to the court martial. Following the establishment of the Irish Free State in 1922, the barracks were taken over by the Irish Army and renamed Kehoe Barracks. In 1924 the barracks were given over to Dublin Corporation and converted to provide social housing. Kehoe Square was demolished in 1969 to allow the construction of Saint Michael's Estate housing which was demolished in 2013. The three surviving barracks buildings were in use as a Christian Brothers' school until recently. The design of the barracks is grounded in long-established traditions with a symmetrical plan and classically-derived proportions. The construction in cut limestone is typical of the solidity and traditional materials favoured by barracks in the nineteenth century. The stone and brick detailing are worthy of note and add aesthetic appeal. With much early fabric surviving intact, the barracks add to the historic character of the locality. In active use by the local community, it retains an important social function.

G	50080094	Richmond Barracks	1830 - 1870	Barracks	10m	Regional	

	Description: (NOTE: DESCRIPTION IS NOW SUPERSEDED DUE TO DATE OF NIAH ASSESSMENT) Detached seven-bay single-storey former barracks, built c.1850, having attic accommodation to south end and single-storey flat-roofed extension to rear (east) elevation. Later in use as social housing, subsequently in use as school, currently disused. Pitched slate roof having decorative polychrome eaves course, some cast-iron rainwater goods. Yellow brick walls laid in English bond over chamfered granite and limestone, square-headed recessed panels to north elevation having chamfered red brick reveals, dentilated polychrome brick head detail and chamfered sills. Segmental-headed window openings to front (west) and south elevations, having yellow brick voussoirs and cut granite sills, set within square-headed recesses. Blocked window openings to front elevation, timber sash windows to south elevation, ground floor. Segmental-headed door opening to south elevation having yellow brick voussoirs, square-headed door opening to north elevation having concrete lintel. Located on street between two surviving barracks buildings, addressing the site of recently demolished Saint Michael's Estate housing complex.

		Appraisal: (NOTE: DESCRIPTION IS NOW SUPERSEDED DUE TO DATE OF NIAH ASSESSMENT) This building and the two adjacent barracks buildings were part of the Richmond Barracks complex dating from 1814, and form a focal point in the streetscape. The historic significance of the barracks is well-documented, all those arrested after the 1916 Rising were taken to Richmond Barracks for processing, including the leaders, who were held in the gymnasium prior to the court martial. Following the establishment of the Irish Free State in 1922, the barracks were taken over by the Irish Army and renamed Kehoe Barracks. In 1924 the barracks were given over to Dublin Corporation and converted to provide social housing. Kehoe Square was demolished in 1969 to allow the construction of Saint Michael's Estate housing which was demolished in 2013. The three surviving barracks buildings were in use as a Christian Brothers' school until the late twentieth century, this central building being used as the school gymnasium. Although some windows have been lost, much original fabric is retained. The elaborate brick detailing is testament to the skill and craftsmanship of brickworkers in the nineteenth century. The composition and scale of the building create a pleasing formal facade, making a positive contribution to the area. Both this building and the adjacent former barracks to the south will be restored as a 1916 commemorative project.						
H		50080095	Richmond Barracks	1830 - 1870	Barracks	10m	Regional	
	8705	**Description: (NOTE: DESCRIPTION IS NOW SUPERSEDED DUE TO DATE OF NIAH ASSESSMENT)** Detached twelve-bay single-storey former barracks, built c.1850, having central two-bay pedimented entrance breakfront to front (west) elevation, and half-dormer attic to south elevation. Later in use as social housing, subsequently in use as school, currently disused. Hipped slate roof with cut stone eaves course, having moulded brown brick chimneystack flanked by pair of hipped dormer windows to south elevation, parapet to breakfront having cut granite coping and carved limestone cross finial. Cast-iron rainwater goods. Snecked cut limestone walls over limestone plinth, having cut granite impost course and circular blind opening to pediment having carved stone crest '1929 / FACERE ET DOCERE'. Round-headed recessed window openings with cut granite sills to front and north elevations, having cut limestone voussoirs, cut granite impost blocks and yellow brick reveals. Round-headed window openings to dormer windows, having cut stone sills and red brick block-and-start surrounds. All openings blocked or partially blocked, timber sash windows evident. Round-headed recessed blocked door openings to front and north elevations, having cut limestone voussoirs, granite impost blocks and yellow brick reveals. Located on street adjacent to two surviving barracks buildings, addressing the site of recently demolished Saint Michael's Estate housing complex.						
		Appraisal: (NOTE: DESCRIPTION IS NOW SUPERSEDED DUE TO DATE OF NIAH ASSESSMENT) This building and the two adjacent barracks buildings were part of the Richmond Barracks complex dating from 1814, and form a focal point in the streetscape. The historic significance of the barracks is well-documented, all those arrested after the 1916 Rising were taken to Richmond Barracks for processing, including the leaders, who were held in the gymnasium prior to the court martial. Following the establishment of the Irish Free State in 1922, the barracks were taken over by the Irish Army and renamed Kehoe Barracks. In 1924 the barracks were given over to Dublin Corporation and converted to provide social housing. Kehoe Square was demolished in 1969 to allow the construction of Saint Michael's Estate housing which was demolished in 2013. The three surviving barracks buildings were in use as a Christian Brothers' school until the late twentieth century. The design of the barracks is grounded in long-established traditions with a symmetrical plan and classically-derived proportions. The construction in cut limestone is typical of the solidity and traditional materials favoured by the military in the nineteenth century. The stone and brick detailing are worthy of note and add aesthetic appeal. Although some windows have been lost, much original fabric is retained. The composition and scale of the building create a pleasing formal facade, making a positive contribution to the area. Both this building and the adjacent former barracks to the north will be restored as a 1916 commemorative project.						
I			Richmond Barracks Boundary Wall	1812	Defensive	0m	Regional	
J		50080089	Mcdowells Public House	1865-1870	Public House	22m	Regional	
		Description: Attached pair of three-bay two-storey former houses with attic accommodation, dated 1868, now in use as public house and having shopfronts to front (south) elevation, with lower two-storey lean-to return to rear (north) elevation. Pitched slate and artificial slate roof having rooflights, lined-and-ruled rendered chimneystack to west gable, rendered parapet with cornice to front (south) elevation, and cast-iron rainwater goods. Lined-and-ruled rendered walls, having channelled quoins, and painted lettering. Square-headed window openings, having rendered window surrounds, painted sills, and one-over-one pane timber sash windows. Shopfront to west comprising central display windows flanked by door openings, timber panelled pilasters with carved foliated consoles flanking fascia and dentillated cornice. Timber framed windows, panelled riser, timber panelled double-leaf door to public house, sheeted timber door with plain overlight to east. Later shopfront to east, having recent steel shutters.						
		Appraisal: This public house occupies a corner site on Emmet Road and shares similar scale and proportions with neighbouring buildings, making a positive contribution to a coherent streetscape. Its form is enhanced by render detailing such as its window surrounds and quoins, while timber sash windows add a patina of age. The survival of the shopfronts is significant, demonstrating the quality of craftsmanship in the nineteenth and early twentieth centuries. Richmond House was a popular public house with the soldiers of Richmond Barracks, an infantry barracks built to the immediate south in 1810 and closed in 1924. The public house is of social as well as architectural interest, and is painted in the colours of Saint Patrick's Athletic Football Club, with the rear of the building overlooking Richmond Park stadium to the north.						
K		50080383	Golden Bridge	1740 - 1780	Bridge	110m	Regional	
		Description: Single-arch masonry bridge, built c.1760, carrying Emmet Road over Camac River. Road widened to north in twentieth-century, having recent wall to north elevation. Segmental-arch with rubble limestone voussoirs, walls, and parapet wall to south elevation. Square-headed poured concrete lintel and soffit to north elevation having cement block parapet wall and cement coping. Tarmacadam carriageway, with cement-paved path to north and south.						
		Appraisal: Although subsequently altered due to road widening, this traditionally constructed bridge in unrefined locally-sourced stone is evidence of the long established settlement here. As a crossing point over the River Camac it would have provided access to nearby Richmond Barracks from the west. Golden Bridge was mapped as early as John Rocque's map of Dublin city and environs of 1773. Still in use today, it has given its name to the townlands to the south, Goldenbridge North and Goldenbridge South, indicating its significance to the area in the past.						
L		50080384	Emmett Road Postbox	1920 - 1940	Post Box	80m	Regional	

		Description: Freestanding cast-iron pillar box, erected c.1930. Moulded neck, shallow domed cap, curved hinged door having aperture to east elevation. Monogram 'P&T' to door. Maker's mark 'CARRON COMPANY / STIRLINGSHIRE' to rear.						
		Appraisal: This attractive piece of street furniture represents the high quality of mass-produced cast-iron work in the early years of the twentieth century. The insignia, representing the national Posts & Telegraphs service (fl. 1924-84), dates the box to the early years of the Irish State and provides decorative as well as contextual interest. It continues to fulfil its function and is testimony to the robust quality of manufacture. Following Independence, the Irish government continued to commission pillar boxes from British firms as well as Irish ones. This model was erected in Britain during the reign of George V (1910-1936), with the GR cipher rather than the P&T monogram on the door. It is indicative of the continuity of design right through the nineteenth and twentieth centuries, until the adoption of rectangular steel post boxes in more recent decades.						
M		50080088	Inchicore United Workmans Club	1880 - 1900	Clubhouse	45m	Regional	
		Description: Attached five-bay two-storey workmen's club, built c.1890, having lower two-storey return to rear (north) elevation. Hipped artificial slate roof, having red brick chimneystacks with cornices, and paired timber brackets to eaves. Red brick walls laid in English garden wall bond to front (south) elevation, with moulded brick string course. Chamfered plinth course. Lined-and-ruled rendered walls to east and rear elevations. Elliptical-headed window openings to front elevation, having red brick voussoirs and cut granite sills with red brick sill courses. Continuous moulded red brick label moulding to ground floor windows. Replacement uPVC windows, and timber-framed glazed signage boards to interior of windows. Elliptical-headed door opening having red brick voussoirs, recent steel door with shuttering.						
		Appraisal: Inchicore United Workmans Club has acted as a place of congregation and recreation for local workmen since the late nineteenth-century. This symmetrical and well-proportioned building exhibits skilled craftsmanship, and is typical of late nineteenth-century construction. Though the windows and doors have been replaced, the building retains an early character, and the glazed panels to the interior of the ground floor windows are a reminder of the former windows. Inchicore village gained a large working-class population in the mid nineteenth-century with the construction of the Great Southern & Western Railway Works in 1846 and its associated housing, and a large paper mill at Goldenbridge.						
N		50080096	Mercy Convent Gate Lodge	1860 - 1900	Gate Lodge	10m	Regional	
		Description: Detached three-bay two-storey gate lodge, built c.1880, having single-storey flat-roofed extension to west elevation. Now disused. Hipped artificial slate roof having terracotta ridge crestings, coving to eaves, red brick chimneystacks with projecting chimneybreasts to east and west elevations, having moulding and embellishment to brickwork. Some cast-iron rainwater goods. Red brick walls laid in English garden wall bond having cut limestone platband with carved cross detail to east elevation. Segmental-headed window openings having painted granite sills, and red brick voussoirs, chamfered reveals and six-over-six timber sash windows to front (north) elevation, ground floor. Segmental-headed door opening having red brick voussoirs, chamfered reveals and granite step, blocked opening. Pitched artificial slate canopy over entrance having terracotta ridge crestings, timber panelled barge boards and decorative timber brackets. Located on street, at entrance to former convent and industrial school, having garden to south and enclosure to north having later railings. Red brick gate piers to north, with cut limestone string course, and pointed limestone capping having decorative stone cross. Later metal gate piers with wrought-iron double-leaf entrance gates with cross finial, matching pedestrian gate.						
		Appraisal: A well-designed and carefully executed gate lodge with decorative brick detailing that is testament to the skill and craftsmanship of nineteenth-century brickworkers. The brickwork and stone embellishment, the unusual eaves detail and the decorative ridge tiles are of particular note, adding aesthetic appeal and a patina of age to the streetscape. Although some windows have been lost, much original fabric is retained. The cross motifs indicate that it was built as a gate lodge to the convent and industrial school to the west, and typically of Victorian gate lodges it combines a modest size with highly decorative elements. It addresses the entrance to the site, while presenting a decorative yet blank elevation to the street.						
O		50080397	Saint Vincent's Convent	1855 - 1865	Chapel	150m	Regional	
		Description: Attached cruciform-plan Roman Catholic church, built c.1860, having four-bay nave, full-height chancel and transepts, sacristies to north-east and south-east re-entrant corners of transept with lean-to slate roofs, and gabled porches to north-west and south-west re-entrant corners of transepts. Now in use as educational building. Pitched slate roofs with cut granite copings having carved granite cross finials, and cast-iron rainwater goods. Painted red brick walls laid in Flemish bond, with chamfered plinth course. Stepped buttresses with chamfered granite coping, angled to corners. Pointed arch lancet windows, arranged in threes to gables, having red brick voussoirs, carved granite keystones, chamfered granite sills, and leaded stained glass windows. Circular windows to sacristies, set in pointed arch recesses, now blocked. Tudor arch door openings to porches, having double-leaf timber battened doors. Two-storey bay to south-west corner, linking to convent, having pitched slate roof, painted red brick walls, and recessed Tudor arch door surround, with chamfered reveals, shouldered door opening with timber battened door, and plain overlight. Interior having cruck roof with exposed roof timbers supported on painted masonry corbels. Groin vaulting to crossing. Plastered walls with chamfered pointed arches to crossing. Gallery to west end. Shouldered square-headed door openings to sacristy rooms to chancel, timber battened doors. Recent subdivisions and alteration. Former convent buildings attached to south-west corner.						
		Appraisal: This former Roman Catholic church forms part of a complex of religious and industrial buildings associated with the former Saint Vincent's Industrial School. In 1855 Cardinal Cullen requested the Sisters of Mercy to provide a rehabilitation service to women who had been incarcerated in Mountjoy Jail. Cardinal Cullen rented a premises at Goldenbridge and by 1858 the Sisters of Mercy had established a convent, national school for the poor of the area and a commercial laundry, as well as the rehabilitation service for the former prisoners. The Griffith's Valuation map of c.1860 shows a Roman Catholic chapel on the site, while the convent buildings were constructed to the south later in the century. The church is of architectural interest, and though the interior has been altered, the building retains much of its early form and materials. The church may have been designed by John Bourke (d.1871), who carried out designs from 1858 for the Saint Vincent de Paul Reformatory at Goldenbridge. Bourke designed many commissions for the Catholic Church throughout his career, and it was as a designer of churches, convents and related schools and institutions that he made his reputation. The building is of historical and social significance as part of the Goldenbridge Convent and Industrial School complex.						
P		50080097	Saint Anne's	1870 - 1910	Presbytery	95m	Regional	

		Description: Detached three-bay two-storey former presbytery, built c.1890, having two-storey return with catslide roof to rear (north) elevation, and single-storey flat-roofed extension to west elevation. Now in use as private house. Hipped slate roof having clay ridge tiles, red brick chimneystacks, moulded brick eaves course and some cast-iron rainwater goods. Red brick walls. Segmental-arched window openings having cut granite sills and red brick voussoirs, replacement uPVC windows. Round-headed door opening having red brick doorcase with moulded brick cornice, moulded surround, impost and plinth, cut granite keystone, timber panelled door having plain fanlight, and granite step. Set back from road, front garden enclosed by metal railings over cut granite plinth, with matching pedestrian gate, garden to west and north enclosed by calp limestone boundary wall having red brick piers and vehicular entrance to south elevation. **Appraisal:** This well-proportioned middle-sized house occupies a prominent site along the Grand Canal. The elegant brick façade is enlivened through the use of decorative brick and granite detailing to highlight the door opening, while an elegantly executed eaves course further enhances the building's design. The limestone boundary walls add a patina of age to Saint Vincent Street West. Originally a presbytery, it formed part of a larger group of associated religious buildings in the area.						
Q			St. Vincent Street West Cottages	C1890	Residential	10m	Architecteural Interest	
R			Emmett Road Terrace	C1890	Residential	15m	Architecteural Interest	

APPENDIX F – BIODIVERSITY

Appendix F1 Winter Bird Survey – Enviroguide Consulting

Appendix F2 Bat Survey Report – AEE Ltd.

Appendix F3 Bat Survey Metadata Enviroguide Consulting

Appendix F1 Winter Bird Survey – Enviroguide Consulting

Wintering Waterfowl & Shorebird Survey Results 2020-22

AT

LANDS AT EMMET ROAD, CO. DUBLIN

ON BEHALF OF

Dublin City Council

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Appendix I – 2020/21 Winter Bird Survey Data

Appendix II – 2021/22 Winter Bird Survey Data

1 INTRODUCTION

Enviroguide Consulting were commissioned by Dublin City Council to carry out a series of Wintering Bird Surveys in relation to a Proposed Development at Emmet Road, Co. Dublin.

2 QUALITY ASSURANCE AND COMPETENCE

Synergy Environmental Ltd., T/A Enviroguide Consulting, is wholly Irish Owned multi-disciplinary consultancy specialising in the areas of the Environment, Waste Management and Planning. All our consultants carry scientific or engineering qualifications and have a wealth of experience working within the Environmental Consultancy sectors.

Professional memberships include the Chartered Institution of Wastes Management (CIWM), the Irish Environmental Law Association and Chartered Institute of Ecology and Environmental Management (CIEEM).

All surveying and reporting has been carried out by qualified and experienced ecologists and environmental consultants. Brian McCloskey, Project Ecologist and Ornithologist with Enviroguide, and Eric Dempsey, Senior Ornithologist undertook the wintering bird surveys at the Site of the Proposed Development.

Brian McCloskey is a graduate Ecologist and experienced Ornithologist with 12 years of bird survey experience. Brian is a longstanding and active member of Bird Watch Ireland and has provided Ornithology survey work for ecological consultancies, e.g., vantage points surveys of gulls, terns, raptors, waders and wildfowl; hinterland surveys of the above as well as riverine species; and breeding waders and country birds. Brian is highly experienced with all survey methodologies and with surveying all species groups of Irish birds and migrants.

Eric Dempsey is an Environmental Consultant and Senior Ornithologist who has worked on a wide range of conservation, research, and ecological monitoring projects across Ireland. Eric is the author of the best-selling books, The Complete Field Guide to Ireland's Birds and Finding Birds in Ireland and is experienced in coordinating and undertaking surveys along with being highly proficient in report writing and data management. Eric is highly experienced with all survey methodology and has inputted in various Environmental Impact Assessment Reports, Environmental Assessments and Appropriate Assessments.

3 BACKGROUND

The purpose of this report is to provide a robust evidenced based assessment of whether the Site of the Proposed Development is, or has the potential to be, in its current state, utilised as *ex-situ* feeding/roosting grounds by species of shorebird and waterfowl listed as Special Conservation Interest (SCI) species for nearby Special Protection Areas (SPAs).

Member States are required to designate SPAs under the EU Birds Directives (79/409/EEC), to provide protection for bird species of special conservation importance. These sites along with Special Areas of Conservation (SACs) are collectively known as Natura 2000 sites or

'European Sites', and form part of Natura 2000, a network of protected sites located throughout the European Community.

The following SPAs are located within proximity to the Site of the Proposed Development: South Dublin Bay and River Tolka Estuary SPA ca. 6.9km to the east, Baldoyle Bay SPA ca.14.3km to the northeast, North Bull Island SPA ca. 9.7km to the northeast and Wicklow Mountains SPA located ca.11.1km to the south.

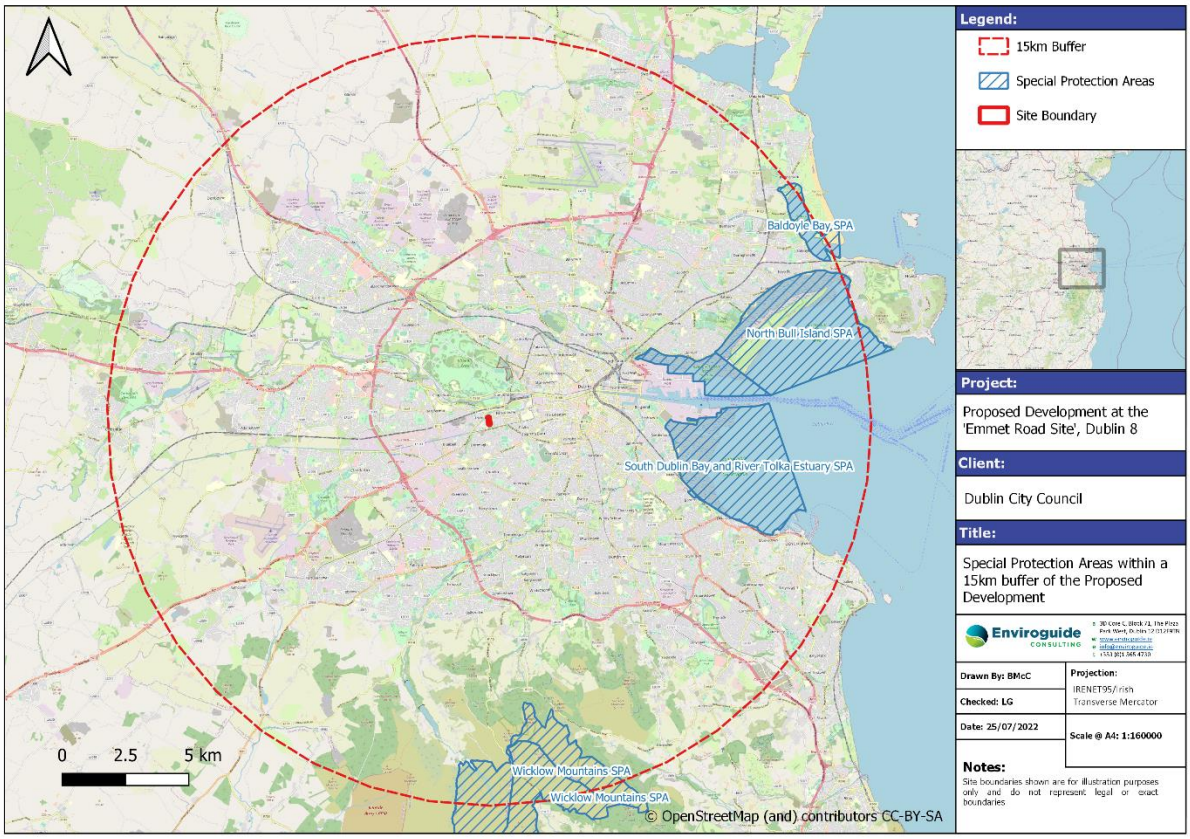


Figure 1: Special Protection Areas (SPAs) (in blue) located within proximity to the Site of the Proposed Development (red marker).

3.1 Qualifying Interests

The species listed as SCIs for these designated European sites are listed in Table 1 below. There are 23 species that are listed as SCIs for the aforementioned SPA's, 21 waterfowl/shore bird species and 2 terrestrial species.

Table 1: Bird species of Special Conservation Interest listed for nearby SPAs.

Special Protection Area (SPA)			
Site Code	**Site Name**	**Qualifying Interests**	**Distance to Site**

004024	South Dublin Bay and River Tolka Estuary SPA	Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] Oystercatcher (*Haematopus ostralegus*) [A130] Ringed Plover (*Charadrius hiaticula*) [A137] Grey Plover (*Pluvialis squatarola*) [A141] Knot (*Calidris canutus*) [A143] Sanderling (*Calidris alba*) [A144] Dunlin (*Calidris alpina*) [A149] Bar-tailed Godwit (*Limosa lapponica*) [A157] Redshank (*Tringa totanus*) [A162] Black-headed Gull (*Chroicocephalus ridibundus*) [A179] Roseate Tern (*Sterna dougallii*) [A192] Common Tern (*Sterna hirundo*) [A193] Arctic Tern (*Sterna paradisaea*) [A194] Wetland and Waterbirds [A999]	6.2km
004040	Wicklow Mountains SPA	Merlin (*Falco columbarius*) [A098] Peregrine (*Falco peregrinus*) [A103]	11km
004016	Baldoyle Bay SPA	Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] Shelduck (*Tadorna tadorna*) [A048] Ringed Plover (*Charadrius hiaticula*) [A137] Golden Plover (*Pluvialis apricaria*) [A140] Grey Plover (*Pluvialis squatarola*) [A141] Bar-tailed Godwit (*Limosa lapponica*) [A157] Wetland and Waterbirds [A999]	14.2km
004006	North Bull Island SPA	Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] Shelduck (*Tadorna tadorna*) [A048] Teal (*Anas crecca*) [A052] Pintail (*Anas acuta*) [A054] Shoveler (*Anas clypeata*) [A056] Oystercatcher (*Haematopus ostralegus*) [A130] Golden Plover (*Pluvialis apricaria*) [A140] Grey Plover (*Pluvialis squatarola*) [A141] Knot (*Calidris canutus*) [A143]	9.3km

		Sanderling (*Calidris alba*) [A144] Dunlin (*Calidris alpina*) [A149] Black-tailed Godwit (*Limosa limosa*) [A156] Bar-tailed Godwit (*Limosa lapponica*) [A157] Curlew (*Numenius arquata*) [A160] Redshank (*Tringa totanus*) [A162] Turnstone (*Arenaria interpres*) [A169] Black-headed Gull (*Chroicocephalus ridibundus*) [A179] Wetland and Waterbirds [A999]	

It is noted that the three Tern species listed above are strictly pelagic species, except when breeding, and visit Ireland during the summer. These species in particular would not be expected to frequent the Site of the Proposed Development at any time of the year due to their coastal and pelagic requirements.

The majority of the 21 waterfowl/shorebird species are not expected to utilise the Site lands due to a combination of their largely coastal nature as shorebirds, and for their respective preferences for particular types of inland feeding grounds i.e., arable/pasture fields and short sward grasslands.

4 EXISTING ENVIRONMENT

The Site of the Proposed Development is located near Inchicore, just off Emmet Road beside the Goldenbridge Cemetery, in south County Dublin. The Site is situated in a primarily residential/ commercial area on the outskirts of the villages of Inchicore and Kilmainham, and measures approximately 4.68 hectares (including watermain upgrade along Emmet Road) and c. 3.72 hectares on the main development site which is bounded to the north by Emmet Road, the east by the St. Michael's Estate, the west by St. Vincent's Street West and to the south by the Goldenbridge Cemetery.

Figure 2 shows the Site location.

The following habitat types (Fossitt, 2000) were recorded within Site of the Proposed Development:

- *BL3 – Buildings and artificial surfaces*
- *GA2 – Amenity grassland*
- *GS2 – Dry meadows and grassy verges*
- *ED3 – Recolonising bare ground*
- *BC4 – Flower beds and borders*
- *BL1 – Stone walls and other stone work*

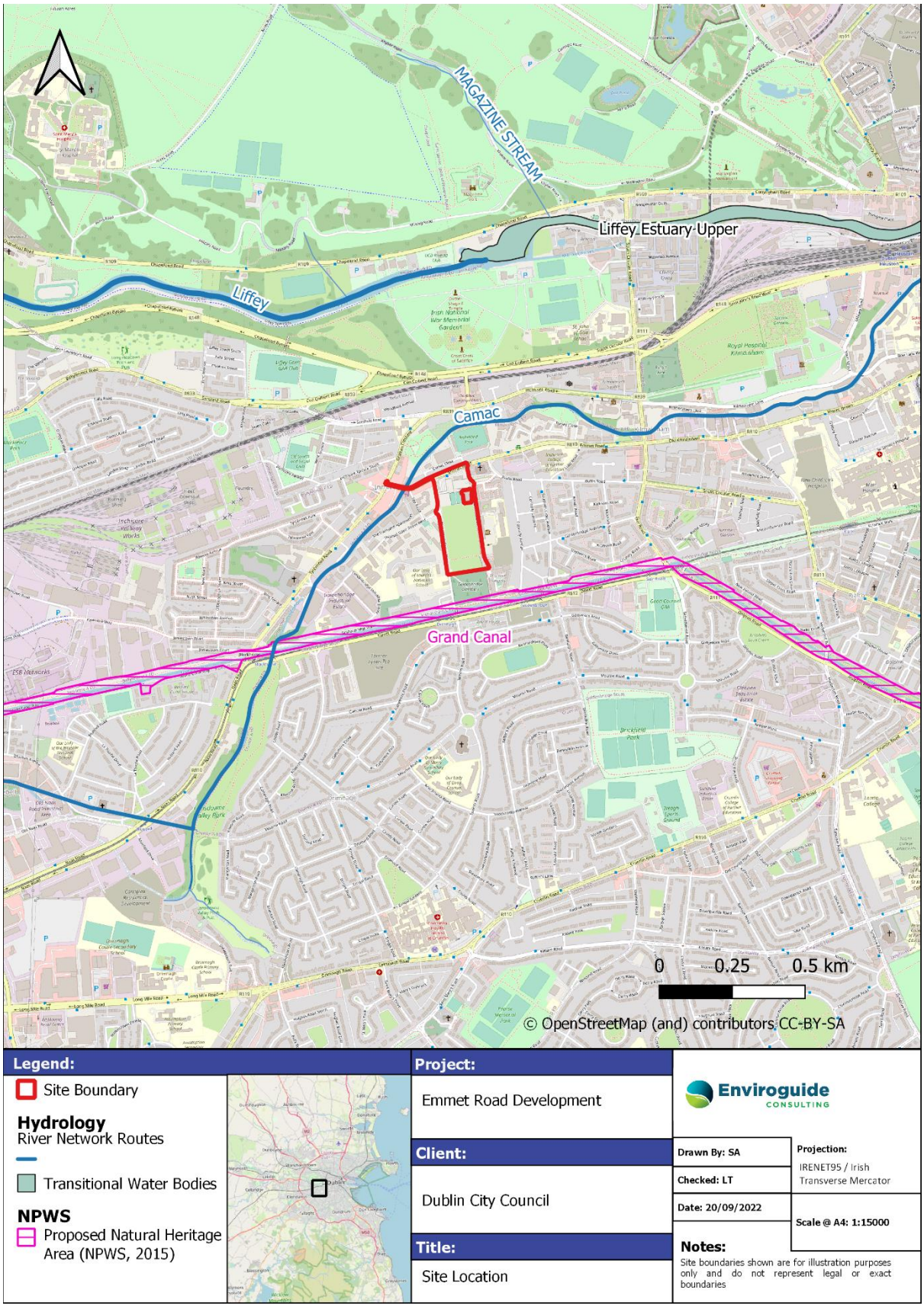


Figure 2: Site location



Figure 3: Survey Area

5 METHODOLOGY

5.1 Habitat suitability Assessment

Prior to commencement of surveys in October 2021, a site walkover was conducted by Enviroguide Senior Ecologist Liam Gaffney and an initial assessment was made on the quality of the lands with regard to their *ex-situ* potential. Based on this assessment, the methodology for the survey was designed with a view to providing the scientific data necessary to ascertain with confidence the level of usage of the Site lands by the relevant SCI bird species (As detailed in Table 1).

5.2 Survey Methodology

During 2020/21 a total of 6 survey days were carried out at the Site; covering October, November and December 2020 and January, February and March 2021. These surveys provide a summary of the usage of the Site by SCI species during the winter. A total of 36 hours of survey were carried out at the Site throughout the 2020/21 winter.

Table 2: Winter Waterfowl and Shorebird Surveys conducted at the Site of the Proposed Development in 2020/21

Winter Bird survey Dates
30th October 2020
28th November 2020
27th December 2020
19th January 2021
24th February 2021
30th March 2021

During 2021/22 a total of 5 survey days were carried out at the Site; covering December 2021, January and March 2022. These surveys provide a summary of the usage of the Site by SCI species during the 2021/22 winter. A total of 30 hours of survey were carried out at the Site.

Table 3: Winter Waterfowl and Shorebird Surveys conducted at the Site of the Proposed Development in 2021/22

Winter Bird survey Dates
1st December 2021
20th December 2021
24th January 2022
4th March 2022
21st March 2022

The survey methodology was as followed:

- Each survey day either commenced at dawn and continued for 6 hours or commenced 6 hours prior to dusk and ended at dusk. These timings were alternated each survey day to capture any possible temporal trends in the usage of the lands by SCI species.
- Each day, prior to the commencement of the survey, the Site was walked and checked for any obvious evidence of SCI species usage e.g., Light-bellied Brent Goose (LBBG) droppings.
- Each hour the Site was walked and observed for a period of approx. 20 mins with any SCI species activity on, or in flight over the Site recorded.
- All SCI species that were observed visiting the Site or flew overhead were recorded, as were any other species of note e.g., rare passerines etc.

All surveys were undertaken using:

- Optricon 8x42 binoculars (or equivalent)
- Optricon 20x Telescope (or equivalent)
- Agreed survey methodology.
- Field notebook.

6 SURVEY RESULTS

6.1 2020/21 Survey Results

6.1.1 Ex-situ usage

The first set of winter bird Surveys at the Site of the Proposed Development comprised of 6 survey days i.e., a total of 36 hourly counts across October, November and December 2020 and January, February and March 2021.

Out of a total of 36 hourly counts: Five waterfowl/shorebird species were recorded utilising the Site lands. Light-bellied Brent Geese (*Branta bernicla hrota*) were recorded feeding on the

Site on just one occasion. Light-bellied Brent Goose droppings, a distinctive indicator of this species' presence/usage of a Site, were also recorded on just one occasion.

The only other shorebirds recorded utilising the Site were Gull species such as Herring Gull (*Larus argentatus*), Common Gull (*Larus canus*) and Black-headed Gull (*Larus ridibundus*), loafing about on the Site. Lesser black-backed Gull (Larus fuscus) was recorded during the March surveys.

Table 4: Waterfowl/Shorebird species recorded at the Site during the 2020/21 winter

Waterfowl/Shorebird species recorded 2020/21					
Species	**Scientific name**	**BOCCI Status**	**Activity**	**Date**	**Peak Count**
Light-bellied Brent Goose	*Branta bernicla hrota*	Amber	Feeding on Site	28/11/2020	14
Lesser Black backed Gull	*Larus fuscus*	Amber	Loafing on Site	30/03/2021	30
Herring Gull	*Larus argentatus argenteus*	Amber	Flying around and loafing on Site	All survey dates	18
Black-headed Gull	*Larus ridibundus*	Amber	Flying around and loafing on the Site	30/10/2020 27/12/2020 19/01/2021 24/02/2021	27
Common Gull	*Larus canus*	Amber	Flying around and loafing on the Site	30/10/2020 27/12/2020 19/01/2021	1

6.2 2021/22 Survey Results

6.2.1 Ex-situ usage

The second set of winter bird Surveys at the Site of the Proposed Development comprised of 5 survey days i.e., a total of 30 hourly counts in December 2021, January and March 2022.

Out of a total of 30 hourly counts: Eight waterfowl/shorebird species were recorded in the vicinity of the Site lands. Four of these species were only recorded as flying over the Site rather than using the Site as a feeding ground. Light-bellied Brent Geese were recorded once flying over the Site. Light-bellied Brent Goose droppings were not recorded on any of the Site visits, despite thorough Site walkovers carried out each survey day.

The only shorebirds recorded utilising the Site were all Gull species with Herring Gull, Common Gull and Black-headed Gull loafing about on the Site. Lesser black-backed Gull was recorded on the March surveys.

6.2.2 Fly overs

Out of a total of 30 hourly counts: 4 instances of waterfowl/shorebird species in flight over the Site were recorded. No records of Merlin or Peregrine were made at or over the Site during any of the survey days.

Records of interest are highlighted below:

- 24/01/2022 – 230 Light-bellied Brent Geese flew south-east over the Site.
- 21/03/2022 – A Mute Swan (*Cygnus olor*) flew west over the Site.
- 21/03/2022 – An Oystercatcher (*Haematopus ostralegus*) flew east over the Site.
- 21/03/2022 – 9 Mallard (*Anas platyrhynchos*) flew east over the Site.

Herring Gull, Common Gull, Lesser black-backed Gulls and Black-headed Gull were the most common shorebird species observed loafing on the Site lands along with common passerine species such as corvids, wood pigeons, and smaller hedgerow species.

Table 5: Waterfowl/Shorebird species recorded on the Site of the Proposed Development 2021/22

Waterfowl/Shorebird species recorded 2021/22					
Species	**Scientific name**	**BOCCI Status**	**Activity**	**Date**	**Peak Count**
Lesser Black backed Gull	*Larus fuscus*	Amber	Flying over and loafing on the Site	21/03/2022	3
Herring Gull	*Larus argentatus argenteus*	Amber	Flying over and loafing on the Site	All survey dates	15
Black-headed Gull	*Larus ridibundus*	Amber	Flying over and loafing on the Site	All survey dates	43
Common Gull	*Larus canus*	Amber	Flying over and loafing on the Site	01/12/2021 24/01/2022 04/03/2022	4

7 CONCLUSIONS

Results of the winter bird surveys carried out over two winters (5 days across December 2021, January and March 2022 and 6 days across October, November and December 2020 and

January, February and March 2021) confirm very little usage of the Site of the Proposed Development by species listed as of Special Conservation Interest for the relevant SPAs.

Over the course of the 66 hours surveyed, one observation of Light-bellied Brent Geese was made during the 2020/21 winter. On the 28th of November 2020, a peak count of 14 individuals were found feeding on the Site. No records of this species were made during the 2021/22 winter and no LBBG droppings were recorded at the Site during any of the Site visits. This demonstrates that the Site of the Proposed Development is not a significant *ex-situ* feeding Site for LBBG. The only other SCI recorded on the Site was Black-headed Gull; recorded loafing about on the site in low numbers (Peak count of 43 on 24/01/2022).

Table 6 summarises the peak counts of all relevant species recorded on site during the surveys, and compares this with their respective 1% national and international population estimates. These 1% national and international population estimate figures are taken from Lewis *et al.* (2019). National figures from Lewis *et al.* (2019) are based on records from the Irish Wetland Bird Survey (I-WeBS), a scheme that is funded by the National Parks and Wildlife Service of the Department of Culture, Heritage & the Gaeltacht and that is co-ordinated by BirdWatch Ireland; and international figures are based on records from Wetlands International (2012 & 2018).

Table 6: Summary of peak counts of all relevant SCI species across the survey period, and respective 1% national and international population estimates.

Species	Peak Count	Date	1% National Population	1% International Population
Light-bellied Brent Geese	14	28/11/2020	350	400
Black-headed Gull	43	24/01/2022	n/a*	31,000

*= I-WeBS typically does not record gull species sufficiently in order to be able to generate accurate 1% national figures. Gulls are widely distributed during winter and are not monitored routinely during I-WeBS so standard methods of population estimation and threshold setting cannot be applied. Gull species are therefore not assigned 1% thresholds but rather a 'threshold of significance' is applied that relates to the known most important sites for the species in question (Crowe, 2005). In the case of Black-headed Gull the current threshold of significance is 1,000 (after Crowe, 2005).

Although there is some potential feeding habitat for waterfowl and shorebird species at the Site in the form of the amenity grassland present, little to no usage of the Site was recorded during the two winters it was surveyed. It is noted that the Site is not located in close proximity to the coast and also experiences frequent disturbance in the form of humans passing through the Site walking or with dogs. As such, it is unlikely that the Site will be used regularly if at all by any SCI species other than Gull species. LBBG were only recorded feeding on the Site

once in winter 2020/21 and the lack of visual records or droppings since then indicate that it is not regularly used as an important feeding Site by the Brent Geese.

The only gull species recorded at the Site that is an SCI for the SPAs located within 15km of the Site was Black-headed Gull; recorded loafing about on the site in low numbers (Peak count of 43 on 24/01/2022). It is noted that the highest peak count recorded at the Site of 43 Black-headed Gull on one occasion is not deemed to be significant in terms of overall population numbers. As mentioned above the current threshold of significance for Black-headed Gull is 1,000 (Crowe, 2005). The South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA are designated as SPAs due in-part to the fact they supports nationally important numbers of wintering waterbird species including 3,040 and 2,196 Black-headed Gull respectively (NPWS, 2015; NPWS 2014). It is therefore concluded that there will be no loss of any important *ex-situ* foraging/roosting habitat, to any of the SCI species listed for the relevant SPAs, as a result of the Proposed Development.

Other than Black-headed Gulls which were present on all counts, SCI species were noted in flight over the Site on just two occasions (Light-bellied Brent Geese and Oystercatcher) and no significant flight path was observed to be consistently in use over the Site. A lone occurrence of 230 LBBG recorded in January 2022 and a single Oystercatcher in March 2022 were the only SCI waterfowl species recorded in flight over the Site. It is noted that the Proposed Development heights of 5-7 storeys will also not impact on the aforementioned species in terms of in-flight collisions.

Based on initial Site assessment/observations, expert opinion, and the findings of the survey itself; it is our considered professional opinion that the Site of the Proposed Development is not currently utilised in any significant manner by SCI species listed for the relevant SPAs. It is also does not currently represent an important flyway for SCI species. Therefore, it is deemed that the Proposed Development will not have any significant adverse effects on these species in terms of *ex-situ* habitat loss, or flight-line obstruction going forward.

8 REFERENCES

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Appendix I – 2020/21 Winter Bird Survey Data

Emmet Green - Winter Bird Survey 2020-21 **Species - Peak Counts per hour**

Date	Observer	Start time	End time	PB	CU	OC	LB	BH	HG	CM	PB droppings	Wind	Cloud	Temp	Precip	Vis	Sunrise	Sunset	Notes
30/10/2020	ED	10:25	10:35	0	0	0	0	7	2	0	N	1	2	7	1	4	07:22	16:55	LOTS OF PEOPLE ON SITE
30/10/2020	ED	12:40	13:40	0	0	0	0	2	11	0	N	1	2	9	1	4	07:22	16:55	
30/10/2020	ED	14:35	15:30	0	0	0	0	4	9	1	N	1	2	9	1	4	07:22	16:55	
28/11/2020	ED	10:15	11:15	14	0	0	0	0	3	0	Y	2	4	10	1	4	08:15	16:12	
28/11/2020	ED	11:15	12:15	14	0	0	0	0	6	0	Y	2	4	10	1	4	08:15	16:12	
28/11/2020	ED	12:15	13:15	8	0	0	0	0	4	0	Y	2	4	11	1	4	08:15	16:12	
28/11/2020	ED	13:15	14:15	8	0	0	0	0	4	0	Y	2	4	11	1	4	08:15	16:12	
28/11/2020	ED	14:15	15:15	8	0	0	0	0	13	0	Y	2	4	10	1	4	08:15	16:12	
28/11/2020	ED	15:15	16:15	8	0	0	0	0	7	0	Y	2	4	9	1	4	08:15	16:12	PB FLUSHED AT 15.35PM
27/12/2020	ED	10:05	11:05	0	0	0	0	2	7	1	N	8	4	5	1	4	08:40	16:12	LOTS OF PEOPLE ON SITE
27/12/2020	ED	11:05	12:05	0	0	0	0	3	6	0	N	8	4	5	1	4	08:40	16:12	
27/12/2020	ED	12:05	13:05	0	0	0	0	3	14	0	N	8	4	5	1	4	08:40	16:12	
27/12/2020	ED	13:05	14:05	0	0	0	0	0	7	0	N	8	4	5	1	4	08:40	16:12	
27/12/2020	ED	14:05	15:05	0	0	0	0	0	5	0	N	8	4	5	1	4	08:40	16:12	
27/12/2020	ED	15:05	16:05	0	0	0	0	2	10	0	N	8	4	5	1	4	08:40	16:12	
19/01/2021	ED	09:40	10:40	0	0	0	0	15	8	0	N	6	4	9	4	4	08:26	16:44	
19/01/2021	ED	10:40	11:40	0	0	0	0	27	18	0	N	6	4	9	4	4	08:26	16:44	LOTS OF PEOPLE ON SITE
19/01/2021	ED	11:40	12:40	0	0	0	0	12	7	0	N	6	4	9	4	4	08:26	16:44	
19/01/2021	ED	12:40	13:40	0	0	0	0	6	3	1	N	6	4	9	4	4	08:26	16:44	
19/01/2021	ED	13:40	14:40	0	0	0	0	5	2	0	N	6	4	9	4	4	08:26	16:44	
19/01/2021	ED	14:40	15:40	0	0	0	0	9	6	0	N	6	4	9	4	4	08:26	16:44	
24/02/2021	ED	08:25	09:25	0	0	0	0	6	3	0	N	3	4	8	1	4	07:24	17:52	LOTS OF PEOPLE ON SITE
24/02/2021	ED	09:25	10:25	0	0	0	0	12	9	0	N	3	4	8	1	4	07:24	17:52	
24/02/2021	ED	10:25	11:25	0	0	0	0	3	4	0	N	3	4	8	1	4	07:24	17:52	
24/02/2021	ED	11:25	12:25	0	0	0	0	4	2	0	N	3	4	9	1	4	07:24	17:52	
24/02/2021	ED	12:25	13:25	0	0	0	0	11	2	0	N	3	4	9	1	4	07:24	17:52	
24/02/2021	ED	13:25	14:25	0	0	0	0	4	5	0	N	3	4	9	1	4	07:24	17:52	
30/03/2021	ED	12:25	13:25	0	0	0	0	0	5	0	N	2	1	15	1	4	07:03	19:56	LOTS OF PEOPLE ON SITE
30/03/2021	ED	13:25	14:25	0	0	0	2	0	6	0	N	2	1	15	1	4	07:03	19:56	
30/03/2021	ED	14:25	15:25	0	0	0	2	0	4	0	N	2	1	15	1	4	07:03	19:56	
30/03/2021	ED	15:25	16:25	0	0	0	0	0	5	0	N	2	1	15	1	4	07:03	19:56	
30/03/2021	ED	16:25	17:25	0	0	0	2	0	7	0	N	2	1	15	1	4	07:03	19:56	
30/03/2021	ED	17:25	18:25	0	0	0	2	0	3	0	N	2	1	15	1	4	07:03	19:56	

Appendix II – 2021/22 Winter Bird Survey Data

Site visit	Count	Date	Observer	Site Name	Start time	End time	Species	No.	Activity Code	Flight direction	Droppings	Wind	Cloud	Temp	Precip	Vis	Sunrise	Sunset	High tide 1	Low tide 1	Notes
1	1	01/12/2021	BMcC	Emmet Rd	08:20	09:20	BH	12	FO		N	6	4	6	1	4	08:19	16:10	08:51	14:28	BH present on all hourly counts with a peak of 12
1	2	01/12/2021	BMcC	Emmet Rd	09:20	10:20	HG	7	FO		N	7	4	6	1	4	08:19	16:10	08:51	14:28	HG present on all hourly counts with a peak of 7
1	3	01/12/2021	BMcC	Emmet Rd	10:20	11:20	CM	4	FO		N	6	4	7	1	4	08:19	16:10	08:51	14:28	
1	4	01/12/2021	BMcC	Emmet Rd	11:20	12:20	CM	4	FO		N	6	4	8	1	4	08:19	16:10	08:51	14:28	
1	5	01/12/2021	BMcC	Emmet Rd	12:20	13:20	0	0			N	7	3	8	1	4	08:19	16:10	08:51	14:28	
1	6	01/12/2021	BMcC	Emmet Rd	13:20	14:20	0	0			N	6	4	7	1	4	08:19	16:10	08:51	14:28	
2	1	20/12/2021	BMcC	Emmet Rd	08:45	09:45	BH	10	FO		N	2	4	7	1	4	08:43	16:06	12:15	05:38	BH present on all hourly counts with a peak of 10
2	2	20/12/2021	BMcC	Emmet Rd	09:45	10:45	HG	14	FO		N	3	4	7	1	4	08:43	16:06	12:15	05:38	HG present on all hourly counts with a peak of 14
2	3	20/12/2021	BMcC	Emmet Rd	10:45	11:45	0	0			N	3	4	7	1	4	08:43	16:06	12:15	05:38	
2	4	20/12/2021	BMcC	Emmet Rd	11:45	12:45	0	0			N	3	4	7	1	4	08:43	16:06	12:15	05:38	
2	5	20/12/2021	BMcC	Emmet Rd	12:45	13:45	0	0			N	3	4	7	1	4	08:43	16:06	12:15	05:38	
2	6	20/12/2021	BMcC	Emmet Rd	13:45	14:45	0	0			N	3	4	7	1	4	08:43	16:06	12:15	05:38	
3	1	24/01/2022	BMcC	Emmet Rd	10:55	11:55	0	0			N	1	1	5	1	4	08:20	16:53	15:44	09:02	
3	2	24/01/2022	BMcC	Emmet Rd	11:55	12:55	PB	230	FL	SE	N	1	1	6	1	4	08:20	16:53	15:44	09:02	
3	3	24/01/2022	BMcC	Emmet Rd	12:55	13:55	HG	8	FO		N	2	1	7	1	4	08:20	16:53	15:44	09:02	HG present on all hourly counts with a peak of 8
3	4	24/01/2022	BMcC	Emmet Rd	13:55	14:55	BH	43	FO		N	2	1	8	1	4	08:20	16:53	15:44	09:02	BH present on all hourly counts with a peak of 43
3	5	24/01/2022	BMcC	Emmet Rd	14:55	15:55	CM	3	FO		N	2	4	8	1	4	08:20	16:53	15:44	09:02	
3	6	24/01/2022	BMcC	Emmet Rd	15:55	16:55	0	0			N	3	4	8	1	4	08:20	16:53	15:44	09:02	
4	1	04/03/2022	BMcC	Emmet Rd	07:00	08:00	HG	9	FO		N	3	1	3	1	4	07:03	18:08	12:42	18:28	HG present on all hourly counts with a peak of 9
4	2	04/03/2022	BMcC	Emmet Rd	08:00	09:00	BH	4	FO		N	3	1	3	1	4	07:03	18:08	12:42	18:28	BH present on all hourly counts with a peak of 4
4	3	04/03/2022	BMcC	Emmet Rd	09:00	10:00	0	0			N	3	1	5	1	4	07:03	18:08	12:42	18:28	
4	4	04/03/2022	BMcC	Emmet Rd	10:00	11:00	CM	2	FO		N	3	1	6	1	4	07:03	18:08	12:42	18:28	
4	5	04/03/2022	BMcC	Emmet Rd	11:00	12:00	CM	1	FO		N	3	2	7	1	4	07:03	18:08	12:42	18:28	
4	6	04/03/2022	BMcC	Emmet Rd	12:00	13:00	0	0			N	3	1	8	1	4	07:03	18:08	12:42	18:28	
5	1	21/03/2022	BMcC	Emmet Rd	12:40	13:40	MA	3	FL	W	N	4	1	13	1	4	06:23	18:40	13:20	19:19	
5	2	21/03/2022	BMcC	Emmet Rd	13:40	14:40	MS	1	FL	W	N	3	1	13	1	4	06:23	18:40	13:20	19:19	
5	2	21/03/2022	BMcC	Emmet Rd	13:40	14:40	MA	9	FL	E	N	3	1	13	1	4	06:23	18:40	13:20	19:19	
5	3	21/03/2022	BMcC	Emmet Rd	14:40	15:40	OC	1	FL	E	N	3	1	12	1	4	06:23	18:40	13:20	19:19	
5	4	21/03/2022	BMcC	Emmet Rd	15:40	16:40	HG	15	FO		N	2	1	11	1	4	06:23	18:40	13:20	19:19	HG present on all hourly counts with a peak of 15
5	5	21/03/2022	BMcC	Emmet Rd	16:40	17:40	LB	3	FO		N	3	1	11	1	4	06:23	18:40	13:20	19:19	
5	6	21/03/2022	BMcC	Emmet Rd	17:40	18:40	BH	12	FO		N	3	1	11	1	4	06:23	18:40	13:20	19:19	BH present on all hourly counts with a peak of 12

Appendix F2 Bat Survey Report – AEE Ltd.

July 2022

Bat Survey Report



Emmet Road, Inchicore, Dublin 8

ASH Ecology & Environmental

Aisling Walsh M.Sc MCIEEM Trading as Ash Ecology & Environmental Ltd.
Tel: 089 4991181 / Company Reg: 630819 /
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Figure 2 Aerial Photo of Site showing existing layout and surrounding landscapes

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Figure 6 Combined Bat Results with Legend –23/25 July 2020 & 7 July 2022

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Appendix A Plates

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1. INTRODUCTION

1.1 Purpose of the Report

Ash Ecology and Environmental Ltd (AEE) were commissioned to carry out a series of bat emergence and activity surveys on behalf of on behalf of Enviroguide Consulting for their client Dublin City Council (DCC).

The development site is bounded to the north by Emmet Road, to the south by Goldenbridge cemetery to the east by the former Richmond Barracks and the pedestrian link to the Bulfin estate next to Saint Michael's Church and to the west by Saint Vincent Street West.

The development will comprise 578 no. apartments, consisting of 110 no. studio apartments, 172 no. 1 bedroom apartments, 250 no. 2 bedroom apartments (including 10 no. duplex apartments) and 46 no. 3 bedroom apartments (all apartments to have balconies or terraces), community facilities Library/Community Hub, Creche, Supermarket, 5 no. units (retail/café/restaurant/class 2 financial services floorspace) & 2 no. Café/restaurant units), a public plaza fronting onto Emmet Road and the installation of a new watermain c 200m in length along Emmet Road to the junction with Tyrconnell Road/Grattan Crescent. The proposal includes works to a protected structure (8705 - Richmond/Keogh Barracks, relating to works to rubble stone boundary wall).

The overall site comprise 4.68 hectares (including watermain upgrade along Emmet Road) and the main development site comprises 3.72 hectares consisting of the now demolished Saint Michael's Estate housing development, see Figure 1 for site location. An aerial photo with existing layout and surrounding landscape is shown as Figure 2.

As the buildings onsite are to be demolished a series of bat surveys were required which took place during July 2020 and July 2022. A bat survey was also carried out in July 2020 to assess the Goldenbridge Cemetery to the south boundary of the site for usage by bats via the perimeter (assess not permitted at night for health and safety reasons).

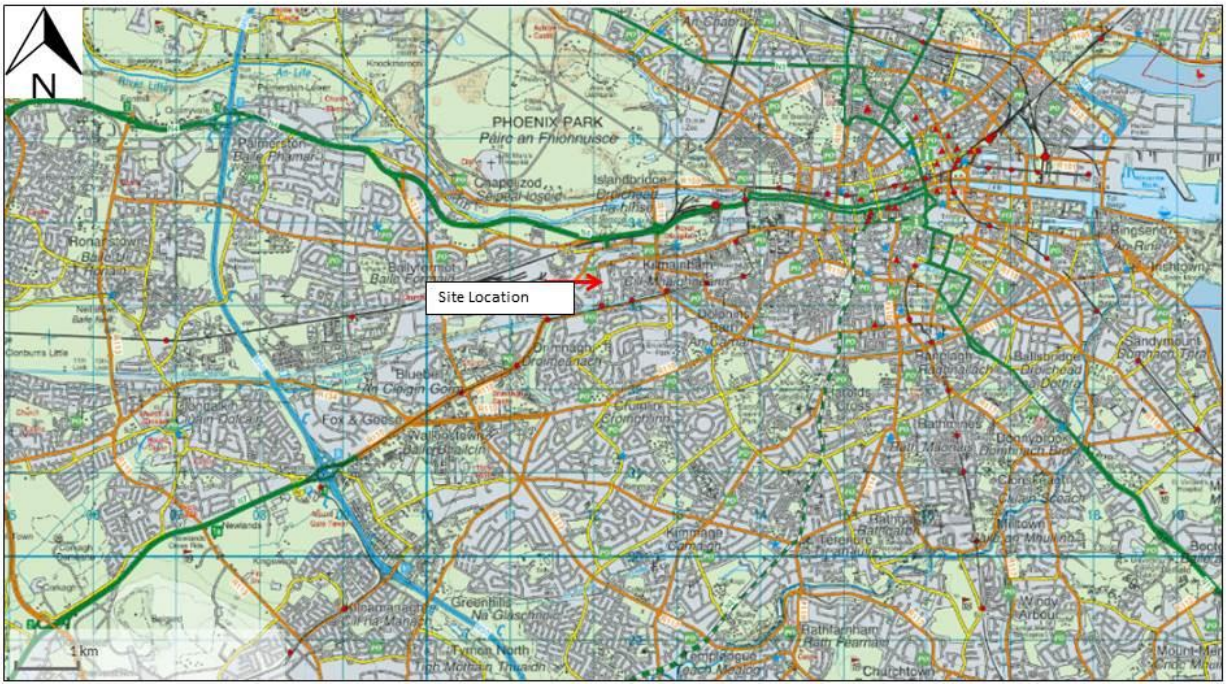


Figure 1 Site Location Map



Figure 2 Aerial Photo of Site showing existing layout and surrounding urban landscape.

1.2 Competency of Assessor

This report has been prepared by Ash Ecology & Environmental Ltd (AEE) whose managing director and leading ecologist is Aisling Walsh who is a full member of the Chartered Institute of Ecological & Environmental Management (CIEEM) while the company, AEE, is a Registered Practice by the CIEEM. Aisling's qualifications include M.Sc. (Dist) in Biodiversity and Conservation (TCD) and B.Sc. (Hons) Zoology (NUIG), a diploma in Applicated Aquatic Science (GMIT) and a Certificate in Applied Biology (GMIT). Aisling has over 15 years of experience providing environmental consultancy and environmental assessment services. Aisling has written numerous Ecological Impact Assessments (EcIA), Screening for Appropriate Assessment Stage I and Stage II Natura Impact Statements, chapters for Environmental Impact Assessments/Statements (EIAR), Badger Surveys, Bat Surveys, Bird and Habitat Surveys.

Aisling is a licenced bat ecologist (example of recent: DER/BAT 2020 – 46 EUROPEAN, DER/BAT 2020 – 48 EUROPEAN, DER/BAT 2021 – 89 EUROPEAN, DER/BAT 2022 – 12 EUROPEAN)and a member of Bat Conservation Ireland. In addition she has completed several bat courses to continue her training and CPD with the most recently (May 2021) a Lantra-accredited course, developed by the Bat Conservation Trust and supported by the Arboricultural Association to access bat tree roost features. Over the past 15 years Aisling has completed 100s of bat surveys providing her with more than adequate experience in the profession.

1.3 Bat Legislation

All bat species are protected under the Wildlife Act 1976 to 2021 which make it an offence to wilfully interfere with or destroy the breeding or resting place of these species; however, the Acts permit limited exemptions for certain kinds of situations.

Section 23 of the Wildlife Act 1976 to 2021 contains several exemptions to the protection given to the species listed for protection on Schedule 5 (e.g. for agriculture or construction). In 2005 a further amendment through the European Communities (Natural Habitats) (Amendment) Regulations 2005 (S.I. No. 378 of 2005) removed all of the exemptions provided in Section 23(7) of the Wildlife Act 1976 to 2021 insofar as they relate to Annex IV species, including all species of bats. Those 2005 Regulations were revoked in 2011 except for Regulation 2 which brings about this strengthened protection for bats (and other Annex IV species). All species of bats in Ireland are listed on Schedule 5 of the 1976 Act, and are therefore subject to the provisions of Section 23, which make it an offence to:

- Intentionally kill, injure or take a bat;
- Wilfully interfere with the breeding or resting place of a bat

The Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora ("the Habitats Directive") seeks to protect rare and vulnerable species, including all species of bats, and their habitats and requires that appropriate monitoring of populations be undertaken. All species of bat found in Ireland are listed on Annex IV of the Directive. Member States are required to put in place a system of strict protection (as outlined in Article 12) for species listed on Annex IV ('European protected species'). The lesser horseshoe bat is further protected under Annex II. This Annex relates to the designation of Special Areas of Conservation (SACs). The Habitats Directive is transposed into Irish law by the

European Communities (Birds & Natural Habitats Regulations) 2011 (S.I. No. 477 of 2011) ("the Habitats Regulations"). Under the Habitats Regulations (2011), all bat species are listed on the First Schedule and Regulation 51 makes it an offence to:

- Deliberately capture or kill a bat;
- Deliberately disturb a bat particularly during the period of breeding, hibernating or migrating;
- Damage or destroy a breeding site or resting place of a bat;
- Keep, sell, transport, exchange, offer for sale or offer for exchange any bat taken in the wild.

Across Europe, bats are further protected under the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1982), which, in relation to bats, exists to conserve all species and their habitats. The Convention on the Conservation of Migratory Species of Wild Animals (CMS, Bonn Convention 1979) was instigated to protect migrant species across all European boundaries. EUROBATS (a daughter Agreement under CMS) is of particular relevance in relation to cooperation across international borders for the conservation of bats, many of which are known to migrate long distances. The Irish government has ratified both of these conventions as well as the EUROBATS Agreement.

1.4 Derogation licences

It is an offence, under Regulation 51 of the European Communities (Birds and Natural Habitats) Regulations, 2011 ('the 2011 Regulations') to:

a) Deliberately capture or kill a bat in the wild;
b) Deliberately disturb a bat particularly during the period of breeding, rearing, hibernation and migration;
c) Damage or destroy a bat's breeding site or resting place, or;
d) Keep, transport, sell, exchange, offer for sale or offer for exchange any bat taken in the wild, other than those taken legally before the Habitats Directive before the Habitats Directive was implemented.

A person may apply to the Minister under Regulation 54 of the 2011 Regulations for a derogation licence to carry out one or more of these prohibited activities. But, the Minister may only grant such a derogation licence if three criteria are met.

Firstly the Minister may only grant a derogation licence if it is for one of the following specified reasons listed in Regulation 54:

a) In the interests of protecting wild fauna and flora and conserving natural habitats;
b) To prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property;
c) In the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and the beneficial consequences of primary importance for the environment;
d) For the purpose of research and education, of repopulating and introducing these species and for the breeding operations necessary for these purposes, including the artificial propagation of plats, or;

e) To allow, under strictly supervised conditions, on a selective basis and to a limited extent, the taking or keeping of bats.

Secondly, the Minister may only issue a derogation if there is no alternative to carrying out the prohibited activity. The first aim of the developer, whether from a private company or a public authority, working with professional advice, should be to entirely avoid any potential impact of a proposed development on bats and their breeding and resting places. Alternatives may involve redesigning a development so that bat roosts, and associated commuting routes and feeding areas are kept intact and that bats are not disturbed, for example by inappropriate lighting. It should be noted that the European Commission has a specific understanding of satisfactory alternative solution. "An alternative solution cannot be deemed unsatisfactory merely because it would cause greater inconvenience or compel a change in behaviour" (European Commission, 2021, page 13)[1]. Decisions about what solution is satisfactory must be science-based and should solve the problem of how to strictly protect the bats in light of the development.

Thirdly the Minister may only grant a derogation if it is not detrimental to the maintenance of the populations of bats at a favourable conservation status (FCS) in their natural range. There is case law from the Court of Justice of the European Union (CJEU) to back this up. One example is the Finnish Wolf Case C-674/17. The ruling establishes that the Member State must "clearly and precisely" identify in the derogation what the objectives of the derogation are. It must also establish that the derogation is capable of achieving those objectives and demonstrate that there is no satisfactory alternative. Cumulative effects of derogations must be taken into account when issuing derogations. The maximum number of all derogations must not be detrimental to the maintenance or restoration of the population at FCS. Consideration must be given to other human causes of mortality. Any risk to FCS must be ruled out by detailed conditions based on the level of population, its conservation status and its biological characteristics. The conditions must be precisely defined and they must be monitored to ensure they are implemented.

If any of these three criteria are not satisfied, the Minister cannot issue a derogation licence. It must never be assumed that a derogation licence will automatically be granted.

In summary, it is clear that a developer must first look to avoid all impacts on bats. This may mean looking at alternative solutions and redesigning the project accordingly. If this is not possible, the developer needs to check whether there are grounds to apply for a derogation licence, based on the reasons given in Regulation 54 of the Habitats Regulations. When applying for a derogation licence the developer must clearly state the reason and describe in detail all alternative solutions which were given serious consideration. Any mitigation intended to ensure that there is no impact or minimal impact on the bats must be clearly described in detail, giving examples of how it worked in other places.

If a derogation licence has been refused by the Minister, any aspect of the development for which the derogation licence was sought, must not go ahead, no matter what other permissions are in place.

[1] https://op.europa.eu/en/publication-detail/-/publication/bbc7ace0-27e2-11ec-bd8e-01aa75ed71a1/language-en

A derogation licence is required when on the basis of survey information and specialist knowledge, it appears that:

- The site in question is a breeding site or resting place for bats and/or;
- The proposed activity could impact on a breeding site or resting place of a bat.

No licence is required if the proposed activity is unlikely to result in an offence. The advice given in this document (and see also Mullen et al. 2021)[2] should assist the proponent, or those acting on their behalf, in arriving at a decision on this matter, though it must be recognised that determining whether a particular site is used as a breeding or resting place can be problematic for such mobile animals as bats. Determining whether an activity undertaken near to a roost might impact on that roost (e.g. by removing important flight lines or foraging areas) will also require specialist assessment. Note that if the proposed activity can be timed, organised and carried out so as to avoid committing an offence then no licence is required.

Examples of works that are likely to need a licence because they may result in the destruction of a breeding or resting place and/or disturbance of bats include:

- Demolition of buildings known to be used by bats;
- Conversion of barns or other buildings known to be used by bats;
- Restoration of ruined or derelict buildings;
- Maintenance and preservation of heritage buildings;
- Introduction of artificial lighting inside a roost or near a roost entrance;
- Change of use of buildings resulting in increased ongoing disturbance;
- Removal of trees known to be used by bats;
- Significant alterations to roof voids known to be used by bats. Examples of works that, if carefully planned, may not need a licence include:
- Works near to or at roosts (e.g. re-roofing) if carried out while bats are not present and the access points and roosting area are not affected;
- Remedial timber treatment, carried out with the correct (non-toxic to bats) chemicals while bats are not present.

2. METHODOLOGY

2.1 Information Sources

A desk-based review of information sources was completed. Information contained on the websites of the National Parks and Wildlife Service (NPWS)[3] and the National Biodiversity Data Centre (NBDC)[4] was reviewed. The following publications and websites were also reviewed and consulted:

[2] Mullen, E., Marnell, F & Nelson, B. (2021) Strict protection of animal species. Guidance for public authorities on the application of Articles 12 and 16 of the EU Habitats Directive to development/works undertaken by or on behalf of a public authority. Unpublished Report, National Parks and Wildlife Service. Department of Housing, Local Government and Heritage, Dublin. https://npws.ie/sites/default/files/files/article-12- guidance-final.pdf

[3] The National Parks and Wildlife Services map viewer http://webgis.npws.ie/npwsviewer/

[4] The National Biodiversity Data Centre www.NBDC.ie

- Marnell, F., Kelleher, C. & Mullen, E. (2022) Bat mitigation guidelines for Ireland v2. Irish Wildlife Manuals, No. 134. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.
- Mullen, E., Marnell, F & Nelson, B. (2021) Strict protection of animal species. Guidance for public authorities on the application of Articles 12 and 16 of the EU Habitats Directive to development/works undertaken by or on behalf of a public authority. Unpublished Report, National Parks and Wildlife Service. Department of Housing, Local Government and Heritage, Dublin. https://npws.ie/sites/default/files/files/article-12- guidance-final.pdf
- Bat Conservation Trust (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd edition
- CIEEM (2021) Bat Mitigation Guidelines - A guide to impact assessment, mitigation and compensation for developments affecting bats
- Bat Conservation Ireland https://www.batconservationireland.org/
- BTHK (2018) Bat Roosts in Trees – A Guide to Identification and Assessment for Tree-Care and Ecology Professionals. Exeter: Pelagic Publishing.
- Bat Conservation Trust (2018) Bats and artificial lighting in the UK Bats and the Built Environment series[5]
- Mitchell-Jones, A.J, & McLeish, A.P. (eds). 2004., 3rd Edition Bat Workers' Manual, JNCC, Peterborough, ISBN 1 86107 558 8
- Bat Conservation Ireland (2012) Bats and Appropriate Assessment Guidelines, Version 1, December 2012. Bat Conservation Ireland, www.batconservationireland.org[6]
- Bat Conservation Ireland (2010) Bats & Lighting Guidance Notes for: Planners, engineers, architects and developers[7]
- Best Practice Guidelines for the Conservation of Bats in the Planning of National Road Schemes (National Roads Authority, 2005).
- Guidelines for the Treatment of Bats during the Construction of National Road Schemes (National Roads Authority, 2005).
- Bats and Lighting in the UK – Bats and the Built Environment Series (Institute of Lighting Professionals, September 2011
- Guidance Notes for the Reduction of Obtrusive Light GN01 (Institute of Lighting Professionals, 2011.
- Bats and Lighting – Guidance Notes for Planners, Engineers, Architects and Developers (Bat Conservation Ireland);
- The Eurobats Mitigation of Lighting Document

2.2 Desk Study

2.2.1 Previous Records

A desktop review was carried out to identify the previous records of Bat species within the Proposed Development Site and its environs. The study area occurs in 10km^2 Grid Square O13. The website the NBDC (www.nbdc.ie) was accessed on 09/07/2022 to establish any previous bat records and shown below in Table 1.

[5] https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/

[6] https://www.batconservationireland.org/wp-content/uploads/2013/09/BCIreland-AA-Guidelines_Version1.pdf

[7] https://www.batconservationireland.org/wp-content/uploads/2013/09/BCIrelandGuidelines_Lighting.pdf

Table 1 Historical Bat Records in 10km^2 Grid Square O13 (NBDC website www.nbdc.ie accessed 09/07/2022)

Species Name - Common	*Species Name - Latin*	Last Documented Record O13
Brown Long-eared Bat	*Plecotus auritus*	25/05/2020
Daubenton's Bat	*Myotis daubentonii*	25/05/2020
Leisler's Bat	*Nyctalus leisleri*	08/06/2020
Nathusius's Pipistrelle	Pipistrellus nathusii	25/05/2020
Natterer's Bat	Myotis nattereri	25/05/2020
Common Pipistrelle	*Pipistrellus pipistrellus*	03/08/2013
Soprano Pipistrelle	*Pipistrellus pygmaeus*	25/05/2020
Whiskered Bat	Myotis mystacinus	13/08/2007

2.2.2 *Species Background*

Ireland had ten known bat species until February 2013, when a single live greater horseshoe bat (*Rhinolophus ferrumequinum)* was found roosting in Co. Wexford[8]. On 8th June 2020, a single audio recording was confirmed in the Glendaough area, Co. Wicklow. It was found on two more occasions in the same area in early July 2020 (Bat Conservation Ireland, July 2020).

The ten species (excluding the greater horseshoe) are briefly described overleaf. For a more comprehensive overview see McAney, 2006.[9]

The dependence of Irish bat species on insect prey has left them vulnerable to habitat destruction, land drainage, agricultural intensification and increase use of pesticides. Also, their reliance on buildings as roosting sites has made them particularly vulnerable to renovation works and the use of timber chemical treatment. Buildings are highly important as roosting sites for bats and all Irish bat species use buildings for all roost types. Most significant in terms of roosts in houses are maternity roosts, but cellars and even attics may serve as hibernation sites for bats. Roosts within buildings can far exceed the numbers encountered in trees, bridges, caves or cliffs and roosts of over 1,000 bats have been recorded in buildings.[10]

[8] National Biodiversity Data Centre http://www.biodiversityireland.ie/new-bat-species-found-in-ireland/

[9] McAney, K. (2006) *A Conservation Plan for Irish Vesper Bats.* Irish Wildlife Manual No.20. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government.

[10] NRA (2005) Guidelines for the Treatment of Bats Prior to the Construction of National Road Schemes. National Roads Authority, Dublin

2.2.2.1 Family Vespertilionidae:

Common pipistrelle *Pipistrellus pipistrellus*
This species was only recently separated from its sibling, the soprano or brown pipistrelle P. pygmaeus[11], which is detailed below. The common pipistrelle's echolocation calls peak at 45 kHz. The species forages along linear landscape features such as hedgerows and treelines as well as within woodland.

Soprano pipistrelle *Pipistrellus pygmaeus*
The soprano pipistrelle's echolocation calls peak at 55 kHz, which distinguishes it readily from the common pipistrelle on detector. The pipistrelles are the smallest and most often seen of our bats, flying at head height and taking small prey such as midges and small moths. Summer roost sites are usually in buildings, but tree holes and heavy ivy are also used. Roost numbers can exceed 1,500 animals in mid-summer.

Nathusius' pipistrelle *Pipistrellus nathusii*
Nathusius' pipistrelle is a recent addition to the Irish fauna and has mainly been recorded from the north-east of the island in Counties Antrim and Down[12] and also in Fermanagh, Longford and Cavan. It has also recently been recorded in Counties Cork and Kerry.[13] However, the known resident population is enhanced in the autumn months by an influx of animals from Scandinavian countries. The status of the species has not yet been determined.

Leisler's bat *Nyctalus leisleri*
This species is Ireland's largest bat, with a wingspan of up to 320mm; it is also the third most common bat, preferring to roost in buildings, although it is sometimes found in trees and bat boxes. It is the earliest bat to emerge in the evening, flying fast and high with occasional steep dives to ground level, feeding on moths, caddisflies and beetles. The echolocation calls are sometimes audible to the human ear being around 15 kHz at their lowest. The audible chatter from their roost on hot summer days is sometimes an aid to location. This species is uncommon in Europe and as Ireland holds the largest national population the species is considered as Near Threatened here.

Brown long-eared bat *Plecotus auritus*
This species of bat is a 'gleaner', hunting amongst the foliage of trees and shrubs, and hovering briefly to pick a moth or spider off a leaf, which it then takes to a sheltered perch to consume. They often land on the ground to capture their prey. Using its nose to emit its echolocation, the long-eared bat 'whispers' its calls so that the insects, upon which it preys, cannot hear its approach (and hence, it needs oversize ears to hear the returning echoes). As this is a whispering species, it is extremely difficult to monitor in the field as it is seldom heard on a bat detector. Furthermore, keeping within the foliage, as it does, it is easily overlooked. It prefers to roost in old buildings.

[11] Barratt, E. M., Deauville, R., Burland, T. M., Bruford, M. W., Jones, G., Racey, P. A., & Wayne, R. K. (1997) *DNA Answers the Call of Pipistrelle Bat Species. Nature* 387: 138 - 139.
[12] Richardson, P. (2000) *Distribution Atlas of Bats in Britain and Ireland 1980 - 1999*. The Bat Conservation Trust, London, England.
[13] Kelleher, C. (2005) *International Bat Fieldcraft Workshop, Killarney, Co. Kerry*. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government.

Natterer's bat *Myotis nattereri*
This species has a slow to medium flight, usually over trees but sometimes over water. It usually follows hedges and treelines to its feeding sites, consuming flies, moths, caddisflies and spiders. Known roosts are usually in old stone buildings but they have been found in trees and bat boxes. The Natterer's bat is one of our least studied species and further work is required to establish its status in Ireland.

Daubenton's bat *Myotis daubentonii*
This bat species feeds close to the surface of water, either over rivers, canals, ponds, lakes or reservoirs but it can also be found foraging in woodlands. Flying at 15 kilometres per hour, it gaffs insects with its over-sized feet as they emerge from the surface of the water - feeding on caddis flies, moths, mosquitoes, midges etc. It is often found roosting beneath bridges or in tunnels and also makes use of hollows in trees.

Whiskered bat *Myotis mystacinus*
This species, although widely distributed, has been rarely recorded in Ireland. It is often found in woodland, frequently near water. Flying high, near the canopy, it maintains a steady beat and sometimes glides as it hunts. It also gleans spiders from the foliage of trees. Whiskered bats prefer to roost in buildings, under slates, lead flashing or exposed beneath the ridge beam within attics. However, they also use cracks and holes in trees and sometimes bat boxes. The whiskered bat is one of our least studied species and further work is required to establish its status in Ireland.

Brandt's bat *Myotis brandtii*
This species is known from five specimens found in Counties Wicklow (Mullen, 2007), Cavan, and Clare in 2003, a specimen in Kerry in 2005[14] and another in Tipperary in 2006.[15] No maternity roosts have yet been found. It is very similar to the whiskered bat and cannot be separated by the use of detectors. Its habits are similar to its sibling.

2.2.2.2 Family Rhinolophidae:

Lesser horseshoe bat *Rhinolophus hipposideros*

This species is the only representative of the Rhinolophidae or horseshoe bat family in Ireland. It differs from our other species in both habits and looks, having a unique nose leaf with which it projects its echolocation calls. It is also quite small and, at rest, wraps its wings around its body. Lesser horseshoe bats feed close to the ground, gleaning their prey from branches and stones. It often carries its prey to a perch to consume, leaving the remains beneath as an indication of its presence.

The echolocation call of this species is of constant frequency and, on a heterodyne bat detector, sounds like a melodious warble. The species is confined to six counties along the Atlantic seaboard: Mayo, Galway, Clare, Limerick, Kerry and Cork. The current Irish national population is estimated at 12,500 animals. This species is listed on Annex II of the EC Habitats Directive and 41 Special Areas of Conservation have

[14] Kelleher, C. 2006a Nathusius pipistrelle Pipistrellus nathusii and Brandt's Bat Myotis brandtii - New Bat Species to Co. Kerry – Irish Naturalists' Journal 28: 258.
[15] Kelleher, C. 2006b Brandt's Bat Myotis brandtii, New Bat Species to Co. Tipperary. Irish Naturalists' Journal 28: 345.

been designated in Ireland for its protection. Where it occurs, it is often found roosting within farm buildings.

2.2.3 Landscape Suitability

The National Biodiversity Data Centre (NBDC) maps landscape suitability bats based on Lundy *et al.* (2011). The maps are a visualisation of the results of the analyses based on a 'habitat suitability' index. The index ranges from 0 to 100 with 0 being least favourable and 100 most favourable for bats. On average for all bat species the highest range is between 36.44 - 58.56. The overall assessment of bat habitats for the current study area is given as '18.33', deemed 'Low' by the author.

Table 2 gives the suitability of the study area for the bat species found in the study area (based on NBDC) along with their Irish Red List Status (from Marnell *et al.*, 2019).[16]

Table 2 Suitability of the study area for the bat species found in the Dublin 8 (based on the NBDC data) with Irish Red list status indicated.

Common name	Scientific name	Suitability index	Irish red list status
All bats	-	18.33	Least Concern
Soprano pipistrelle	*Pipistrellus pygmaeus*	33	Least Concern
Brown long-eared bat	*Plecotus auritus*	23	Least Concern
Common pipistrelle	*Pipistrellus pipistrellus*	31	Least Concern
Lesser-horseshoe bat	*Rhinolophus hipposideros*	0	Least Concern
Leisler's bat	*Nyctalus leisleri*	37	Least Concern
Whiskered bat	*Myotis mystacinus*	13	Least Concern
Daubenton's bat	*Myotis daubentonii*	11	Least Concern
Nathusius' pipistrelle	*Pipistrellus nathusii*	10	Least Concern
Natterer's bat	*Myotis nattereri*	7	Least Concern

2.2.4 Bat Roosts

Bats were originally cave and tree dwelling animals but many now find buildings just as suitable for their needs. Bats are social animals and most species congregate in large colonies during summer. These colonies consist mostly of females of every reproductive class, with some juvenile males from the previous year. Male bats normally roost individually or in small groups meeting up with the females in the late autumn-early winter, when it is time to mate. In summer, bats seek warm dry buildings in which they can give birth and suckle their young. In winter, they seek out places with a constant low temperature and high humidity where they can become torpid and hibernate during adverse weather conditions. However, bats do not hibernate continuously during winter and will awake and hunt during mild nights when there are insects available, and it is energetically advantageous to forage.

[16] Marnell, F., Looney, D. & Lawton, C. (2019) Ireland Red List No. 12: Terrestrial Mammals. National Parks and Wildlife Service, Department of the Culture, Heritage and the Gaeltacht, Dublin, Ireland.

2.2.4.1 Maternity Roosts

Maternity roosts are the most significant roosts and they are predominantly all-female aggregations that are formed from late May onwards and remain as a relatively cohesive unit until mid to late August. Not all female bats give birth annually. These females that do bear young in a given year avail of a suitable building, tree and sometimes cave (or equivalent). The young are flightless for several weeks and hence are vulnerable to dangers such as tree felling and restoration, reinforcement or demolition of structures such as buildings and bridges.

2.2.4.2 Mating Roosts

Most bat species mate in autumn but pregnancy does not occur until the following spring. During this time males will take possession of a cavity in a building, tree, bridge, cave or mine and attract females to these sites to establish a harem. Male bats call both from a perch and in flight in much the same manner that male birds sing.

2.2.4.3 Hibernation Roosts

Bats have a high metabolic rate and in temperate countries, such as Ireland, flying insects are not available in sufficient numbers during winter to sustain bats. Therefore, bats hibernate during winter. In hibernation sites, bats are often completely inactive for several days and are extremely vulnerable to disturbance by human activities due to the time taken for them to become sufficiently active to allow escape. Hibernation may extend from November to the end of March, during which time bat activity will take place sporadically.

2.2.4.4 Night Roosts

These are roosts which are used as resting places for bats between foraging bouts. They also provide retreats for bats from predators or during inclement weather conditions. They also function as feeding perches and may be important for socialising.

2.3 Bat Survey Methodology

The guidance used for the bat emergence surveys and activity surveys followed Marnell et al (2022)[17] for the July 2022 survey and the older 2006[18] guidelines for surveys in 2020. The Bat Conservation Trust (2016)[19] Guidelines were used in both July 2020 and July 2022.

[17] Marnell, F., Kelleher, C. & Mullen, E. (2022) Bat mitigation guidelines for Ireland v2. Irish Wildlife Manuals, No. 134. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage, Ireland.

[18] Kelleher, C. & Marnell, F. (2006) Bat Mitigation Guidelines for Ireland. Irish Wildlife Manuals, No. 25. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland.

[19] The Bat Conservation Trust (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd edition

There are three main structures onsite which were surveyed (Labelled 1, 2 and 3 as per Figures 3-6.). Building 1 and 2 are for demolition. Building 3 will be retained and unaffected.

A bat emergence survey of the 3 No. existing buildings onsite was carried out on the 23rd of July 2020 (21.00 to 23.30, sunset 21.34, temperature 15°C in calm dry conditions) and 7th July 2022 (21.00 to 23.30, sunset 21.31, temperature 22-23°C in dry calm conditions) for the subject site (see Figure 2), while a general bat activity survey around the perimeter of the Goldenbridge Cemetery was carried out on 25th July 2020 (21.20 to 23.30, sunset 21.53, temperatures 15-17°C in dry calm conditions).

The equipment used included an Elekon Bat Logger M detector and heterodyne SSF Bat2 Detector. Visual observations were taken with the aid of a powerful L.E.D. torch (AP Pros-Series 220 Lumens High Performance Spotlight).

A Seek Thermal Reveal Pro High-Resolution Thermal Imaging Camera, along with a RIDGID 36848 Micro CA-150 Hand-Held Borescope was available for any inspection of any crevices/roof spaces on the affected Building 1 and 2 (where accessible). The borescope is fitted with a camera and allows visibility of confined spaces and narrow passages potentially used by hibernating/roosting bats. It allows spaces up to 3m from ground level to be inspected. All spaces that could potentially allow bats access the buildings were visually examined in detail for bats, signs of bats, or evidence of bat activity, using a torch where necessary. Cracks, crevices etc. were investigated for ingress / egress points and evidence of bat habitation, such as prey items, smearing lines, droppings, and staining. The floors, window sills, and other elevated surfaces were examined closely for droppings. The interior of Buildings No. 2 and No. 3 was also checked for bat signs. Building 1 was not accessible inside.

The BCT guidelines were followed for the assessment rating[20] and classified using Table 4.1 of the BCT guidelines (2016) which is shown as Table 3 overleaf.

The results were used to grade the 3 No. existing buildings as having Negligible, Low, Moderate, or High suitability for roosting bats in accordance with Bat Conservation Trust guidelines[21], see Table 3. Building 3, while not affected, was graded for completeness.

General Site photos are contained in Appendix A from July 2020 and July 2022.

[20] *Bat Surveys for Professional Ecologists, Good Practice Guidelines (2016)*
[21] Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn).

Table 3 Guidelines for assessing the potential suitability of proposed development sites for bats, based on the presence of roost features within the landscape, to be applied using professional judgement.

Suitability	Description Roosting habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions[a] and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation[b]). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.[c]	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions[a] and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions[a] and surrounding habitat.	Continuous, high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

[a] For example, in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.
[b] Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten *et al.*, 2015). This phenomenon requires some research in the UK but ecologists should be aware of the potential for larger numbers of this species to be present during the autumn and winter in large buildings in highly urbanised environments.
[c] This system of categorisation aligns with BS 8596:2015 Surveying for bats in trees and woodland (BSI, 2015).

2.4 Bat Roost Potential Tree Assessment

Trees that may provide a roosting space for bats were classified using the Bat Tree Habitat Key (BTHK, 2018)[22] and the classification system adapted from Collins (2016). The Potential Roost Features (PRFs) listed in BTHK (2018) were used to determine the PBR value of trees, see Table 4. Consideration was also given to the classification of trees according to the British Standard BS8956 - Surveying for bats in trees and woodland, see Table 5.

Trees, if identified as Potential Bat Roosts, were inspected during the daytime, where possible, for evidence of bat usage. Evidence of bat usage is in the form of actual bats (visible or audible), bat droppings, urine staining, grease marks (oily secretions from glands present) and claw marks. In addition, the presence of bat fly pupae (bat parasite) also indicated that bat usage of a crevice, for example, has occurred in the past.

[22] BTHK (2018) Bat Roosts in Trees – A Guide to Identification and Assessment for Tree-Care and Ecology Professionals. Exeter: Pelagic Publishing.

A Phase 1 inspection was undertaken to make a list of trees within the proposed development site that may be suitable as roosting sites for bats. Inspections were undertaken visually with the aid of a strong torch beam (AP Pros-Series 220 Lumens High Performance Spotlight) and Celestron12x56 Prism Binoculars during the daytime searching for PRFs, if visible. To aid this Phase 1 inspection, tree reports, where available, were consulted to supplement the data collected. A RIDGID 36848 Micro CA-150 Hand-Held Borescope for inspection of any accessible crevices on trees (3m from ground).

General Site photos showing the trees onsite are contained in Appendix A.

During the survey, the features listed below on the affected trees were sought as they may provide suitable roost sites for bats:

- Natural holes (e.g. knot holes) arising from naturally shed branches or branches previously pruned back to a branch collar.
- Man-made holes (e.g. cavities that have developed from flush cuts or cavities created by branches tearing out from parent stems).
- Cracks/splits in stems or braches (horizontal and vertical).
- Partially detached, loose or bark plates.
- Cankers (caused by localised bark death) in which cavities have developed.
- Other hollows or cavities, including butt rots.
- Compression of forks with included bark, forming potential cavities.
- Crossing stems or branches with suitable roosting space between.
- Ivy stems with diameters in excess of 50mm with suitable roosting space behind (or where roosting space can be seen where a mat of thinner stems has left a gap between the mat and the trunk).
- Bat or bird boxes.
- Other suitable places of rest or shelter.

Certain factors such as orientation of the feature, height from the ground, the direct surroundings and its location in respect to other features may enhance or reduce the potential value.

Table 4 Classification and Survey Requirements for Bats in Trees[23]

Classification of Tree	Description of Category and Associated Features (based on Potential Roosting Features listed above)	Likely Further Survey Work / Actions
Confirmed Roost	Evidence of roosting bats in the form of live / dead bats, droppings, urine staining, mammalian fur oil staining, etc.	A National Parks and Wildlife (NPWS) derogation licence application will be required if the tree or roost site is affected by the development or proposed arboricultural works. This will require a combination of aerial assessment by

[23] Bat Surveys for Professional Ecologists: Good Practice Guidelines (J., Collins (Bat Conservation Trust), 2016).

Classification of Tree	Description of Category and Associated Features (based on Potential Roosting Features listed above)	Likely Further Survey Work / Actions
		roped access bat workers (where possible, health and safety constraints allowing) and nocturnal survey during appropriate periods (e.g. nocturnal survey - May to August) to inform on the licence. Works to tree undertaken under supervision in accordance with the approved good practice method statement provided within the licence. However, where confirmed roost site(s) are not affected by works, work under a precautionary good practice method statement may be possible.
High Potential – Category 1	A tree with one or more Potential Roosting Features that are obviously suitable for larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter protection, conditions (height above ground level, light levels, etc) and surrounding habitat. Examples include (but are not limited to); woodpecker holes, larger cavities, hollow trunks, hazard beams, etc.	Aerial assessment by roped access bat workers (if appropriate) and / or nocturnal survey during appropriate period (May to August). Following additional assessments, tree may be upgraded or downgraded based on findings. If roost sites are confirmed and the tree or roost is to be affected by proposals a licence from the NPWS will be required. After completion of survey work (and the presence of a bat roost is discounted), a precautionary working method statement may still be appropriate.
Moderate Potential – Category 2	A tree with Potential Roosting Features which could support one or more potential roost sites due to their size, shelter protection, conditions (height above ground level, light levels, etc) and surrounding habitat but unlikely to support	A combination of aerial assessment by roped access bat workers and / or nocturnal survey during appropriate period (May to August). Following additional assessments, tree may be upgraded or downgraded based on findings.

Classification of Tree	Description of Category and Associated Features (based on Potential Roosting Features listed above)	Likely Further Survey Work / Actions
	a roost of high conservation status (i.e. larger roost, irrespective of wider conservation status). Examples include (but are not limited to); woodpecker holes, rot cavities, branch socket cavities, etc.	After completion of survey work (and the presence of a bat roost is discounted), a precautionary working method statement may still be appropriate. If a roost site/s is confirmed a licence from the NPWS will be required.
Low Potential – Category 3	A tree of sufficient size and age to contain Potential Roosting Features but with none seen from ground or features seen only very limited potential. Examples include (but are not limited to); loose/lifted bark, shallow splits exposed to elements or upward facing holes.	No further survey required but a precautionary working method statement may be appropriate.
Negligible/No potential – Category 4	Negligible/no habitat features likely to be used by roosting bats	None.

Table 5 Classification of Trees for Risk of Bat Roost Presence

Tree category and description (following scoping survey)	Secondary (non-specialist) survey recommendations	Secondary (specialist) survey recommendations
Known or confirmed roost	Initially consider if work to tree(s) can be avoided. If not, a specialist bat roost assessment should be undertaken to establish bat species, numbers and the nature of the roost.	
High/medium risk Trees with a suitable potential roost feature, or with several features with some bat roost potential.	• Secondary (non-specialist) assessment to examine potential roost features previously identified. If roosts cannot reasonably be ruled out a bat specialist should be consulted. • Following this assessment the tree could be up-graded or down-graded (see column 1 categories.	• Specialist bat roost assessment should be undertaken if work to a tree cannot be avoided. • Assessment to include techniques such as endoscope use and dusk/pre-dawn surveys should be undertaken. • Following this assessment the tree could be up-graded or down-graded.
Low risk Trees of sufficient size and age to contain bat roosts but with no obvious potential roost features seen during the scoping survey, or features seen with limited roosting potential only, e.g. small amounts of ivy.	No further assessment is required unless sufficient new evidence is found to upgrade the category.	None
Negligible/no risk Trees with apparently no potential to support bats.		
NOTE Risk equates to the likelihood of bat roost presence.		

2.5 Landscape Evaluation

Ecological survey results were evaluated to determine the significance of identified features located in the study area on an importance scale ranging from international-national-county-local (from NRA, 2009) The local scale is approximately equivalent to one 10km square but can be operationally defined to reflect the character of the area of interest. Because most sites will fall within the local scale, this is sub-divided into two categories: local importance (higher value) and local importance (lower value).

3. RESULTS

3.1 Bat Survey

In total three species of bat were detected overall during the three surveys in July 2020 and 2022. The tabulated results are summarized in Table 6, with the complete dataset of bat species identified in real time in the field using the Elekon Batlogger M detector presented in Appendix B.

The visual results of the bat surveys (July 23rd and 25th 2020, and July 7th 2022) are shown as Figures 3, 4 and 5. A merged map of the three surveys, outlining the locations of the bat calls, is shown as Figure 6.

There are three main structures onsite which were surveyed (Labelled 1, 2 and 3 as per Figures 3-6.). Building 1 and 2 will be subject to demolition and Building 3 will be retained and unaffected.

The interior of the affected Building 2 and 3 were inspected as per the methodology set out in Section 2.3. All spaces that could potentially allow bats access into Building 1, 2 and 3 were visually examined in detail for bats, signs of bats, or evidence of bat activity, using a torch where necessary. Cracks, crevices etc. were investigated for ingress / egress points and evidence of bat habitation, such as prey items, smearing lines, droppings, and staining.

Overall (as per Table 3) the Buildings numbered 1 and 2 were assessed as having 'Low' bat suitability with limited access points observed. Both buildings 1 and 2 are currently vacant. Building 3 (Inchicore Community Sports Centre) is currently in use and a modern well sealed building with 'Negligible' bat roost potential. This building will not be affected by works.

Building 1 and 2 had some bat potential e.g. heavy ivy on walls, entry points via old vent holes, wooden soffits (Building 1), however given the high levels of city street lighting and limited foraging and commuting habitat, together with no bat emergence on the nights of surveys, it is unlikely bats are using these buildings. In addition the interior of Building 2 revealed no signs of bats to the interior.

It was noted Goldenbridge Cemetery (outside the site but adjacent to the south boundary) has mature trees with potential roost features (PRFs) and so is considered to be 'Low' to 'Moderate', however is mainly an ecological island in the city setting. Bat activity was low on all survey nights carried out in both July 2020 and July 2022, despite optimal weather conditions. The activity survey in July 2022 focused mainly on the eastern area of the site where the buildings are located (for health and safety reasons as advised by DCC personnel).

In conclusion the subject site had low levels of bat activity despite optimal weather while the cemetery had low to moderate levels with the majority in the southeast corner of the Goldenbridge Cemetery which is not within the development site.

Table 6 Bat Results Summary Data from three Survey Dates – July 23rd 2020, July 25th 2020 and July 7th 2022

Species Name - Common	Species Name - Latin	Number of Occurrences	Peak Frequency (kHz)
23/07/2020 - Site			
Leisler's Bat	*Nyctalus leisleri*	2	27
Soprano Pipistrelle	*Pipistrellus pygmaeus*	1	56
07/07/2022 - Site			
Leisler's Bat	*Nyctalus leisleri*	4	27
Soprano Pipistrelle	*Pipistrellus pygmaeus*	1	56
25/07/2021 – Goldenbridge Cemetery			
Common Pipistrelle	*Pipistrellus pipistrellus*	3	46
Leisler's Bat	*Nyctalus leisleri*	2	27
Soprano Pipistrelle	*Pipistrellus pygmaeus*	7	56

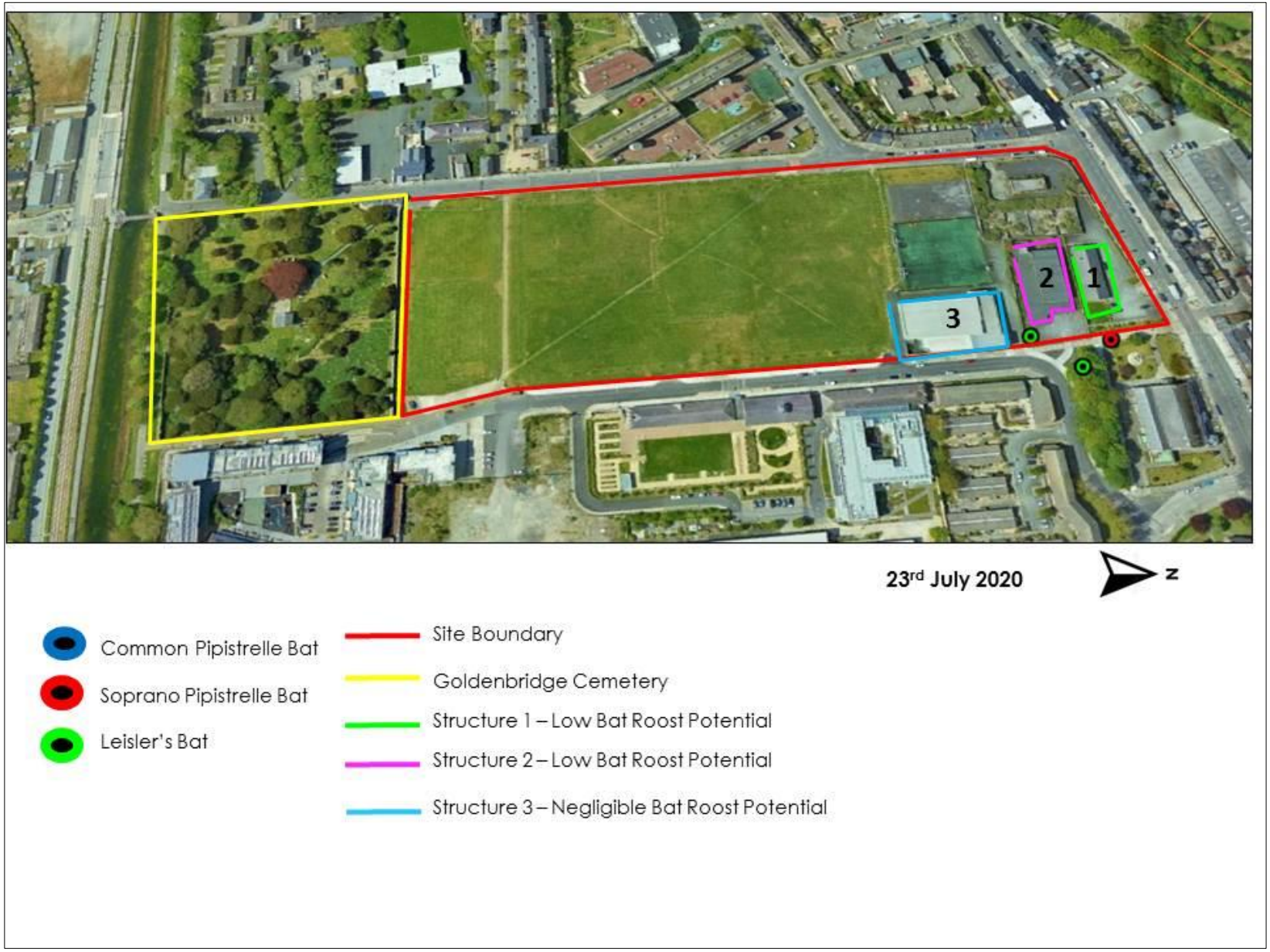


Figure 3 Bat Results with Legend – July 23rd 2020

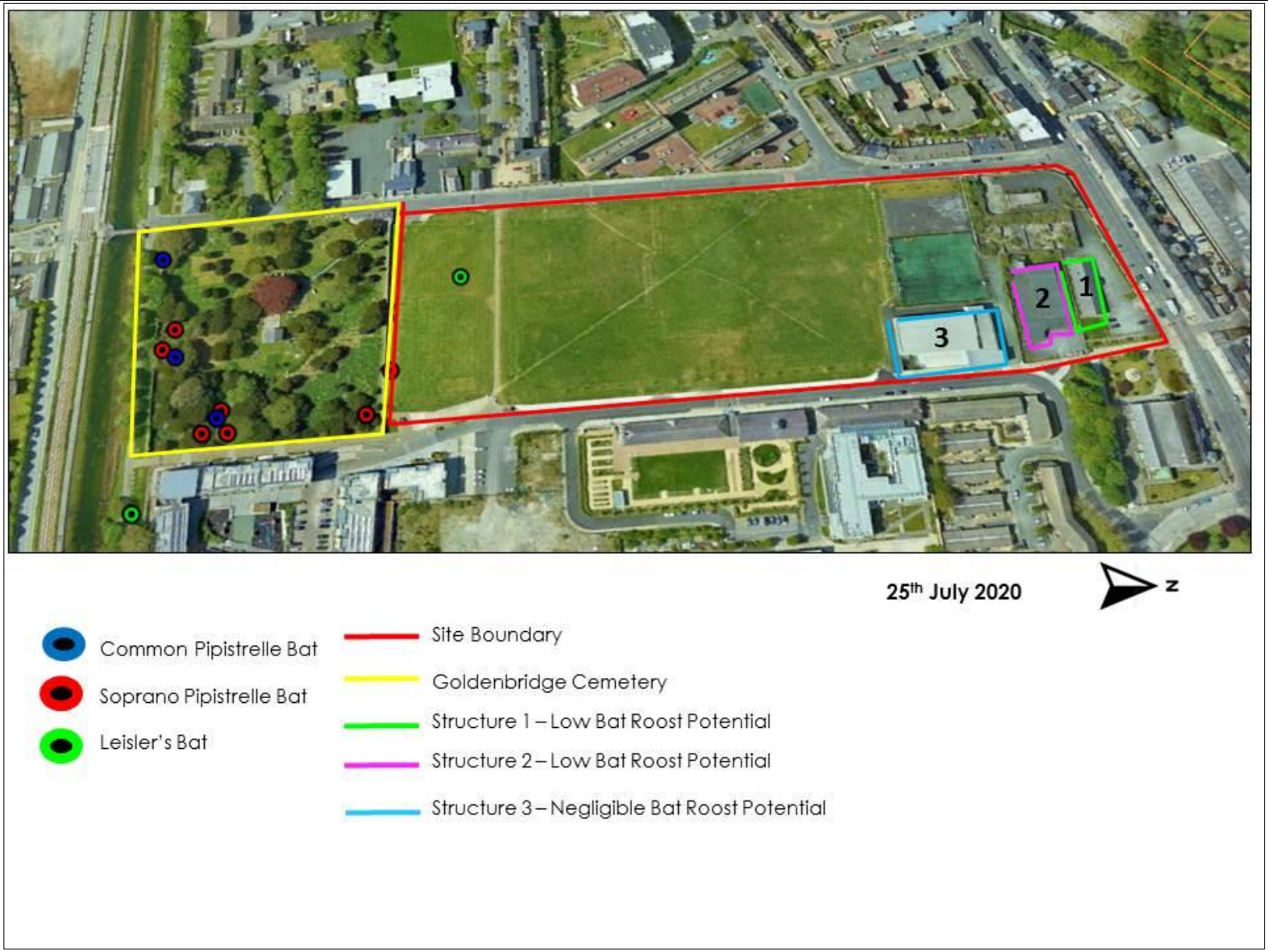


Figure 4 Bat Results with Legend – July 25th 2020

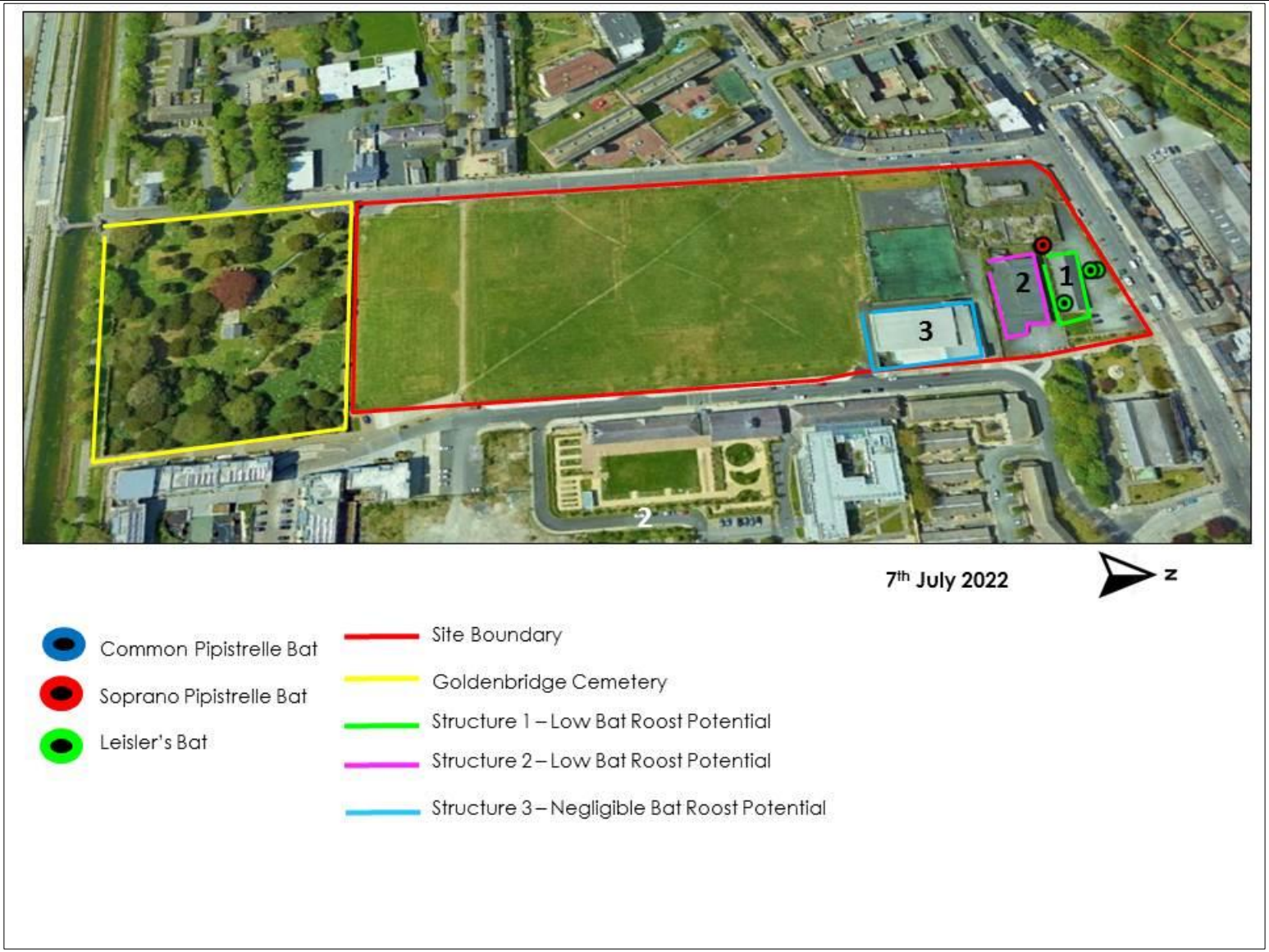


Figure 5 Bat Results with Legend – July 7th 2022



Figure 6 Bat Results Combined – July 23rd 2020, July 25th 2020 and July 7th 2022

3.2 Bat Potential Tree Assessment

Trees affected by the development are semi-mature. There are no mature trees present. All semi mature trees and areas of scrub were assessed as having negligible bat roost potential (see Tables 3 and 4) due to a lack of features such as heavy ivy, holes, crevices, bark splits and peeling bark. It is therefore surmised all trees onsite are assessed as having 'Negligible' bat roost potential (see Tables 3 and 4) and 'No Risk' for affecting bat roosts (see Table 5).

3.3 Landscape Evaluation

The landscape is considered of local importance (lower value) for bats at the subject site and of local importance (higher value) at the Goldenbridge Cemetery due to tree cover in this location and the network of mature treelines along with the Grand Canal giving a continuous treeline foraging route albeit with lighting which will discourage certain species which might account for the low level of bat activity. In that regard the trees and vegetation in and around the site are important as a biodiversity corridor to the wider landscape outside the cityscape.

4. RECOMMENDATIONS

4.1 Lighting for Bats

In order to minimise disturbance to bats utilising the site in general, the lighting and layout of the proposed development should be designed to minimise light-spill onto habitats used by the local bat population foraging or commuting. This can be achieved by ensuring that the design of lighting accords with guidelines presented in the Bat Conservation Trust & Institute of Lighting Engineers *'Bats and Lighting in the UK - Bats and Built Environment Series',* the Bat Conservation Trust *'Artificial Lighting and Wildlife Interim Guidance'* and the Bat Conservation Trust *'Statement on the impact and design of artificial light on bats*'. Therefore, where possible, the lighting scheme should include the following:

- The avoidance of direct lighting of proposed areas of habitat creation / landscape planting, or on trees planted.

- Goldenbridge Cemetery should not have an increase in the current lux level due to the adjacent development.

- Unnecessary light spill controlled through a combination of directional lighting and hooded / shielded luminaires or strategic planting to provide screening vegetation.

- Lights should be of low intensity. It is better to use several low intensity lights than one strong light spilling light across the entire area.

- Narrow spectrum lighting should be used with a low UV component. Glass also helps reduce the UV component emitted by lights.

- The colour rendering of the selected light fitting should be 3000k making the LED fittings a warmer light, helping to further minimize the impact on the local wildlife

- Where lighting is necessary, it shall be of limited height and targeted downwards to prevent overspill.

- Bat boxes should not be illuminated.

4.2 Bat Potential Trees

Trees used for future landscaping should comprise of mainly native Irish species.

4.3 Bat Roosting Opportunities

Due to a lack of mature trees onsite, if possible, the design of some non-residential units should incorporate integrated 5 x Bat Brick[24] over 4m high (if possible) into their south facing walls. The walls in which they are placed should not be illuminated. If this is not possible to integrate bat bricks then 5 x large bat boxes could be placed on the wall exterior.[25] See Appendix C for examples. If no suitable locations for bat boxes are available, 5 no. pole mounted bat boxes should be installed along the southern boundary near Goldenbridge Cemetery[26]. Finally, if there are no suitable locations for bat boxes within the Site, a series of 5 no. bat boxes should be installed on trees in nearby lands owned by Dublin City Council. The recommended boxes are Woodcrete 1FF Bat Boxes[27].

4.4 Further Surveys

While Building 1 and 2 were considered to be of Low bat Roost suitability and there was no emergence from same, a pre-demolition bat survey is recommended if these buildings are knocked between March and October to ensure no bats are present at this time.

5. CONCLUSION

The results of the bat survey showed no bats emerging from any building onsite, specifically Building 1 and 2 which are affected. There was no evidence of bat signs within Buildings 2 (affected) or Building 3 (unaffected). No bat derogation licence is required for this reason. Soprano Pipistrelle and Leisler's Bat were recorded flying over the subject site but not using it. Both these species and Common Pipistrelle were recorded in the Goldenbridge Cemetery area which is more amenable to bats due to the present of mature trees. There are no mature trees on the development site affected, only semi mature trees with no bat roost potential.

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24 https://www.nhbs.com/4?q=&hPP=60&idx=titles&p=0&fR%5Bhide%5D%5B0%5D=false&fR%5Blive%5D%5B0%5D=true&fR%5Bshops.id%5D%5B0%5D=4&fR%5Bsubsidiaries%5D%5B0%5D=3&hFR%5Bsubjects_equipment.lvl1%5D%5B0%5D=Bat%20Boxes%20%3E%20Integrated%20Bat%20Boxes&slug=integrated-bat-boxes

25 https://www.birdfood.ie/beaumaris-bat-box-large

26 https://www.nhbs.com/pole-mounted-maternity-bat-box

27 1FF Schwegler Bat Box With Built-in Wooden Rear Panel | NHBS Practical Conservation Equipment

On the basis of the findings of the survey works it is concluded that the overall impact arising from the proposed works, will most likely be negligible for bats if:

- A bat friendly lighting design is implemented following best practice guidelines. Goldenbridge Cemetery should not have an increase in Lux levels due to the development.
- The design of the proposed development incorporate 5 x integrated Bat Brick, 5 x large bat box placed onto the south facing walls of a selection of non-residential buildings, 5x pole mounted bat boxes at the south of the Site **or** 5 x bat boxes installed in onto trees in nearby lands owned by Dublin City Council in an unilluminated area.
- Works will cease and the NPWS Ranger and AEE contacted if bats are found during renovation works, and a Derogation Licence acquired.

APPENDICES

APPENDIX A



Plate 1 A view of Building 1, 'Low' bat roost potential (see Figure 3, Photo July 2022).



Plate 2 A view of Building 2, 'Low' bat potential (see Figure 3, Photo July 2022).

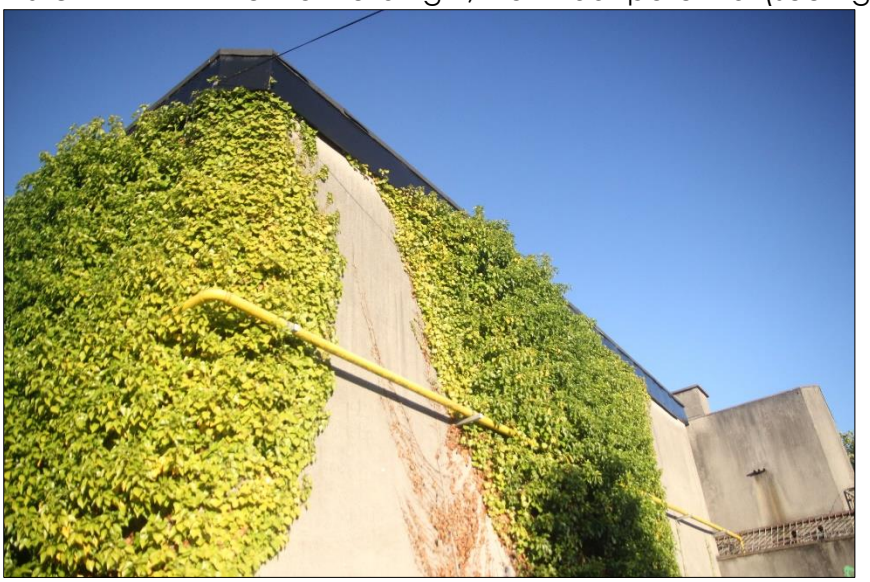


Plate 3 A view of Building 2, 'Low' bat potential (see Figure 3, Photo July 2022).



Plate 4 A view of Building 3, 'Negligible' bat potential (see Figure 3, Photo July 2022).



Plate 5 Amenity Grassland (GA2) between onsite buildings and Goldenbridge Cemetery (Photo July 2022).

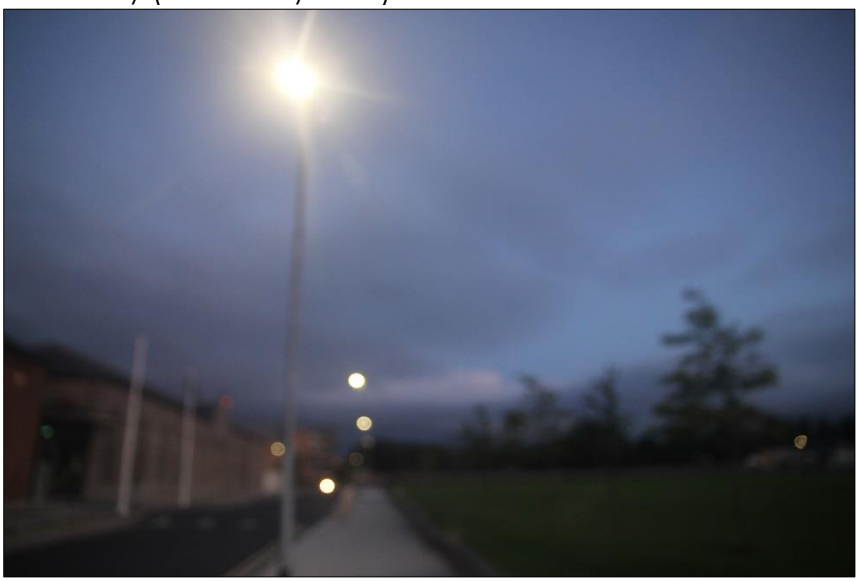


Plate 6 Area well lit up at night time which can be a deterrent for bats to roost in buildings even if access is possible.



Plate 7 Goldenbridge Cemetery, photo taken through locked gate. Example of potential roost feature shown with arrow (Photo July 2020)



Plate 8 Goldenbridge Cemetery with wall perimeter surveyed. Low to moderate bat activity with the majority in the southeast corner (July 2020)



Plate 9 Goldenbridge Cemetery behind stone wall (July 2022)

APPENDIX B

07/07/2022	Species Text	Calls [#]	Mean Peak Frequency [kHz]	Mean Max Frequency [kHz]	Mean Min Frequency [kHz]	Mean Call Length [ms]	Mean Call Distance [ms]	Temperature [°C]	Latitude [WGS84]	Longitude [WGS84]
21:56:54	Leisler's Bat	4	21.1	21.5	20.7	7.7	461	23	53.33983	-6.31735
22:01:57	Leisler's Bat	20	21.4	22	21	18	275	23	53.3398	-6.31734
22:19:16	Leisler's Bat	15	21.2	21.9	21	14	320	22	53.33961	-6.31754
22:28:23	Leisler's Bat	29	24.8	27.3	23.9	11	130	22	53.33968	-6.31707
22:32:21	Soprano Pipistrelle	12	54.1	60.5	52.9	2	70	22	53.33962	-6.31755
23/07/2020	**Species Text**	**Calls [#]**	**Mean Peak Frequency [kHz]**	**Mean Max Frequency [kHz]**	**Mean Min Frequency [kHz]**	**Mean Call Length [ms]**	**Mean Call Distance [ms]**	**Temperature [°C]**	**Latitude [WGS84]**	**Longitude [WGS84]**
21:36:54	Leisler's Bat	5	22.9	23.2	22	28.2	320	15	53.33963	-6.31646
22:27:16	Leisler's Bat	3	25.8	25.9	25.5	9.2	58	15	53.33943	-6.31669
22:52:59	Soprano Pipistrelle	19	56.1	77.9	55.7	3	80	15	53.33976	-6.31668
25/07/2020	**Species Text**	**Calls [#]**	**Mean Peak Frequency [kHz]**	**Mean Max Frequency [kHz]**	**Mean Min Frequency [kHz]**	**Mean Call Length [ms]**	**Mean Call Distance [ms]**	**Temperature [°C]**	**Latitude [WGS84]**	**Longitude [WGS84]**
21:48:54	Soprano pipistrelle	15	53.9	55.1	53.5	9	280	17	53.33681	-6.31607
21:57:32	Leisler's Bat	3	26.1	26.9	25.9	8.5	435	17	53.33709	-6.31719
22:07:32	Common Pipistrelle	15	43	48.2	42.7	6	90	17	53.33623	-6.31601
22:24:54	Soprano Pipistrelle	11	53.9	69.7	53.6	3	60	16	53.33624	-6.31607
22:29:00	Soprano Pipistrelle	7	51.4	63.7	49.8	2.3	107	16	53.33619	-6.31589
22:31:54	Soprano Pipistrelle	1	53.7	56.7	53.4	3.9	0	16	53.33594	-6.31652
22:46:59	Leisler's Bat	6	50.6	62.8	49.8	4.8	241	15	53.33601	-6.31531
22:47:54	Soprano Pipistrelle	13	51.9	72.7	49.9	3	498	15	53.33688	-6.31641
22:50:14	Common Pipistrelle	35	47.6	69.4	46.9	3	250	15	53.336	-6.31647
22:54:54	Soprano Pipistrelle	18	52.4	78.6	50.1	3	213	15	53.33629	-6.3159
22:56:29	Common Pipistrelle	3	49	51.7	48.5	5.2	405	15	53.33582	-6.31727
23:06:29	Soprano Pipistrelle	11	53.9	69.7	53.6	3	60	15	53.33596	-6.31669

APPENDIX C



Example of Large Maternity style Bat Box to attach to wall

https://www.nhbs.com/search?q=maternity+bat&qtview=211917



Example of integrated Bat Brick/Block

https://www.nhbs.com/search?q=bat%20brick&hPP=60&idx=titles&p=0&fR%5Bdoc_s%5D%5B0%5D=false&fR%5Bhide%5D%5B0%5D=false&fR%5Blive%5D%5B0%5D=true&qtview=229385

Appendix F3 Bat Survey Metadata Enviroguide Consulting

Recording	Timestamp	Species Text	Classification source	Mean Peak Frequency [kHz]	Mean Max Frequency [kHz]	Mean Min Frequency [kHz]	Mean Call Length [ms]	Mean Call Distance [ms]	Temperature [°C]	Latitude [WGS84]	Longitude [WGS84]
3750003	14/09/2021 20:11	Pipistrellus pipistrellus	Reviewed	48.2	77.3	47.4	3	94	17	53.3396	-6.31759
3750004	14/09/2021 20:11	Pipistrellus pipistrellus	Reviewed	48.7	76.9	47.8	4	80	17	53.33959	-6.3176
3750005	14/09/2021 20:11	Pipistrellus pipistrellus	Reviewed	48.8	79	47.8	4	85	17	53.33959	-6.3176
3750006	14/09/2021 20:11	Pipistrellus pipistrellus	Reviewed	48.9	82	48	4	90	17	53.33958	-6.3176
3750007	14/09/2021 20:13	Pipistrellus pipistrellus	Reviewed	48.7	86.3	47.9	4	85	17	53.33959	-6.31759
3750008	14/09/2021 20:13	Pipistrellus pipistrellus	Reviewed	48.3	84	47.4	5	120	17	53.3396	-6.31758
3750009	14/09/2021 20:13	Pipistrellus pipistrellus	Reviewed	47.7	82.3	46.9	4	100	17	53.3396	-6.31758
3750010	14/09/2021 20:13	Pipistrellus pipistrellus	Reviewed	49.8	60.2	48.2	3	80	17	53.3396	-6.31758
3750011	14/09/2021 20:13	Pipistrellus pipistrellus	Reviewed	48.9	85.8	47.9	4	85	17	53.3396	-6.31758
3750012	14/09/2021 20:14	Pipistrellus pipistrellus	Reviewed	48.6	86.6	47.7	4	90	17	53.33961	-6.31757
3750013	14/09/2021 20:14	Pipistrellus pipistrellus	Reviewed	48.9	82	47.8	3	85	17	53.3396	-6.31758
3750014	14/09/2021 20:14	Pipistrellus pipistrellus	Reviewed	48.7	87.3	47.4	4	94	17	53.3396	-6.31759

Recording	Timestamp	Species Text	Classification source	Mean Peak Frequency [kHz]	Mean Max Frequency [kHz]	Mean Min Frequency [kHz]	Mean Call Length [ms]	Mean Call Distance [ms]	Temperature [°C]	Latitude [WGS84]	Longitude [WGS84]
3750015	14/09/2021 20:15	Pipistrellus pipistrellus	Reviewed	48.4	80.8	47.5	4	100	17	53.33959	-6.31758
3750016	14/09/2021 20:15	Pipistrellus pipistrellus	Reviewed	49	85.2	48	4	90	17	53.33961	-6.31759
3750017	14/09/2021 20:15	Pipistrellus pipistrellus	Reviewed	48.8	84.3	47.9	4	90	17	53.33961	-6.31759
3750018	14/09/2021 20:16	Pipistrellus pipistrellus	Reviewed	48.7	82.2	47.8	4	90	17	53.33961	-6.31759
3750019	14/09/2021 20:16	Pipistrellus pygmaeus	Reviewed	51.7	93.4	50.5	4	80	17	53.33959	-6.31759
03750020_1	14/09/2021 20:17	Pipistrellus pygmaeus	Reviewed	53.1	81.4	51.8	3	170	17	53.33958	-6.31759
3750021	14/09/2021 20:17	Nyctalus leisleri	Reviewed	23	24.1	22.4	12.4	358	17	53.3396	-6.31759
3750023	14/09/2021 20:17	Pipistrellus pygmaeus	Reviewed	53.4	61.6	52.6	3	80	17	53.33959	-6.31759
3750024	14/09/2021 20:17	Pipistrellus pygmaeus	Reviewed	52.9	84.3	52	4	80	17	53.33959	-6.31759
3750025	14/09/2021 20:17	Pipistrellus pygmaeus	Reviewed	53.6	76.3	52.3	3	80	17	53.3396	-6.31758
3750026	14/09/2021 20:17	Pipistrellus pygmaeus	Reviewed	52.9	91	52	4	85	17	53.3396	-6.31757
3750028	14/09/2021 20:18	Pipistrellus pygmaeus	Reviewed	52.4	76.9	51.5	4	70	17	53.33961	-6.3176
3750029	14/09/2021 20:18	Pipistrellus pygmaeus	Reviewed	53.1	88.6	51.8	4	80	17	53.3396	-6.31761

Recording	Timestamp	Species Text	Classification source	Mean Peak Frequency [kHz]	Mean Max Frequency [kHz]	Mean Min Frequency [kHz]	Mean Call Length [ms]	Mean Call Distance [ms]	Temperature [°C]	Latitude [WGS84]	Longitude [WGS84]
3750030	14/09/2021 20:18	Pipistrellus pygmaeus	Reviewed	52.9	94.9	52	3	80	17	53.33959	-6.3176
3750031	14/09/2021 20:18	Pipistrellus pygmaeus	Reviewed	53.7	81.6	52.3	3	80	17	53.33958	-6.31759
3750032	14/09/2021 20:19	Pipistrellus pygmaeus	Reviewed	52.8	85.3	51.8	4	84	17	53.33958	-6.31758
3750033	14/09/2021 20:19	Pipistrellus pygmaeus	Reviewed	52.8	81.1	51.8	4	80	17	53.33959	-6.31757
3750034	14/09/2021 20:19	Pipistrellus pygmaeus	Reviewed	51.3	91	50.4	4	80	17	53.3396	-6.31758
3750035	14/09/2021 20:20	Pipistrellus pipistrellus	Reviewed	49.4	54.6	48.7	3	99	17	53.33959	-6.31758
3750036	14/09/2021 20:20	Pipistrellus pipistrellus	Reviewed	50.6	91.7	49.7	4	75	17	53.33959	-6.31759
3750037	14/09/2021 20:20	Pipistrellus pygmaeus	Reviewed	51	84	49.8	4	74	17	53.3396	-6.31759
3750038	14/09/2021 20:20	Pipistrellus pipistrellus	Reviewed	50.5	86	49.8	4	80	17	53.3396	-6.31759
3750039	14/09/2021 20:20	Pipistrellus pipistrellus	Reviewed	50.5	87.1	49.7	4	80	17	53.33959	-6.31759
3750040	14/09/2021 20:21	Pipistrellus pygmaeus	Reviewed	52.9	80	50.7	4	80	17	53.33959	-6.31758
3750041	14/09/2021 20:21	Pipistrellus pipistrellus	Reviewed	50.7	86.4	49.7	4	74	17	53.33958	-6.31757
3750042	14/09/2021 20:21	Pipistrellus pygmaeus	Reviewed	53.8	87.1	53.2	4	70	17	53.33958	-6.31757

Recording	Timestamp	Species Text	Classification source	Mean Peak Frequency [kHz]	Mean Max Frequency [kHz]	Mean Min Frequency [kHz]	Mean Call Length [ms]	Mean Call Distance [ms]	Temperature [°C]	Latitude [WGS84]	Longitude [WGS84]
3750043	14/09/2021 20:21	Pipistrellus pygmaeus	Reviewed	53.7	77.8	52.5	3	80	17	53.33958	-6.31757
3750044	14/09/2021 20:22	Pipistrellus pygmaeus	Reviewed	52.9	93	51.7	4	76	17	53.33958	-6.31757
3750045	14/09/2021 20:22	Pipistrellus pygmaeus	Reviewed	53.3	94.8	51.9	4	85	17	53.33957	-6.31758
3750049	14/09/2021 20:23	Pipistrellus pygmaeus	Reviewed	52.3	90.6	51.3	4	94	17	53.33957	-6.31759
3750052	14/09/2021 20:23	Pipistrellus pygmaeus	Reviewed	53.4	91.2	51.9	4	74	17	53.33959	-6.31757
3750053	14/09/2021 20:23	Pipistrellus pygmaeus	Reviewed	53.1	90.8	51.9	4	80	17	53.3396	-6.31757
3750054	14/09/2021 20:23	Pipistrellus pygmaeus	Reviewed	52.6	93.8	51.6	4	74	17	53.33959	-6.31759
3750055	14/09/2021 20:24	Pipistrellus pygmaeus	Reviewed	52.8	92.1	51.8	4	80	17	53.33959	-6.3176
3750056	14/09/2021 20:24	Pipistrellus pygmaeus	Reviewed	52.9	89.2	51.9	4	80	17	53.33958	-6.31762
3750057	14/09/2021 20:24	Pipistrellus pygmaeus	Reviewed	52.7	89.3	51.6	4	80	17	53.33955	-6.31758
3750058	14/09/2021 20:24	Pipistrellus pygmaeus	Reviewed	52.2	77.7	51.3	4	70	17	53.33954	-6.31756
3750060	14/09/2021 20:25	Pipistrellus pygmaeus	Reviewed	52.8	77	51.8	4	85	17	53.33948	-6.31757
3750061	14/09/2021 20:25	Pipistrellus pygmaeus	Reviewed	53.5	74.2	51.2	4	84	17	53.33947	-6.31752

Recording	Timestamp	Species Text	Classification source	Mean Peak Frequency [kHz]	Mean Max Frequency [kHz]	Mean Min Frequency [kHz]	Mean Call Length [ms]	Mean Call Distance [ms]	Temperature [°C]	Latitude [WGS84]	Longitude [WGS84]
3750062	14/09/2021 20:26	Pipistrellus pygmaeus	Reviewed	51.5	55.9	50.9	5.1	120	17	53.33947	-6.31756
3750064	14/09/2021 20:26	Pipistrellus pygmaeus	Reviewed	51.9	79.5	51.1	5	105	17	53.33947	-6.31756
3750065	14/09/2021 20:26	Pipistrellus pygmaeus	Reviewed	53	86.3	51.8	4	85	17	53.33956	-6.31757
3750066	14/09/2021 20:26	Pipistrellus pygmaeus	Reviewed	52.7	92.4	51.7	4	80	17	53.33959	-6.31757
3750067	14/09/2021 20:26	Pipistrellus pygmaeus	Reviewed	52.5	89.7	51.4	4	85	17	53.3396	-6.31759
3750070	14/09/2021 20:28	Pipistrellus pygmaeus	Reviewed	51.8	90.6	51	5	95	17	53.3396	-6.3176
3750071	14/09/2021 20:28	Pipistrellus pygmaeus	Reviewed	52.7	84.9	51.7	3	158	17	53.33959	-6.3176
3750072	14/09/2021 20:28	Pipistrellus pygmaeus	Reviewed	52.4	89.5	51.4	4	80	17	53.33961	-6.3176
3750073	14/09/2021 20:29	Pipistrellus pygmaeus	Reviewed	52.4	93.4	51.5	4	80	17	53.33961	-6.31759
3750074	14/09/2021 20:29	Pipistrellus pygmaeus	Reviewed	53	83	51.9	4	80	17	53.3396	-6.3176
3750075	14/09/2021 20:29	Pipistrellus pygmaeus	Reviewed	52.5	92.1	51.6	4	80	17	53.3396	-6.3176
3750076	14/09/2021 20:29	Pipistrellus pygmaeus	Reviewed	52.2	84.2	51.3	4	83	17	53.3396	-6.31759
3750078	14/09/2021 20:30	Pipistrellus pygmaeus	Reviewed	52.2	93.9	51.3	4	90	17	53.33961	-6.31761

Recording	Timestamp	Species Text	Classification source	Mean Peak Frequency [kHz]	Mean Max Frequency [kHz]	Mean Min Frequency [kHz]	Mean Call Length [ms]	Mean Call Distance [ms]	Temperature [°C]	Latitude [WGS84]	Longitude [WGS84]
3750079	14/09/2021 20:30	Pipistrellus pygmaeus	Reviewed	52.5	87.8	51.5	4	90	17	53.3396	-6.31759
3750080	14/09/2021 20:30	Pipistrellus pipistrellus	Reviewed	50.4	54.3	49.7	4.8	224	16	53.33959	-6.31759
3750081	14/09/2021 20:30	Pipistrellus pygmaeus	Reviewed	51.4	56.8	50.8	4.9	189	16	53.33959	-6.31759
3750082	14/09/2021 20:30	Pipistrellus pygmaeus	Reviewed	52.1	64.7	51.3	4	83	16	53.33959	-6.31759
3750083	14/09/2021 20:30	Pipistrellus pygmaeus	Reviewed	51.8	85.9	51.1	4	90	16	53.33959	-6.31759
3750084	14/09/2021 20:30	Pipistrellus pygmaeus	Reviewed	52.7	88.9	51.7	4	80	16	53.33959	-6.31759
3750085	14/09/2021 20:31	Pipistrellus pipistrellus	Reviewed	51	56.8	50.3	3	170	16	53.3396	-6.31758
3750086	14/09/2021 20:31	Pipistrellus pygmaeus	Reviewed	52.5	83.8	51.6	3	80	16	53.3396	-6.31758
3750087	14/09/2021 20:31	Pipistrellus pygmaeus	Reviewed	52.8	87.9	51.7	4	86	16	53.3396	-6.31757
3750088	14/09/2021 20:31	Pipistrellus pygmaeus	Reviewed	52.5	84.8	51.5	4	84	16	53.3396	-6.31758
3750089	14/09/2021 20:31	Pipistrellus pygmaeus	Reviewed	52.4	83	51.4	4	80	16	53.33959	-6.31757
3750090	14/09/2021 20:32	Pipistrellus pygmaeus	Reviewed	52.8	65.2	51.1	4	86	16	53.33959	-6.31759
3750091	14/09/2021 20:32	Pipistrellus pygmaeus	Reviewed	52.5	76.6	51.4	4	74	16	53.33958	-6.31759

Recording	Timestamp	Species Text	Classification source	Mean Peak Frequency [kHz]	Mean Max Frequency [kHz]	Mean Min Frequency [kHz]	Mean Call Length [ms]	Mean Call Distance [ms]	Temperature [°C]	Latitude [WGS84]	Longitude [WGS84]
3750092	14/09/2021 20:32	Pipistrellus pygmaeus	Reviewed	52.4	84	51.4	4	85	16	53.33958	-6.31759
3750096	14/09/2021 20:33	Pipistrellus pygmaeus	Reviewed	53	75.7	51.8	3	84	17	53.33958	-6.31759
3750097	14/09/2021 20:33	Pipistrellus pygmaeus	Reviewed	53.1	80.7	51.9	4	84	17	53.33959	-6.31759
3750098	14/09/2021 20:33	Pipistrellus pygmaeus	Reviewed	53.2	78.1	51	5	110	17	53.33958	-6.31758
3750099	14/09/2021 20:33	Pipistrellus pygmaeus	Reviewed	51.7	69.4	50.4	4	93	17	53.33959	-6.31759
3750100	14/09/2021 20:34	Pipistrellus pygmaeus	Reviewed	52.8	74	51.6	4	85	17	53.33961	-6.31766
3750101	14/09/2021 20:34	Pipistrellus pygmaeus	Reviewed	52.3	75	51	3	80	17	53.33962	-6.3177
3750102	14/09/2021 20:34	Pipistrellus pygmaeus	Reviewed	52.6	74.6	51.6	4	70	17	53.33961	-6.31766
3750104	14/09/2021 20:34	Pipistrellus pygmaeus	Reviewed	52.2	78.4	51.1	4	90	17	53.33961	-6.31766
3750105	14/09/2021 20:34	Pipistrellus pygmaeus	Reviewed	52.1	73.7	50.8	4	85	17	53.33961	-6.31766
3750106	14/09/2021 20:35	Pipistrellus pygmaeus	Reviewed	52.7	68.3	51.4	3	83	17	53.3396	-6.31761
3750107	14/09/2021 20:35	Pipistrellus pygmaeus	Reviewed	52.7	80.2	51.7	4	73	17	53.33959	-6.3176
3750108	14/09/2021 20:36	Pipistrellus pygmaeus	Reviewed	52.9	54	52.3	2	96	17	53.33959	-6.3174

Recording	Timestamp	Species Text	Classification source	Mean Peak Frequency [kHz]	Mean Max Frequency [kHz]	Mean Min Frequency [kHz]	Mean Call Length [ms]	Mean Call Distance [ms]	Temperature [°C]	Latitude [WGS84]	Longitude [WGS84]
03750020_2	14/09/2021 20:17	Nyctalus leisleri	Reviewed	23.4	24	22.6	10	730	17	53.33958	-6.31759
03750110_5	14/09/2021 20:42	Pipistrellus pipistrellus	Reviewed	48	48.4	46.7	2.4	10	16	53.33992	-6.3172

APPENDIX G – MATERIAL ASSETS – TRAFFIC AND TRANSPORTATION

Appendix G10.1 - Traffic Survey Data

Appendix G10.2- Traffic Flows Diagram

Appendix G10.3 - TRICS

Appendix G10.4 - Model Output File

Appendix G10.1 - Traffic Survey Data

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 1 - R839 Grattan Crescent / R810 Emmet Road / R810 Tyrconnell Road

Origin : Arm A R839 Grattan Crescent

	Destination : Arm A R839 Grattan Crescent								**Destination :** Arm B R810 Emmet Road								**Destination :** Arm C R810 Tyrconnell Road								Arm Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	
07:00	0	0	0	0	0	0	0	0	91	12	2	0	1	0	1	107	44	10	1	0	4	1	2	62	169
07:15	0	0	0	0	0	0	0	0	91	17	3	0	2	1	0	114	45	9	0	0	2	1	3	60	174
07:30	0	0	0	0	0	0	0	0	97	19	1	0	1	1	0	119	79	8	2	0	1	2	1	93	212
07:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**92**	**14**	**0**	**0**	**1**	**1**	**0**	**108**	**83**	**10**	**1**	**0**	**0**	**0**	**5**	**99**	**207**
08:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**85**	**13**	**2**	**0**	**3**	**0**	**3**	**106**	**51**	**4**	**2**	**0**	**0**	**3**	**4**	**64**	**170**
08:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**96**	**10**	**0**	**0**	**1**	**2**	**2**	**111**	**61**	**8**	**0**	**0**	**0**	**2**	**3**	**74**	**185**
08:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**82**	**3**	**3**	**0**	**1**	**1**	**3**	**93**	**59**	**5**	**2**	**0**	**1**	**2**	**2**	**71**	**164**
08:45	0	0	0	0	0	0	0	0	75	7	0	1	2	1	1	87	55	8	2	0	0	0	3	68	155
09:00	0	0	0	0	0	0	0	0	72	16	0	0	1	0	2	91	38	9	1	0	2	0	2	52	143
09:15	0	0	0	0	0	0	0	0	74	10	0	0	2	0	0	86	55	8	1	0	3	0	2	69	155
09:30	0	0	0	0	0	0	0	0	94	10	1	0	2	1	0	108	43	6	2	0	0	0	0	51	159
09:45	0	0	0	0	0	0	0	0	61	13	2	0	2	0	2	80	34	9	2	0	0	1	2	48	128
10:00	0	0	0	0	0	0	0	0	53	6	1	0	1	0	0	61	32	10	2	1	0	0	0	45	106
10:15	0	0	0	0	0	0	0	0	48	16	1	0	3	0	1	69	38	10	2	0	1	0	1	52	121
10:30	0	0	0	0	0	0	0	0	38	7	1	0	1	1	1	49	29	7	1	0	1	2	1	41	90
10:45	0	0	0	0	0	0	0	0	48	12	1	0	2	2	0	65	31	7	2	0	0	0	0	40	105
11:00	0	0	0	0	0	0	0	0	55	12	1	0	1	0	0	69	34	11	2	0	0	2	0	49	118
11:15	0	0	0	0	0	0	0	0	61	4	0	0	1	1	1	68	40	6	3	1	1	0	1	52	120
11:30	0	0	0	0	0	0	0	0	39	8	0	0	1	0	1	49	31	14	1	0	1	0	1	48	97
11:45	0	0	0	0	0	0	0	0	49	8	1	0	0	0	1	59	72	6	1	0	0	0	1	80	139
12:00	0	0	0	0	0	0	0	0	40	8	0	0	2	0	1	51	51	6	0	0	1	0	1	59	110
12:15	0	0	0	0	0	0	0	0	46	7	0	1	1	1	1	57	49	13	5	1	5	0	1	74	131
12:30	0	0	0	0	0	0	0	0	53	7	1	0	1	0	1	63	40	13	4	0	2	3	2	64	127
12:45	0	0	0	0	0	0	0	0	44	10	0	0	2	1	1	58	45	12	3	0	0	2	1	63	121
13:00	0	0	0	0	0	0	0	0	50	5	1	0	0	0	1	57	47	12	4	0	0	0	2	65	122
13:15	0	0	0	0	0	0	0	0	54	6	1	0	2	0	3	66	44	13	1	0	1	1	1	61	127
13:30	0	0	0	0	0	0	0	0	56	9	4	0	1	0	3	73	55	11	1	0	1	2	5	75	148
13:45	0	0	0	0	0	0	0	0	50	2	2	0	1	0	1	56	52	5	2	0	1	0	1	61	117
14:00	0	0	0	0	0	0	0	0	49	11	1	0	0	0	3	64	43	12	0	0	0	2	0	57	121
14:15	0	0	0	0	0	0	0	0	43	4	0	0	3	0	1	51	54	5	2	0	1	2	2	66	117
14:30	0	0	0	0	0	0	0	0	40	4	1	0	2	0	0	47	56	10	1	0	0	1	3	71	118
14:45	0	0	0	0	0	0	0	0	40	5	2	0	1	0	0	48	42	14	0	0	0	0	4	60	108
15:00	0	0	0	0	0	0	0	0	64	7	1	0	1	0	0	73	55	10	1	0	0	0	1	67	140
15:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**51**	**6**	**0**	**0**	**4**	**0**	**1**	**62**	**49**	**10**	**1**	**0**	**1**	**0**	**1**	**62**	**124**
15:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**46**	**6**	**0**	**0**	**2**	**0**	**1**	**55**	**49**	**8**	**0**	**0**	**1**	**2**	**1**	**61**	**116**
15:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**50**	**6**	**0**	**0**	**1**	**0**	**1**	**58**	**48**	**8**	**2**	**0**	**0**	**1**	**2**	**61**	**119**
16:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**58**	**8**	**2**	**0**	**2**	**2**	**2**	**74**	**62**	**9**	**0**	**0**	**1**	**1**	**1**	**74**	**148**
16:15	0	0	0	0	0	0	0	0	32	5	0	0	0	0	2	39	43	6	1	0	2	0	5	57	96
16:30	0	0	0	0	0	0	0	0	55	7	1	0	3	0	2	68	68	14	1	0	2	2	0	87	155
16:45	0	0	0	0	0	0	0	0	61	5	0	0	2	1	3	72	58	8	1	0	1	2	3	73	145
17:00	0	0	0	0	0	0	0	0	51	4	0	0	2	2	4	63	63	9	2	0	0	1	6	81	144
17:15	0	0	0	0	0	0	0	0	53	4	0	0	2	0	2	61	70	4	1	0	1	1	6	83	144
17:30	0	0	0	0	0	0	0	0	66	6	0	0	1	2	0	75	57	2	0	0	0	0	7	66	141
17:45	0	0	0	0	0	0	0	0	65	6	0	0	2	0	1	74	66	7	0	0	0	0	6	79	153
18:00	0	0	0	0	0	0	0	0	72	9	0	0	1	1	1	84	61	7	0	0	1	1	4	74	158
18:15	0	0	0	0	0	0	0	0	65	8	0	0	2	1	2	78	61	5	0	0	1	2	5	74	152
18:30	0	0	0	0	0	0	0	0	61	7	0	0	3	1	1	73	54	6	0	0	1	0	1	62	135
18:45	0	0	0	0	0	0	0	0	48	4	0	0	1	2	3	58	56	3	0	0	0	0	4	63	121
Total	0	0	0	0	0	0	0	0	2864	393	37	2	74	26	61	3457	2452	407	63	3	41	42	110	3118	#REF!

TRACSIS

TRAFFIC DATA

Transport Data Collection and Analytics



Junction Turning Count

Project Number: 3665-IRE
Project Name: Emmet Rd
Client: O' Connor Sutton Cronin Consulting Engineers

Sites: 1-5
Survey Date: 28/04/2022

Survey Time: 07:00-19:00 **Weather:** Dry

Observations: No incidents or observations during the survey period.

Tracsis will retain all personal data relating to this project, including all video images, for a period of three months after receipt of this report and all other data files for one year.

If you would like a copy of the personal data or wish for us to retain for a longer period, please do not hesitate to contact us.

TRAFFIC DATA
Transport Data Collection and Analytics

Site 1 - R839 Grattan Crescent / R810 Emmet Road / R810 Tyrconnell Road
07:00 - 19:00

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 1

Start/End Time

07:00 19:00

Origin Arm ALL

Dest Arm ALL

Class Selection

Car LGV OGV1
OGV2 PSV MC
PC

Vehicles
PCU
Values

Network Peak

AM IP PM ALL

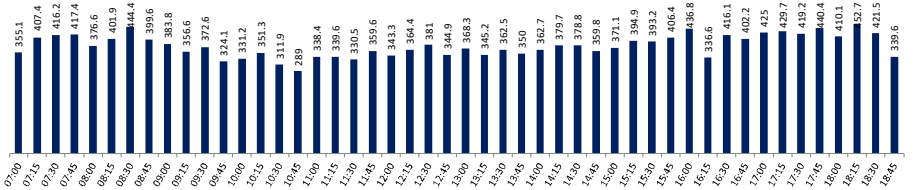
Display

Sites Show Flows
Overview

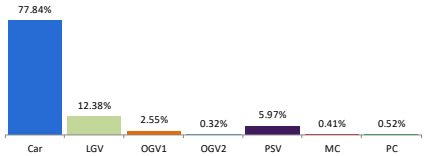


Arm		Location	Observations
A	R839 Grattan Crescent	53.33955	
B	R810 Emmet Road	-6.32103	
C	R810 Tyrconnell Road		

Total Number of Vehicles per Interval



Percentage of Classed Vehicles



	A	B	C
A	0	3509	3094
B	2211	0	3186
C	3209	2935	0

TRAFFIC DATA
Transport Data Collection and Analytics

Site 2 - R810 Emmet Road(ENE) / Saint Vincent Street West / R810 Emmet Road(WSW)
07:00 - 19:00

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 2

Start/End Time

07:00 19:00

Origin Arm ALL

Dest Arm ALL

Class Selection

Car LGV OGV1
OGV2 PSV MC
PC

Vehicles
PCU
Values

Network Peak

AM IP PM ALL

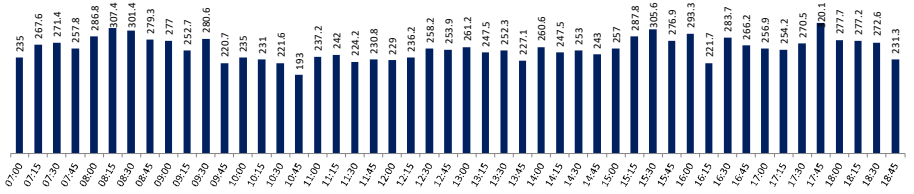
Display

Sites Show Flows
Overview

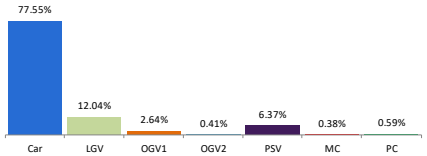


Arm		Location	Observations
A	R810 Emmet Road(ENE)	53.33972	
B	Saint Vincent Street West	-6.31853	
C	R810 Emmet Road(WSW)		

Total Number of Vehicles per Interval



Percentage of Classed Vehicles



	A	B	C
A	0	545	4662
B	383	0	160
C	5937	671	16

TRAFFIC DATA
Transport Data Collection and Analytics

Site 3 - R810 Emmet Road(ENE) / Bulfin Road / R810 Emmet Road(WSW)
07:00 - 19:00

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 3

Start/End Time

07:00 19:00

Origin Arm ALL

Dest Arm ALL

Class Selection

Car LGV OGV1
OGV2 PSV MC
PC

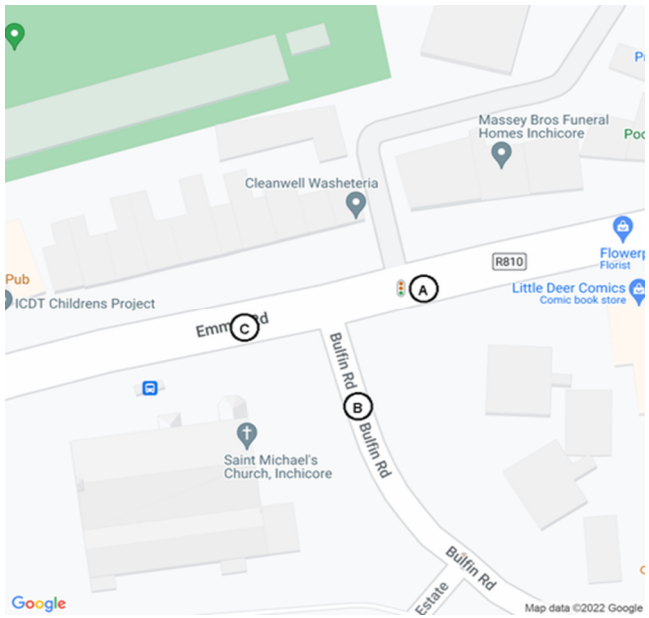
Vehicles
PCU
Values

Network Peak

AM IP PM ALL

Display

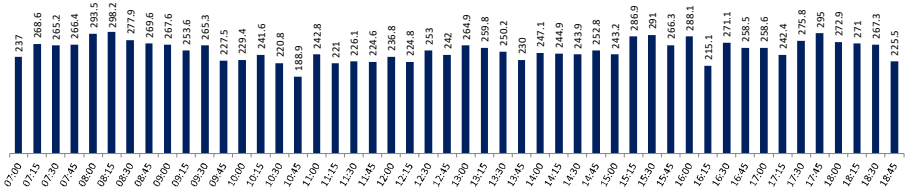
Sites Show Flows
Overview



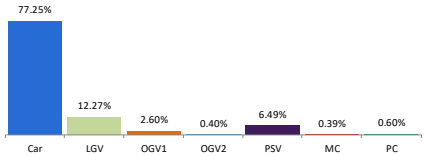
Arm		Location	
A	R810 Emmet Road(ENE)	53.34026	
B	Bulfin Road	-6.31574	
C	R810 Emmet Road(WSW)		

Observations

Total Number of Vehicles per Interval



Percentage of Classed Vehicles



	A	B	C
A	2	455	3551
B	161	0	1666
C	3837	2485	8

TRAFFIC DATA
Transport Data Collection and Analytics

Site 4 - Turvey Avenue / R810 Emmet Road(E) / Luby Road / R810 Emmet Road(W)
07:00 - 19:00

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 4

Start/End Time

07:00 19:00

Origin Arm ALL

Dest Arm ALL

Class Selection

Car LGV OGV1
OGV2 PSV MC
PC

Vehicles
PCU
Values

Network Peak

AM IP PM ALL

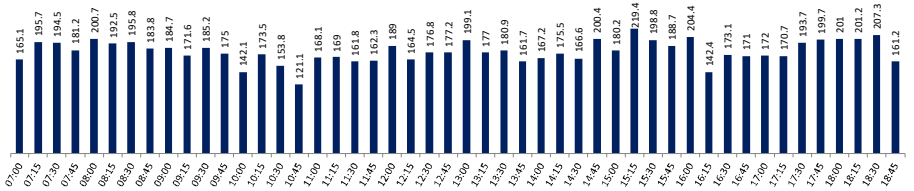
Display

Sites Show Flows
Overview

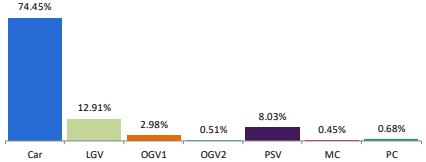


Arm		Location	Observations
A	Turvey Avenue	53.34061	
B	R810 Emmet Road(E)	-6.31105	
C	Luby Road		
D	R810 Emmet Road(W)		

Total Number of Vehicles per Interval



Percentage of Classed Vehicles



	A	B	C	D
A	0	103	2	93
B	82	106	0	3726
C	24	398	0	121
D	71	3865	1	5

TRAFFIC DATA
Transport Data Collection and Analytics

Site 5 - R111 South Circular Road(N) / R810 Old Kilmainham / R111 South Circular Road(S) / R810 Emmet Road
07:00 - 19:00

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 5

Start/End Time

07:00 19:00

Origin Arm ALL

Dest Arm ALL

Class Selection

Car LGV OGV1
OGV2 PSV MC
PC

Vehicles PCU Values

Network Peak

AM IP PM ALL

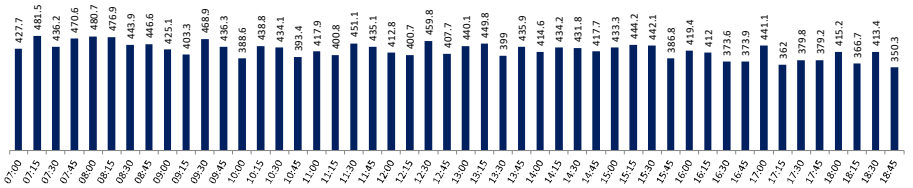
Display

Sites Show Flows
Overview

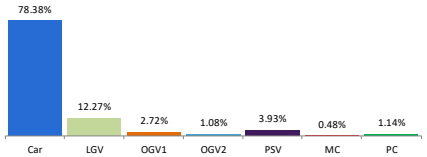


Arm		Location	Observations
A	R111 South Circular Road(N)	53.34063	
B	R810 Old Kilmainham	-6.30768	
C	R111 South Circular Road(S)		
D	R810 Emmet Road		

Total Number of Vehicles per Interval



Percentage of Classed Vehicles



	A	B	C	D
A	1	1393	4370	488
B	69	0	724	3383
C	4910	196	0	143
D	1231	3334	5	2

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 1 - R839 Grattan Crescent / R810 Emmet Road / R810 Tyrconnell Road

Origin : Arm B R810 Emmet Road

	Destination : Arm A R839 Grattan Crescent								**Destination :** Arm B R810 Emmet Road								**Destination :** Arm C R810 Tyrconnell Road								Arm
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Totals
07:00	13	1	0	0	1	0	0	15	0	0	0	0	0	0	0	0	26	8	2	0	1	1	1	39	54
07:15	20	5	1	1	2	0	1	30	0	0	0	0	0	0	0	0	31	7	1	0	4	1	2	46	76
07:30	28	2	0	0	1	0	1	32	0	0	0	0	0	0	0	0	40	6	2	0	2	1	0	51	83
07:45	**31**	**7**	**0**	**0**	**1**	**0**	**2**	**41**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**42**	**9**	**1**	**0**	**2**	**0**	**1**	**55**	**96**
08:00	**36**	**2**	**1**	**0**	**2**	**0**	**0**	**41**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**41**	**6**	**3**	**0**	**2**	**0**	**1**	**53**	**94**
08:15	**37**	**7**	**2**	**0**	**1**	**1**	**1**	**49**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**53**	**12**	**2**	**0**	**1**	**0**	**2**	**70**	**119**
08:30	**37**	**4**	**2**	**0**	**2**	**0**	**0**	**45**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**69**	**14**	**2**	**0**	**1**	**1**	**5**	**92**	**137**
08:45	32	6	1	0	2	0	2	43	0	0	0	0	0	0	0	0	58	4	2	0	3	2	2	71	114
09:00	32	4	0	0	2	0	0	38	0	0	0	0	0	0	0	0	44	12	0	0	2	1	1	60	98
09:15	24	2	0	1	1	0	0	28	0	0	0	0	0	0	0	0	29	9	3	0	0	0	0	41	69
09:30	24	4	0	0	0	0	2	30	0	0	0	0	0	0	0	0	44	8	3	0	2	0	2	59	89
09:45	20	3	1	1	3	0	0	28	0	0	0	0	0	0	0	0	31	5	3	0	3	1	0	43	71
10:00	31	5	0	0	2	0	0	38	0	0	0	0	0	0	0	0	50	8	0	0	1	0	0	59	97
10:15	29	6	0	0	2	0	2	39	0	0	0	0	0	0	0	0	39	11	1	0	2	0	3	56	95
10:30	32	5	1	0	1	0	1	40	0	0	0	0	0	0	0	0	38	5	3	0	1	0	1	48	88
10:45	24	4	1	1	1	0	1	32	0	0	0	0	0	0	0	0	32	6	1	0	3	1	0	43	75
11:00	26	6	0	0	2	0	0	34	0	0	0	0	0	0	0	0	46	15	4	0	1	0	0	66	100
11:15	26	3	1	1	2	0	1	34	0	0	0	0	0	0	0	0	48	8	3	0	2	2	2	65	99
11:30	29	3	1	0	1	0	0	34	0	0	0	0	0	0	0	0	45	11	2	0	2	1	2	63	97
11:45	41	7	0	0	0	0	0	48	0	0	0	0	0	0	0	0	38	8	2	0	1	0	2	51	99
12:00	34	5	1	1	2	1	1	45	0	0	0	0	0	0	0	0	55	11	2	1	4	1	0	74	119
12:15	23	7	1	0	3	0	0	34	0	0	0	0	0	0	0	0	47	4	2	1	0	2	1	57	91
12:30	39	4	0	0	0	0	1	44	0	0	0	0	0	0	0	0	44	19	4	0	1	2	2	72	116
12:45	34	5	1	0	1	1	0	42	0	0	0	0	0	0	0	0	53	14	0	0	3	0	0	70	112
13:00	43	2	0	0	2	0	0	47	0	0	0	0	0	0	0	0	57	10	2	0	5	1	1	76	123
13:15	30	6	1	0	0	0	3	40	0	0	0	0	0	0	0	0	55	13	5	0	3	0	0	76	116
13:30	39	6	1	0	2	0	0	48	0	0	0	0	0	0	0	0	44	4	1	0	1	0	1	51	99
13:45	38	1	1	0	3	0	0	43	0	0	0	0	0	0	0	0	39	7	2	0	2	1	0	51	94
14:00	36	1	0	1	1	0	1	40	0	0	0	0	0	0	0	0	50	12	1	0	6	0	2	71	111
14:15	31	8	2	0	1	0	1	43	0	0	0	0	0	0	0	0	57	9	2	0	2	0	1	71	114
14:30	50	2	0	1	2	0	2	57	0	0	0	0	0	0	0	0	48	9	4	0	2	1	0	64	121
14:45	38	3	0	0	1	0	0	42	0	0	0	0	0	0	0	0	59	12	1	0	3	2	3	80	122
15:00	43	10	2	1	1	1	1	59	0	0	0	0	0	0	0	0	48	10	1	0	2	0	0	61	120
15:15	**43**	**5**	**1**	**0**	**2**	**1**	**3**	**55**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**61**	**12**	**3**	**1**	**3**	**0**	**3**	**83**	**138**
15:30	**54**	**10**	**0**	**0**	**1**	**2**	**1**	**68**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**61**	**10**	**2**	**0**	**3**	**1**	**0**	**77**	**145**
15:45	**42**	**10**	**1**	**0**	**1**	**0**	**0**	**54**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**59**	**14**	**0**	**0**	**2**	**0**	**0**	**75**	**129**
16:00	**44**	**10**	**1**	**0**	**1**	**1**	**1**	**58**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**77**	**15**	**0**	**0**	**4**	**0**	**2**	**98**	**156**
16:15	49	5	0	0	2	0	4	60	0	0	0	0	0	0	0	0	37	9	0	0	3	3	3	55	115
16:30	54	10	1	0	1	0	4	70	0	0	0	0	0	0	0	0	56	10	2	0	1	2	3	74	144
16:45	53	7	0	0	0	1	2	63	0	0	0	0	0	0	0	0	45	10	0	0	0	3	0	58	121
17:00	38	5	0	0	2	1	2	48	0	0	0	0	0	0	0	0	56	8	0	0	2	1	0	67	115
17:15	47	6	0	0	1	1	5	60	0	0	0	0	0	0	0	0	42	4	2	0	5	1	3	57	117
17:30	50	5	0	0	2	0	2	59	0	0	0	0	0	0	0	0	60	12	2	0	2	1	1	78	137
17:45	52	4	0	0	2	0	3	61	0	0	0	0	0	0	0	0	69	8	2	0	5	0	4	88	149
18:00	41	3	0	0	1	0	1	46	0	0	0	0	0	0	0	0	48	4	1	0	1	3	1	58	104
18:15	43	7	0	0	2	1	1	54	0	0	0	0	0	0	0	0	50	8	1	0	3	2	5	69	123
18:30	39	1	0	0	2	1	0	43	0	0	0	0	0	0	0	0	63	5	1	0	4	0	1	74	117
18:45	40	2	0	0	1	1	4	48	0	0	0	0	0	0	0	0	48	6	1	0	1	0	3	59	107
Total	1739	236	26	9	69	14	57	2150	0	0	0	0	0	0	0	0	2332	441	84	3	109	39	67	3075	#REF!

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 1 - R839 Grattan Crescent / R810 Emmet Road / R810 Tyrconnell Road

Origin : Arm C R810 Tyrconnell Road

	Destination : Arm A R839 Grattan Crescent								**Destination :** Arm B R810 Emmet Road								**Destination :** Arm C R810 Tyrconnell Road								Arm
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Totals
07:00	45	6	1	0	3	0	1	56	44	11	2	0	3	1	0	61	0	0	0	0	0	0	0	0	117
07:15	54	15	0	0	3	0	5	77	56	7	1	0	2	3	0	69	0	0	0	0	0	0	0	0	146
07:30	40	6	1	0	7	0	4	58	40	8	1	0	1	0	0	50	0	0	0	0	0	0	0	0	108
07:45	**40**	**4**	**1**	**1**	**4**	**0**	**3**	**53**	**40**	**5**	**3**	**0**	**3**	**2**	**2**	**55**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**108**
08:00	**33**	**7**	**0**	**0**	**3**	**4**	**2**	**49**	**41**	**4**	**1**	**0**	**5**	**1**	**2**	**54**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**103**
08:15	**34**	**5**	**0**	**0**	**3**	**0**	**5**	**47**	**39**	**10**	**2**	**0**	**1**	**0**	**1**	**53**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**100**
08:30	**62**	**13**	**1**	**0**	**2**	**1**	**0**	**79**	**45**	**13**	**0**	**0**	**1**	**2**	**1**	**62**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**141**
08:45	48	12	0	0	1	0	6	67	42	7	1	2	3	0	2	57	0	0	0	0	0	0	0	0	124
09:00	48	5	1	0	2	0	5	61	55	12	2	1	2	2	0	74	0	0	0	0	0	0	0	0	135
09:15	26	12	2	0	2	1	4	47	58	9	3	0	2	0	1	73	0	0	0	0	0	0	0	0	120
09:30	39	10	1	0	1	0	1	52	53	6	2	0	2	1	1	65	0	0	0	0	0	0	0	0	117
09:45	41	8	1	0	5	1	1	57	44	7	0	0	0	0	1	52	0	0	0	0	0	0	0	0	109
10:00	39	4	0	0	3	0	1	47	49	14	0	0	3	0	1	67	0	0	0	0	0	0	0	0	114
10:15	48	9	1	0	2	0	2	62	45	13	3	0	1	0	1	63	0	0	0	0	0	0	0	0	125
10:30	43	10	0	0	1	1	2	57	50	12	2	1	3	1	0	69	0	0	0	0	0	0	0	0	126
10:45	37	15	0	0	0	0	1	53	39	8	0	0	0	1	2	50	0	0	0	0	0	0	0	0	103
11:00	47	8	0	0	1	1	2	59	40	11	2	0	0	2	0	55	0	0	0	0	0	0	0	0	114
11:15	36	13	0	0	3	0	0	52	37	7	2	2	2	1	0	51	0	0	0	0	0	0	0	0	103
11:30	41	15	4	0	1	0	2	63	54	7	2	0	1	1	2	67	0	0	0	0	0	0	0	0	130
11:45	38	11	2	0	3	1	0	55	44	10	2	0	2	0	3	61	0	0	0	0	0	0	0	0	116
12:00	45	7	2	0	1	2	1	58	34	6	1	0	1	0	0	42	0	0	0	0	0	0	0	0	100
12:15	51	12	1	0	1	1	0	66	42	13	0	0	2	0	1	58	0	0	0	0	0	0	0	0	124
12:30	51	7	0	0	1	1	2	62	54	12	1	0	3	1	1	72	0	0	0	0	0	0	0	0	134
12:45	39	6	2	0	0	0	2	49	41	7	3	0	2	1	1	55	0	0	0	0	0	0	0	0	104
13:00	54	6	0	0	0	3	0	63	44	4	2	0	1	0	0	51	0	0	0	0	0	0	0	0	114
13:15	34	7	0	0	1	0	2	44	41	6	2	0	1	1	1	52	0	0	0	0	0	0	0	0	96
13:30	48	6	0	0	1	2	1	58	37	15	1	0	1	1	2	57	0	0	0	0	0	0	0	0	115
13:45	50	13	2	0	0	0	1	66	48	5	0	0	4	0	1	58	0	0	0	0	0	0	0	0	124
14:00	57	9	1	0	2	1	3	73	38	6	2	0	2	1	1	50	0	0	0	0	0	0	0	0	123
14:15	58	10	0	0	4	0	5	77	44	10	1	1	2	2	2	62	0	0	0	0	0	0	0	0	139
14:30	69	7	2	0	1	0	2	81	39	9	2	0	0	0	1	51	0	0	0	0	0	0	0	0	132
14:45	57	7	1	0	2	1	3	71	41	6	2	0	3	1	1	54	0	0	0	0	0	0	0	0	125
15:00	52	7	0	0	2	0	1	62	32	6	1	0	0	2	1	42	0	0	0	0	0	0	0	0	104
15:15	**47**	**11**	**0**	**0**	**2**	**1**	**3**	**64**	**47**	**10**	**0**	**0**	**1**	**0**	**1**	**59**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**123**
15:30	**52**	**5**	**0**	**0**	**2**	**0**	**2**	**61**	**50**	**6**	**3**	**0**	**2**	**1**	**0**	**62**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**123**
15:45	**58**	**11**	**2**	**0**	**0**	**2**	**0**	**73**	**60**	**9**	**4**	**0**	**3**	**0**	**0**	**76**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**149**
16:00	**62**	**6**	**0**	**0**	**3**	**2**	**3**	**76**	**41**	**7**	**1**	**0**	**1**	**0**	**0**	**50**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**126**
16:15	57	8	2	0	4	0	7	78	35	7	2	0	2	0	4	50	0	0	0	0	0	0	0	0	128
16:30	57	5	0	0	3	1	6	72	39	5	0	0	0	1	1	46	0	0	0	0	0	0	0	0	118
16:45	60	8	0	0	0	0	4	72	58	7	1	0	3	0	1	70	0	0	0	0	0	0	0	0	142
17:00	87	7	1	0	2	2	3	102	57	4	0	0	3	0	2	66	0	0	0	0	0	0	0	0	168
17:15	80	10	1	0	4	0	6	101	57	7	1	0	1	1	0	67	0	0	0	0	0	0	0	0	168
17:30	81	9	1	0	0	0	7	98	43	3	1	0	1	1	2	51	0	0	0	0	0	0	0	0	149
17:45	68	4	1	0	1	0	5	79	54	3	0	0	1	1	2	61	0	0	0	0	0	0	0	0	140
18:00	66	7	0	0	2	1	4	80	61	2	0	0	4	0	0	67	0	0	0	0	0	0	0	0	147
18:15	100	7	0	0	3	0	2	112	64	0	0	0	1	0	1	66	0	0	0	0	0	0	0	0	178
18:30	65	5	0	0	1	4	2	77	72	7	1	0	2	0	1	83	0	0	0	0	0	0	0	0	160
18:45	51	9	0	0	1	0	1	62	53	3	1	0	0	0	1	58	0	0	0	0	0	0	0	0	120
Total	2495	404	35	1	94	34	125	3188	2241	366	64	7	84	33	49	2844	0	0	0	0	0	0	0	0	#REF!

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 1 - R839 Grattan Crescent / R810 Emmet Road / R810 Tyrconnell Road

ORIGIN SUMMARY

	Origin : Arm A R839 Grattan Crescent								Origin : Arm B R810 Emmet Road								Origin : Arm C R810 Tyrconnell Road								Origin Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	
07:00	135	22	3	0	5	1	3	169	39	9	2	0	2	1	1	54	89	17	3	0	6	1	1	117	340
07:15	136	26	3	0	4	2	3	174	51	12	2	1	6	1	3	76	110	22	1	0	5	3	5	146	396
07:30	176	27	3	0	2	3	1	212	68	8	2	0	3	1	1	83	80	14	2	0	8	0	4	108	403
07:45	175	24	1	0	1	1	5	207	73	16	1	0	3	0	3	96	80	9	4	1	7	2	5	108	411
1 Hr	622	99	10	0	12	7	12	762	231	45	7	1	14	3	8	309	359	62	10	1	26	6	15	479	1550
08:00	136	17	4	0	3	3	7	170	77	8	4	0	4	0	1	94	74	11	1	0	8	5	4	103	367
08:15	157	18	0	0	1	4	5	185	90	19	4	0	2	1	3	119	73	15	2	0	4	0	6	100	404
08:30	141	8	5	0	2	3	5	164	106	18	4	0	3	1	5	137	107	26	1	0	3	3	1	141	442
08:45	130	15	2	1	2	1	4	155	90	10	3	0	5	2	4	114	90	19	1	2	4	0	8	124	393
1 Hr	564	58	11	1	8	11	21	674	363	55	15	0	14	4	13	464	344	71	5	2	19	8	19	468	1606
09:00	110	25	1	0	3	0	4	143	76	16	0	0	4	1	1	98	103	17	3	1	4	2	5	135	376
09:15	129	18	1	0	5	0	2	155	53	11	3	1	1	0	0	69	84	21	5	0	4	1	5	120	344
09:30	137	16	3	0	2	1	0	159	68	12	3	0	2	0	4	89	92	16	3	0	3	1	2	117	365
09:45	95	22	4	0	2	1	4	128	51	8	4	1	6	1	0	71	85	15	1	0	5	1	2	109	308
1 Hr	471	81	9	0	12	2	10	585	248	47	10	2	13	2	5	327	364	69	12	1	16	5	14	481	1393
10:00	85	16	3	1	1	0	0	106	81	13	0	0	3	0	0	97	88	18	0	0	6	0	2	114	317
10:15	86	26	3	0	4	0	2	121	68	17	1	0	4	0	5	95	93	22	4	0	3	0	3	125	341
10:30	67	14	2	0	2	3	2	90	70	10	4	0	2	0	2	88	93	22	2	1	4	2	2	126	304
10:45	79	19	3	0	2	2	0	105	56	10	2	1	4	1	1	75	76	23	0	0	0	1	3	103	283
1 Hr	317	75	11	1	9	5	4	422	275	50	7	1	13	1	8	355	350	85	6	1	13	3	10	468	1245
11:00	89	23	3	0	1	2	0	118	72	21	4	0	3	0	0	100	87	19	2	0	1	3	2	114	332
11:15	101	10	3	1	2	1	2	120	74	11	4	1	4	2	3	99	73	20	2	2	5	1	0	103	322
11:30	70	22	1	0	2	0	2	97	74	14	3	0	3	1	2	97	95	22	6	0	2	1	4	130	324
11:45	121	14	2	0	0	0	2	139	79	15	2	0	1	0	2	99	82	21	4	0	5	1	3	116	354
1 Hr	381	69	9	1	5	3	6	474	299	61	13	1	11	3	7	395	337	82	14	2	13	6	9	463	1332
12:00	91	14	0	0	3	0	2	110	89	16	3	2	6	2	1	119	79	13	3	0	2	2	1	100	329
12:15	95	20	5	2	6	1	2	131	70	11	3	1	3	2	1	91	93	25	1	0	3	1	1	124	346
12:30	93	20	5	0	3	3	3	127	83	23	4	0	1	2	3	116	105	19	1	0	4	2	3	134	377
12:45	89	22	3	0	2	3	2	121	87	19	1	0	4	1	0	112	80	13	5	0	2	1	3	104	337
1 Hr	368	76	13	2	14	7	9	489	329	69	11	3	14	7	5	438	357	70	10	0	11	6	8	462	1389
13:00	97	17	5	0	0	0	3	122	100	12	2	0	7	1	1	123	98	10	2	0	1	3	0	114	359
13:15	98	19	2	0	3	1	4	127	85	19	6	0	3	0	3	116	75	13	2	0	2	1	3	96	339
13:30	111	20	5	0	2	2	8	148	83	10	2	0	3	0	1	99	85	21	1	0	2	3	3	115	362
13:45	102	7	4	0	2	0	2	117	77	8	3	0	5	1	0	94	98	18	2	0	4	0	2	124	335
1 Hr	408	63	16	0	7	3	17	514	345	49	13	0	18	2	5	432	356	62	7	0	9	7	8	449	1395
14:00	92	23	1	0	0	2	3	121	86	13	1	1	7	0	3	111	95	15	3	0	4	2	4	123	355
14:15	97	9	2	0	4	2	3	117	88	17	4	0	3	0	2	114	102	20	1	1	6	2	7	139	370
14:30	96	14	2	0	2	1	3	118	98	11	4	1	4	1	2	121	108	16	4	0	1	0	3	132	371
14:45	82	19	2	0	1	0	4	108	97	15	1	0	4	2	3	122	98	13	3	0	5	2	4	125	355
1 Hr	367	65	7	0	7	5	13	464	369	56	10	2	18	3	10	468	403	64	11	1	16	6	18	519	1451
15:00	119	17	2	0	1	0	1	140	91	20	3	1	3	1	1	120	84	13	1	0	2	2	2	104	364
15:15	100	16	1	0	5	0	2	124	104	17	4	1	5	1	6	138	94	21	0	0	3	1	4	123	385
15:30	95	14	0	0	3	2	2	116	115	20	2	0	4	3	1	145	102	11	3	0	4	1	2	123	384
15:45	98	14	2	0	1	1	3	119	101	24	1	0	3	0	0	129	118	20	6	0	3	2	0	149	397
1 Hr	412	61	5	0	10	3	8	499	411	81	10	2	15	5	8	532	398	65	10	0	12	6	8	499	1530
16:00	120	17	2	0	3	3	3	148	121	25	1	0	5	1	3	156	103	13	1	0	4	2	3	126	430
16:15	75	11	1	0	2	0	7	96	86	14	0	0	5	3	7	115	92	15	4	0	6	0	11	128	339
16:30	123	21	2	0	5	2	2	155	110	20	3	0	2	2	7	144	96	10	0	0	3	2	7	118	417
16:45	119	13	1	0	3	3	6	145	98	17	0	0	0	4	2	121	118	15	1	0	3	0	5	142	408
1 Hr	437	62	6	0	13	8	18	544	415	76	4	0	12	10	19	536	409	53	6	0	16	4	26	514	1594
17:00	114	13	2	0	2	3	10	144	94	13	0	0	4	2	2	115	144	11	1	0	5	2	5	168	427
17:15	123	8	1	0	3	1	8	144	89	10	2	0	6	2	8	117	137	17	2	0	5	1	6	168	429
17:30	123	8	0	0	1	2	7	141	110	17	2	0	4	1	3	137	124	12	2	0	1	1	9	149	427
17:45	131	13	0	0	2	0	7	153	121	12	2	0	7	0	7	149	122	7	1	0	2	1	7	140	442
1 Hr	491	42	3	0	8	6	32	582	414	52	6	0	21	5	20	518	527	47	6	0	13	5	27	625	1725
18:00	133	16	0	0	2	2	5	158	89	7	1	0	2	3	2	104	127	9	0	0	6	1	4	147	409
18:15	126	13	0	0	3	3	7	152	93	15	1	0	5	3	6	123	164	7	0	0	4	0	3	178	453
18:30	115	13	0	0	4	1	2	135	102	6	1	0	6	1	1	117	137	12	1	0	3	4	3	160	412
18:45	104	7	0	0	1	2	7	121	88	8	1	0	2	1	7	107	104	12	1	0	1	0	2	120	348
1 Hr	478	49	0	0	10	8	21	566	372	36	4	0	15	8	16	451	532	40	2	0	14	5	12	605	1622
Total	5316	800	100	5	115	68	171	6575	4071	677	110	12	178	53	124	5225	4736	770	99	8	178	67	174	6032	17832

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 1 - R839 Grattan Crescent / R810 Emmet Road / R810 Tyrconnell Road

DESTINATION SUMMARY

	Destination : Arm A R839 Grattan Crescent								**Destination :** Arm B R810 Emmet Road								**Destination :** Arm C R810 Tyrconnell Road								Dest
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Totals
07:00	58	7	1	0	4	0	1	71	135	23	4	0	4	1	1	168	70	18	3	0	5	2	3	101	340
07:15	74	20	1	1	5	0	6	107	147	24	4	0	4	4	0	183	76	16	1	0	6	2	5	106	396
07:30	68	8	1	0	8	0	5	90	137	27	2	0	2	1	0	169	119	14	4	0	3	3	1	144	403
07:45	71	11	1	1	5	0	5	94	132	19	3	0	4	3	2	163	125	19	2	0	2	0	6	154	411
1 Hr	271	46	4	2	22	0	17	362	551	93	13	0	14	9	3	683	390	67	10	0	16	7	15	505	1550
08:00	69	9	1	0	5	4	2	90	126	17	3	0	8	1	5	160	92	10	5	0	2	3	5	117	367
08:15	71	12	2	0	4	1	6	96	135	20	2	0	2	2	3	164	114	20	2	0	1	2	5	144	404
08:30	99	17	3	0	4	1	0	124	127	16	3	0	2	3	4	155	128	19	4	0	2	3	7	163	442
08:45	80	18	1	0	3	0	8	110	117	14	1	3	5	1	3	144	113	12	4	0	3	2	5	139	393
1 Hr	319	56	7	0	16	6	16	420	505	67	9	3	17	7	15	623	447	61	15	0	8	10	22	563	1606
09:00	80	9	1	0	4	0	5	99	127	28	2	1	3	2	2	165	82	21	1	0	4	1	3	112	376
09:15	50	14	2	1	3	1	4	75	132	19	3	0	4	0	1	159	84	17	4	0	3	0	2	110	344
09:30	63	14	1	0	1	0	3	82	147	16	3	0	4	2	1	173	87	14	5	0	2	0	2	110	365
09:45	61	11	2	1	8	1	1	85	105	20	2	0	2	0	3	132	65	14	5	0	3	2	2	91	308
1 Hr	254	48	6	2	16	2	13	341	511	83	10	1	13	4	7	629	318	66	15	0	12	3	9	423	1393
10:00	70	9	0	0	5	0	1	85	102	20	1	0	4	0	1	128	82	18	2	1	1	0	0	104	317
10:15	77	15	1	0	4	0	4	101	93	29	4	0	4	0	2	132	77	21	3	0	3	0	4	108	341
10:30	75	15	1	0	2	1	3	97	88	19	3	1	4	2	1	118	67	12	4	0	2	2	2	89	304
10:45	61	19	1	1	1	0	2	85	87	20	1	0	2	3	2	115	63	13	3	0	3	1	0	83	283
1 Hr	283	58	3	1	12	1	10	368	370	88	9	1	14	5	6	493	289	64	12	1	9	3	6	384	1245
11:00	73	14	0	0	3	1	2	93	95	23	3	0	1	2	0	124	80	26	6	0	1	2	0	115	332
11:15	62	16	1	1	5	0	1	86	98	11	2	2	3	2	1	119	88	14	6	1	3	2	3	117	322
11:30	70	18	5	0	2	0	2	97	93	15	2	0	2	1	3	116	76	25	3	0	3	1	3	111	324
11:45	79	18	2	0	3	1	0	103	93	18	3	0	2	0	4	120	110	14	3	0	1	0	3	131	354
1 Hr	284	66	8	1	13	2	5	379	379	67	10	2	8	5	8	479	354	79	18	1	8	5	9	474	1332
12:00	79	12	3	1	3	3	2	103	74	14	1	0	3	0	1	93	106	17	2	1	5	1	1	133	329
12:15	74	19	2	0	4	1	0	100	88	20	0	1	3	1	2	115	96	17	7	2	5	2	2	131	346
12:30	90	11	0	0	1	1	3	106	107	19	2	0	4	1	2	135	84	32	8	0	3	5	4	136	377
12:45	73	11	3	0	1	1	2	91	85	17	3	0	4	2	2	113	98	26	3	0	3	2	1	133	337
1 Hr	316	53	8	1	9	6	7	400	354	70	6	1	14	4	7	456	384	92	20	3	16	10	8	533	1389
13:00	97	8	0	0	2	3	0	110	94	9	3	0	1	0	1	108	104	22	6	0	5	1	3	141	359
13:15	64	13	1	0	1	0	5	84	95	12	3	0	3	1	4	118	99	26	6	0	4	1	1	137	339
13:30	87	12	1	0	3	2	1	106	93	24	5	0	2	1	5	130	99	15	2	0	2	2	6	126	362
13:45	88	14	3	0	3	0	1	109	98	7	2	0	5	0	2	114	91	12	4	0	3	1	1	112	335
1 Hr	336	47	5	0	9	5	7	409	380	52	13	0	11	2	12	470	393	75	18	0	14	5	11	516	1395
14:00	93	10	1	1	3	1	4	113	87	17	3	0	2	1	4	114	93	24	1	0	6	2	2	128	355
14:15	89	18	2	0	5	0	6	120	87	14	1	1	5	2	3	113	111	14	4	0	3	2	3	137	370
14:30	119	9	2	1	3	0	4	138	79	13	3	0	2	0	1	98	104	19	5	0	2	2	3	135	371
14:45	95	10	1	0	3	1	3	113	81	11	4	0	4	1	1	102	101	26	1	0	3	2	7	140	355
1 Hr	396	47	6	2	14	2	17	484	334	55	11	1	13	4	9	427	409	83	11	0	14	8	15	540	1451
15:00	95	17	2	1	3	1	2	121	96	13	2	0	1	2	1	115	103	20	2	0	2	0	1	128	364
15:15	90	16	1	0	4	2	6	119	98	16	0	0	5	0	2	121	110	22	4	1	4	0	4	145	385
15:30	106	15	0	0	3	2	3	129	96	12	3	0	4	1	1	117	110	18	2	0	4	3	1	138	384
15:45	100	21	3	0	1	2	0	127	110	15	4	0	4	0	1	134	107	22	2	0	2	1	2	136	397
1 Hr	391	69	6	1	11	7	11	496	400	56	9	0	14	3	5	487	430	82	10	1	12	4	8	547	1530
16:00	106	16	1	0	4	3	4	134	99	15	3	0	3	2	2	124	139	24	0	0	5	1	3	172	430
16:15	106	13	2	0	6	0	11	138	67	12	2	0	2	0	6	89	80	15	1	0	5	3	8	112	339
16:30	111	15	1	0	4	1	10	142	94	12	1	0	3	1	3	114	124	24	3	0	3	4	3	161	417
16:45	113	15	0	0	0	1	6	135	119	12	1	0	5	1	4	142	103	18	1	0	1	5	3	131	408
1 Hr	436	59	4	0	14	5	31	549	379	51	7	0	13	4	15	469	446	81	5	0	14	13	17	576	1594
17:00	125	12	1	0	4	3	5	150	108	8	0	0	5	2	6	129	119	17	2	0	2	2	6	148	427
17:15	127	16	1	0	5	1	11	161	110	11	1	0	3	1	2	128	112	8	3	0	6	2	9	140	429
17:30	131	14	1	0	2	0	9	157	109	9	1	0	2	3	2	126	117	14	2	0	2	1	8	144	427
17:45	120	8	1	0	3	0	8	140	119	9	0	0	3	1	3	135	135	15	2	0	5	0	10	167	442
1 Hr	503	50	4	0	14	4	33	608	446	37	2	0	13	7	13	518	483	54	9	0	15	5	33	599	1725
18:00	107	10	0	0	3	1	5	126	133	11	0	0	5	1	1	151	109	11	1	0	2	4	5	132	409
18:15	143	14	0	0	5	1	3	166	129	8	0	0	3	1	3	144	111	13	1	0	4	4	10	143	453
18:30	104	6	0	0	3	5	2	120	133	14	1	0	5	1	2	156	117	11	1	0	5	0	2	136	412
18:45	91	11	0	0	2	1	5	110	101	7	1	0	1	2	4	116	104	9	1	0	1	0	7	122	348
1 Hr	445	41	0	0	13	8	15	522	496	40	2	0	14	5	10	567	441	44	4	0	12	8	24	533	1622
Total	4234	640	61	10	163	48	182	5338	5105	759	101	9	158	59	110	6301	4784	848	147	6	150	81	177	6193	17832

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 2 - R810 Emmet Road(ENE) / Saint Vincent Street West / R810 Emmet Road(WSW)

Origin : Arm A R810 Emmet Road(ENE)

	Destination : Arm A R810 Emmet Road(ENE)								**Destination :** Arm B Saint Vincent Street West								**Destination :** Arm C R810 Emmet Road(WSW)								Arm Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	
07:00	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	3	33	7	2	0	2	0	0	44	47
07:15	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	42	10	1	1	6	1	1	62	65
07:30	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	57	7	1	0	3	1	0	69	73
07:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**1**	**0**	**0**	**0**	**0**	**6**	**61**	**12**	**2**	**0**	**3**	**0**	**3**	**81**	**87**
08:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**1**	**0**	**0**	**1**	**1**	**0**	**12**	**70**	**6**	**3**	**0**	**4**	**0**	**1**	**84**	**96**
08:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**1**	**15**	**72**	**16**	**4**	**0**	**2**	**2**	**2**	**98**	**113**
08:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**1**	**0**	**1**	**0**	**0**	**23**	**75**	**16**	**4**	**0**	**1**	**1**	**6**	**103**	**126**
08:45	0	0	0	0	0	0	0	0	18	0	0	0	1	0	0	19	57	15	2	0	5	2	5	86	105
09:00	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11	57	10	0	0	3	1	0	71	82
09:15	0	0	0	0	0	0	0	0	12	2	0	0	0	0	2	16	46	9	2	1	1	0	0	59	75
09:30	0	0	0	0	0	0	0	0	12	1	0	0	1	0	0	14	53	11	2	0	4	0	3	73	87
09:45	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7	42	6	4	1	4	1	0	58	65
10:00	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7	62	12	0	0	3	0	1	78	85
10:15	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	60	15	1	0	4	0	4	84	87
10:30	0	0	0	0	0	0	0	0	1	2	1	0	0	0	1	5	62	11	4	0	2	0	4	83	88
10:45	0	0	0	0	0	0	0	0	6	2	0	0	1	0	0	9	48	7	2	1	4	1	0	63	72
11:00	0	0	0	0	0	0	0	0	6	1	2	1	0	0	0	10	58	18	3	0	3	0	0	82	92
11:15	0	0	0	0	0	0	0	0	9	3	0	0	0	0	0	12	67	10	3	1	4	0	2	87	99
11:30	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	64	13	3	0	3	1	3	87	93
11:45	0	0	0	0	0	0	0	0	2	3	1	0	0	1	0	7	72	13	2	0	1	1	2	91	98
12:00	0	0	0	0	0	0	0	0	4	3	0	0	0	0	0	7	75	14	3	2	6	2	0	102	109
12:15	0	0	0	0	0	0	0	0	14	3	0	0	0	0	0	17	60	11	2	1	3	2	1	80	97
12:30	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	68	20	4	0	1	2	2	97	103
12:45	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12	83	17	3	0	4	0	0	107	119
13:00	0	0	0	0	0	0	0	0	12	2	0	0	0	0	0	14	85	13	0	0	7	1	1	107	121
13:15	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	76	16	6	0	3	0	4	105	113
13:30	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	13	68	12	2	0	2	0	2	86	99
13:45	0	0	0	0	0	0	0	0	6	2	0	0	0	0	0	8	70	7	2	0	5	1	0	85	93
14:00	0	0	0	0	0	0	0	0	15	0	0	0	0	1	0	16	73	14	1	1	7	0	5	101	117
14:15	0	0	0	0	0	0	0	0	18	3	0	0	0	0	2	23	74	15	3	0	5	0	6	103	126
14:30	0	0	0	0	0	0	0	0	11	1	0	0	2	0	0	14	67	8	4	1	2	1	4	87	101
14:45	0	0	0	0	0	0	0	0	10	2	0	0	0	0	1	13	91	12	1	0	3	2	2	111	124
15:00	0	0	0	0	0	0	0	0	11	1	1	0	0	0	0	13	77	16	3	1	3	1	4	105	118
15:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**1**	**0**	**2**	**13**	**93**	**21**	**3**	**0**	**5**	**1**	**5**	**128**	**141**
15:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24**	**3**	**1**	**0**	**1**	**1**	**0**	**30**	**92**	**17**	**2**	**0**	**3**	**2**	**2**	**118**	**148**
15:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**3**	**1**	**0**	**0**	**0**	**0**	**11**	**84**	**21**	**0**	**0**	**3**	**0**	**1**	**109**	**120**
16:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**1**	**11**	**101**	**16**	**2**	**0**	**4**	**1**	**6**	**130**	**141**
16:15	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10	83	15	1	0	5	3	10	117	127
16:30	0	0	0	0	0	0	0	0	17	2	0	0	0	0	0	19	104	19	1	0	2	2	5	133	152
16:45	0	0	0	0	0	0	0	0	9	3	0	0	0	1	2	15	81	14	0	0	1	3	3	102	117
17:00	0	0	0	0	0	0	0	0	7	0	0	0	0	0	2	9	83	12	0	0	4	1	4	104	113
17:15	0	0	0	0	0	0	0	0	7	1	0	0	0	0	2	10	79	11	2	0	4	2	10	108	118
17:30	0	0	0	0	0	0	0	0	5	1	0	0	0	1	2	9	99	16	1	0	4	1	2	123	132
17:45	0	0	0	0	0	0	0	0	12	3	1	0	0	0	4	20	101	10	2	0	7	0	13	133	153
18:00	0	0	0	0	0	0	0	0	11	1	0	0	0	0	3	15	83	10	1	0	3	3	5	105	120
18:15	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9	82	15	1	0	4	3	5	110	119
18:30	0	0	0	0	0	0	0	0	8	0	1	0	0	0	0	9	83	6	1	0	6	0	4	100	109
18:45	0	0	0	0	0	0	0	0	5	0	0	0	0	0	2	7	69	9	0	0	2	1	5	86	93
Total	0	0	0	0	0	0	0	0	442	56	11	1	9	7	27	553	3442	611	96	11	170	47	148	4525	#REF!

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 2 - R810 Emmet Road(ENE) / Saint Vincent Street West / R810 Emmet Road(WSW)

Origin : Arm B Saint Vincent Street West

	Destination : Arm A R810 Emmet Road(ENE)								**Destination :** Arm B Saint Vincent Street West								**Destination :** Arm C R810 Emmet Road(WSW)								Arm
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Totals
07:00	7	0	1	0	0	0	0	8	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	11
07:15	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	7
07:30	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	2	0	1	0	0	0	1	4	6
07:45	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**6**
08:00	**9**	**0**	**0**	**0**	**1**	**0**	**1**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**
08:15	**15**	**1**	**0**	**0**	**0**	**0**	**1**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**18**
08:30	**11**	**2**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**16**
08:45	12	0	0	0	0	1	1	14	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	22
09:00	11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3	15
09:15	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	8
09:30	4	0	0	0	1	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	6
09:45	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	6
10:00	4	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	8
10:15	3	2	0	0	0	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	6
10:30	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	3
10:45	6	2	0	0	0	0	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
11:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	4
11:15	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	5
11:30	8	1	0	0	0	0	1	10	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	12
11:45	4	1	0	1	0	1	0	7	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	10
12:00	10	2	0	1	0	0	2	15	0	0	0	0	0	0	0	0	1	3	0	0	0	0	1	5	20
12:15	5	2	0	0	0	0	0	7	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	9
12:30	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	5
12:45	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	15
13:00	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	5	15
13:15	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	10
13:30	14	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	19
13:45	8	1	0	0	1	0	1	11	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	12
14:00	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	11
14:15	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	3	6
14:30	23	1	0	0	0	0	1	25	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	29
14:45	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	4	2	0	0	0	0	1	7	14
15:00	5	2	0	0	0	0	1	8	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	10
15:15	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**6**	**14**
15:30	**16**	**1**	**0**	**0**	**1**	**0**	**0**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**1**	**0**	**0**	**8**	**26**
15:45	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**4**	**8**
16:00	**9**	**1**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**2**	**0**	**0**	**0**	**0**	**1**	**8**	**18**
16:15	7	0	0	0	0	1	1	9	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2	11
16:30	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	11
16:45	10	1	0	0	0	0	2	13	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	14
17:00	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	8
17:15	5	0	0	0	0	1	1	7	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	8
17:30	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	11
17:45	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6	13
18:00	5	3	0	0	0	0	0	8	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	14
18:15	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	3	8
18:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	6
18:45	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0	7	0	0	0	0	0	1	8	17
Total	324	36	2	2	4	4	18	390	0	0	0	0	0	0	0	0	126	20	5	0	2	1	7	161	#REF!

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 2 - R810 Emmet Road(ENE) / Saint Vincent Street West / R810 Emmet Road(WSW)

Origin : Arm C R810 Emmet Road(WSW)

	Destination : Arm A R810 Emmet Road(ENE)								**Destination :** Arm B Saint Vincent Street West								**Destination :** Arm C R810 Emmet Road(WSW)								Arm Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	
07:00	132	23	4	0	3	1	1	164	4	0	0	0	0	0	0	4	1	0	0	0	0	0	0	1	169
07:15	141	23	4	0	4	4	7	183	4	1	0	0	0	0	1	6	0	0	0	0	0	0	0	0	189
07:30	147	29	2	0	3	1	2	184	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	187
07:45	**122**	**20**	**3**	**0**	**3**	**3**	**5**	**156**	**3**	**2**	**0**	**0**	**1**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**162**
08:00	**125**	**15**	**4**	**0**	**7**	**1**	**6**	**158**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**167**
08:15	**122**	**17**	**3**	**0**	**3**	**2**	**5**	**152**	**21**	**3**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**176**
08:30	**106**	**15**	**3**	**0**	**2**	**2**	**9**	**137**	**27**	**0**	**0**	**0**	**0**	**0**	**0**	**27**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**164**
08:45	95	18	1	1	5	2	5	127	18	1	0	0	0	0	0	19	1	0	0	0	0	0	0	1	147
09:00	119	26	1	2	3	2	3	156	13	3	0	0	0	0	0	16	0	0	0	0	0	0	0	0	172
09:15	120	17	2	0	4	0	0	143	16	1	1	0	0	0	0	18	0	0	0	0	0	0	0	0	161
09:30	139	16	2	0	3	1	2	163	14	0	0	0	0	0	0	14	0	0	1	0	0	0	0	1	178
09:45	98	17	3	0	3	1	5	127	11	2	0	0	0	0	0	13	1	0	0	0	0	0	0	1	141
10:00	96	19	1	0	4	0	5	125	12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0	138
10:15	90	28	4	0	3	0	3	128	3	0	0	0	0	0	0	3	1	0	0	0	0	0	0	1	132
10:30	78	19	3	1	5	2	2	110	11	1	0	0	0	0	0	12	1	0	0	0	0	0	0	1	123
10:45	72	16	1	0	1	4	1	95	9	2	0	0	0	0	0	11	0	0	0	0	0	0	0	0	106
11:00	88	23	3	0	2	1	0	117	11	2	0	0	0	0	0	13	0	0	0	0	0	0	0	0	130
11:15	93	12	2	1	3	1	2	114	10	0	0	1	0	1	0	12	1	0	0	0	0	0	0	1	127
11:30	87	15	2	0	2	1	3	110	4	3	0	0	0	0	0	7	0	0	0	0	0	0	0	0	117
11:45	81	15	3	0	2	0	4	105	14	1	0	0	0	0	1	16	0	1	0	0	0	0	0	1	122
12:00	64	13	1	0	1	0	3	82	6	3	0	0	0	0	0	9	0	0	0	0	0	0	0	0	91
12:15	77	18	0	1	5	1	3	105	16	0	0	0	0	0	1	17	0	0	0	0	0	0	0	0	122
12:30	104	19	1	0	4	1	3	132	13	2	0	0	0	0	0	15	0	0	0	0	0	0	0	0	147
12:45	72	15	4	0	4	1	3	99	8	2	0	0	0	0	0	10	0	0	0	0	0	0	0	0	109
13:00	92	7	3	0	1	0	1	104	9	2	0	0	0	0	0	11	0	0	0	0	0	0	0	0	115
13:15	85	10	3	0	3	1	5	107	12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0	120
13:30	87	22	4	0	2	1	3	119	9	0	1	0	0	0	1	11	1	0	0	0	0	0	0	1	131
13:45	78	8	2	0	5	0	1	94	14	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	108
14:00	86	14	2	0	2	1	9	114	13	2	1	0	0	0	0	16	0	0	0	0	0	0	0	0	130
14:15	73	12	0	1	5	2	4	97	13	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0	110
14:30	79	13	4	0	3	0	1	100	14	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	114
14:45	75	6	4	0	4	1	2	92	5	3	0	0	0	0	0	8	0	0	0	0	0	0	0	0	100
15:00	89	9	3	0	1	3	2	107	16	4	0	0	0	0	0	20	0	0	0	0	0	0	0	0	127
15:15	**87**	**16**	**0**	**0**	**5**	**0**	**1**	**109**	**14**	**1**	**0**	**0**	**0**	**0**	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**124**
15:30	**80**	**12**	**3**	**0**	**4**	**1**	**3**	**103**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**122**
15:45	**102**	**10**	**4**	**0**	**3**	**0**	**2**	**121**	**15**	**4**	**0**	**0**	**0**	**0**	**0**	**19**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**141**
16:00	**93**	**15**	**3**	**0**	**4**	**2**	**3**	**120**	**11**	**1**	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**132**
16:15	59	10	1	0	2	0	8	80	9	2	0	0	0	0	0	11	1	0	0	0	0	0	0	1	92
16:30	81	12	1	0	3	1	4	102	17	3	0	0	0	0	1	21	0	0	0	0	0	0	0	0	123
16:45	96	10	1	0	4	1	3	115	22	1	0	0	0	0	1	24	1	0	0	0	0	0	0	1	140
17:00	93	7	1	0	6	2	5	114	17	1	0	0	0	0	0	18	1	0	0	0	0	0	0	1	133
17:15	99	9	0	0	3	0	2	113	15	2	1	0	0	1	0	19	0	0	0	0	0	0	0	0	132
17:30	98	9	1	0	2	2	4	116	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	127
17:45	117	7	0	0	3	1	2	130	23	2	0	0	0	1	0	26	0	0	0	0	0	0	0	0	156
18:00	112	10	0	0	5	1	3	131	12	0	0	0	0	0	0	12	1	0	0	0	0	0	0	1	144
18:15	121	7	0	0	3	1	4	136	14	1	0	0	0	0	0	15	0	0	0	0	0	0	0	0	151
18:30	108	12	0	0	4	1	2	127	19	2	0	0	0	0	0	21	1	0	0	0	0	0	0	1	149
18:45	98	6	2	0	1	1	5	113	12	2	0	0	0	2	1	17	0	0	0	0	0	0	0	0	130
Total	4656	701	99	7	157	55	161	5836	593	65	4	1	1	5	7	676	14	1	1	0	0	0	0	16	#REF!

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 2 - R810 Emmet Road(ENE) / Saint Vincent Street West / R810 Emmet Road(WSW)

ORIGIN SUMMARY

	Origin : Arm A R810 Emmet Road(ENE)								**Origin :** Arm B Saint Vincent Street West								**Origin :** Arm C R810 Emmet Road(WSW)								Origin Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	
07:00	34	8	2	0	2	1	0	47	9	1	1	0	0	0	0	11	137	23	4	0	3	1	1	169	227
07:15	44	11	1	1	6	1	1	65	6	1	0	0	0	0	0	7	145	24	4	0	4	4	8	189	261
07:30	60	8	1	0	3	1	0	73	3	0	1	0	0	0	2	6	150	29	2	0	3	1	2	187	266
07:45	65	13	3	0	3	0	3	87	1	2	1	0	0	0	2	6	125	22	3	0	4	3	5	162	255
1 Hr	203	40	7	1	14	3	4	272	19	4	3	0	0	0	4	30	557	98	13	0	14	9	16	707	1009
08:00	79	7	3	0	5	1	1	96	9	0	0	0	1	0	1	11	134	15	4	0	7	1	6	167	274
08:15	86	16	4	0	2	2	3	113	16	1	0	0	0	0	1	18	143	20	3	0	3	2	5	176	307
08:30	96	16	5	0	2	1	6	126	13	3	0	0	0	0	0	16	133	15	3	0	2	2	9	164	306
08:45	75	15	2	0	6	2	5	105	20	0	0	0	0	1	1	22	114	19	1	1	5	2	5	147	274
1 Hr	336	54	14	0	15	6	15	440	58	4	0	0	1	1	3	67	524	69	11	1	17	7	25	654	1161
09:00	68	10	0	0	3	1	0	82	13	1	0	0	1	0	0	15	132	29	1	2	3	2	3	172	269
09:15	58	11	2	1	1	0	2	75	7	1	0	0	0	0	0	8	136	18	3	0	4	0	0	161	244
09:30	65	12	2	0	5	0	3	87	5	0	0	0	1	0	0	6	153	16	3	0	3	1	2	178	271
09:45	48	7	4	1	4	1	0	65	5	1	0	0	0	0	0	6	110	19	3	0	3	1	5	141	212
1 Hr	239	40	8	2	13	2	5	309	30	3	0	0	2	0	0	35	531	82	10	2	13	4	10	652	996
10:00	68	13	0	0	3	0	1	85	7	0	0	0	0	0	1	8	108	20	1	0	4	0	5	138	231
10:15	62	16	1	0	4	0	4	87	4	2	0	0	0	0	0	6	94	28	4	0	3	0	3	132	225
10:30	63	13	5	0	2	0	5	88	2	1	0	0	0	0	0	3	90	20	3	1	5	2	2	123	214
10:45	54	9	2	1	5	1	0	72	6	2	0	0	0	0	1	9	81	18	1	0	1	4	1	106	187
1 Hr	247	51	8	1	14	1	10	332	19	5	0	0	0	0	2	26	373	86	9	1	13	6	11	499	857
11:00	64	19	5	1	3	0	0	92	3	1	0	0	0	0	0	4	99	25	3	0	2	1	0	130	226
11:15	76	13	3	1	4	0	2	99	2	1	1	0	0	1	0	5	104	12	2	2	3	2	2	127	231
11:30	70	13	3	0	3	1	3	93	9	2	0	0	0	0	1	12	91	18	2	0	2	1	3	117	222
11:45	74	16	3	0	1	2	2	98	6	2	0	1	0	1	0	10	95	17	3	0	2	0	5	122	230
1 Hr	284	61	14	2	11	3	7	382	20	6	1	1	0	2	1	31	389	72	10	2	9	4	10	496	909
12:00	79	17	3	2	6	2	0	109	11	5	0	1	0	0	3	20	70	16	1	0	1	0	3	91	220
12:15	74	14	2	1	3	2	1	97	7	2	0	0	0	0	0	9	93	18	0	1	5	1	4	122	228
12:30	74	20	4	0	1	2	2	103	4	1	0	0	0	0	0	5	117	21	1	0	4	1	3	147	255
12:45	95	17	3	0	4	0	0	119	14	1	0	0	0	0	0	15	80	17	4	0	4	1	3	109	243
1 Hr	322	68	12	3	14	6	3	428	36	9	0	1	0	0	3	49	360	72	6	1	14	3	13	469	946
13:00	97	15	0	0	7	1	1	121	14	0	1	0	0	0	0	15	101	9	3	0	1	0	1	115	251
13:15	84	16	6	0	3	0	4	113	9	1	0	0	0	0	0	10	97	11	3	0	3	1	5	120	243
13:30	81	12	2	0	2	0	2	99	19	0	0	0	0	0	0	19	97	22	5	0	2	1	4	131	249
13:45	76	9	2	0	5	1	0	93	9	1	0	0	1	0	1	12	92	8	2	0	5	0	1	108	213
1 Hr	338	52	10	0	17	2	7	426	51	2	1	0	1	0	1	56	387	50	13	0	11	2	11	474	956
14:00	88	14	1	1	7	1	5	117	11	0	0	0	0	0	0	11	99	16	3	0	2	1	9	130	258
14:15	92	18	3	0	5	0	8	126	5	0	1	0	0	0	0	6	86	12	0	1	5	2	4	110	242
14:30	78	9	4	1	4	1	4	101	27	1	0	0	0	0	1	29	93	13	4	0	3	0	1	114	244
14:45	101	14	1	0	3	2	3	124	10	3	0	0	0	0	1	14	80	9	4	0	4	1	2	100	238
1 Hr	359	55	9	2	19	4	20	468	53	4	1	0	0	0	2	60	358	50	11	1	14	4	16	454	982
15:00	88	17	4	1	3	1	4	118	7	2	0	0	0	0	1	10	105	13	3	0	1	3	2	127	255
15:15	103	21	3	0	6	1	7	141	13	1	0	0	0	0	0	14	101	17	0	0	5	0	1	124	279
15:30	116	20	3	0	4	3	2	148	23	1	0	0	2	0	0	26	99	12	3	0	4	1	3	122	296
15:45	91	24	1	0	3	0	1	120	6	2	0	0	0	0	0	8	118	14	4	0	3	0	2	141	269
1 Hr	398	82	11	1	16	5	14	527	49	6	0	0	2	0	1	58	423	56	10	0	13	4	8	514	1099
16:00	111	16	2	0	4	1	7	141	14	3	0	0	0	0	1	18	104	16	3	0	4	2	3	132	291
16:15	93	15	1	0	5	3	10	127	8	0	0	0	0	1	2	11	69	12	1	0	2	0	8	92	230
16:30	121	21	1	0	2	2	5	152	10	1	0	0	0	0	0	11	98	15	1	0	3	1	5	123	286
16:45	90	17	0	0	1	4	5	117	11	1	0	0	0	0	2	14	119	11	1	0	4	1	4	140	271
1 Hr	415	69	4	0	12	10	27	537	43	5	0	0	0	1	5	54	390	54	6	0	13	4	20	487	1078
17:00	90	12	0	0	4	1	6	113	7	1	0	0	0	0	0	8	111	8	1	0	6	2	5	133	254
17:15	86	12	2	0	4	2	12	118	6	0	0	0	0	1	1	8	114	11	1	0	3	1	2	132	258
17:30	104	17	1	0	4	2	4	132	9	1	1	0	0	0	0	11	108	10	1	0	2	2	4	127	270
17:45	113	13	3	0	7	0	17	153	12	1	0	0	0	0	0	13	140	9	0	0	3	2	2	156	322
1 Hr	393	54	6	0	19	5	39	516	34	3	1	0	0	1	1	40	473	38	3	0	14	7	13	548	1104
18:00	94	11	1	0	3	3	8	120	11	3	0	0	0	0	0	14	125	10	0	0	5	1	3	144	278
18:15	91	15	1	0	4	3	5	119	7	0	0	0	0	0	1	8	135	8	0	0	3	1	4	151	278
18:30	91	6	2	0	6	0	4	109	5	1	0	0	0	0	0	6	128	14	0	0	4	1	2	149	264
18:45	74	9	0	0	2	1	7	93	15	1	0	0	0	0	1	17	110	8	2	0	1	3	6	130	240
1 Hr	350	41	4	0	15	7	24	441	38	5	0	0	0	0	2	45	498	40	2	0	13	6	15	574	1060
Total	3884	667	107	12	179	54	175	5078	450	56	7	2	6	5	25	551	5263	767	104	8	158	60	168	6528	12157

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 2 - R810 Emmet Road(ENE) / Saint Vincent Street West / R810 Emmet Road(WSW)

DESTINATION SUMMARY

	Destination : Arm A R810 Emmet Road(ENE)							Total	**Destination :** Arm B Saint Vincent Street West							Total	**Destination :** Arm C R810 Emmet Road(WSW)							Total	Dest Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		
07:00	139	23	5	0	3	1	1	172	5	1	0	0	0	1	0	7	36	8	2	0	2	0	0	48	227
07:15	145	23	4	0	4	4	7	187	6	2	0	0	0	0	1	9	44	11	1	1	6	1	1	65	261
07:30	148	29	2	0	3	1	3	186	6	1	0	0	0	0	0	7	59	7	2	0	3	1	1	73	266
07:45	122	21	4	0	3	3	7	160	7	3	1	0	1	0	0	12	62	13	2	0	3	0	3	83	255
1 Hr	554	96	15	0	13	9	18	705	24	7	1	0	1	1	1	35	201	39	7	1	14	2	5	269	1009
08:00	134	15	4	0	8	1	7	169	18	1	0	0	1	1	0	21	70	6	3	0	4	0	1	84	274
08:15	137	18	3	0	3	2	6	169	35	3	0	0	0	0	1	39	73	16	4	0	2	2	2	99	307
08:30	117	17	3	0	2	2	9	150	48	0	1	0	1	0	0	50	77	17	4	0	1	1	6	106	306
08:45	107	18	1	1	5	3	6	141	36	1	0	0	1	0	0	38	66	15	2	0	5	2	5	95	274
1 Hr	495	68	11	1	18	8	28	629	137	5	1	0	3	1	1	148	286	54	13	0	12	5	14	384	1161
09:00	130	27	1	2	3	2	3	168	24	3	0	0	0	0	0	27	59	10	0	0	4	1	0	74	269
09:15	124	18	2	0	4	0	0	148	28	3	1	0	0	0	2	34	49	9	2	1	1	0	0	62	244
09:30	143	16	2	0	4	1	2	168	26	1	0	0	1	0	0	28	54	11	3	0	4	0	3	75	271
09:45	102	18	3	0	3	1	5	132	17	3	0	0	0	0	0	20	44	6	4	1	4	1	0	60	212
1 Hr	499	79	8	2	14	4	10	616	95	10	1	0	1	0	2	109	206	36	9	2	13	2	3	271	996
10:00	100	19	1	0	4	0	6	130	18	2	0	0	0	0	0	20	65	12	0	0	3	0	1	81	231
10:15	93	30	4	0	3	0	3	133	5	1	0	0	0	0	0	6	62	15	1	0	4	0	4	86	225
10:30	79	20	3	1	5	2	2	112	12	3	1	0	0	0	1	17	64	11	4	0	2	0	4	85	214
10:45	78	18	1	0	1	4	2	104	15	4	0	0	1	0	0	20	48	7	2	1	4	1	0	63	187
1 Hr	350	87	9	1	13	6	13	479	50	10	1	0	1	0	1	63	239	45	7	1	13	1	9	315	857
11:00	89	23	3	0	2	1	0	118	17	3	2	1	0	0	0	23	60	19	3	0	3	0	0	85	226
11:15	95	13	2	1	3	1	2	117	19	3	0	1	0	1	0	24	68	10	4	1	4	1	2	90	231
11:30	95	16	2	0	2	1	4	120	10	3	0	0	0	0	0	13	65	14	3	0	3	1	3	89	222
11:45	85	16	3	1	2	1	4	112	16	4	1	0	0	1	1	23	74	15	2	0	1	1	2	95	230
1 Hr	364	68	10	2	9	4	10	467	62	13	3	2	0	2	1	83	267	58	12	1	11	3	7	359	909
12:00	74	15	1	1	1	0	5	97	10	6	0	0	0	0	0	16	76	17	3	2	6	2	1	107	220
12:15	82	20	0	1	5	1	3	112	30	3	0	0	0	0	1	34	62	11	2	1	3	2	1	82	228
12:30	107	19	1	0	4	1	3	135	19	2	0	0	0	0	0	21	69	21	4	0	1	2	2	99	255
12:45	81	16	4	0	4	1	3	109	20	2	0	0	0	0	0	22	88	17	3	0	4	0	0	112	243
1 Hr	344	70	6	2	14	3	14	453	79	13	0	0	0	0	1	93	295	66	12	3	14	6	4	400	946
13:00	102	7	3	0	1	0	1	114	21	4	0	0	0	0	0	25	89	13	1	0	7	1	1	112	251
13:15	92	11	3	0	3	1	5	115	20	1	0	0	0	0	0	21	78	16	6	0	3	0	4	107	243
13:30	101	22	4	0	2	1	3	133	22	0	1	0	0	0	1	24	74	12	2	0	2	0	2	92	249
13:45	86	9	2	0	6	0	2	105	20	2	0	0	0	0	0	22	71	7	2	0	5	1	0	86	213
1 Hr	381	49	12	0	12	2	11	467	83	7	1	0	0	0	1	92	312	48	11	0	17	2	7	397	956
14:00	93	14	2	0	2	1	9	121	28	2	1	0	0	1	0	32	77	14	1	1	7	0	5	105	258
14:15	76	12	0	1	5	2	4	100	31	3	0	0	0	0	2	36	76	15	4	0	5	0	6	106	242
14:30	102	14	4	0	3	0	2	125	25	1	0	0	2	0	0	28	71	8	4	1	2	1	4	91	244
14:45	81	7	4	0	4	1	2	99	15	5	0	0	0	0	1	21	95	14	1	0	3	2	3	118	238
1 Hr	352	47	10	1	14	4	17	445	99	11	1	0	2	1	3	117	319	51	10	2	17	3	18	420	982
15:00	94	11	3	0	1	3	3	115	27	5	1	0	0	0	0	33	79	16	3	1	3	1	4	107	255
15:15	95	16	0	0	5	0	1	117	24	1	0	0	1	0	2	28	98	22	3	0	5	1	5	134	279
15:30	96	13	3	0	5	1	3	121	42	3	1	0	1	1	0	48	100	17	2	0	4	2	2	127	296
15:45	106	10	4	0	3	0	2	125	22	7	1	0	0	0	0	30	87	23	0	0	3	0	1	114	269
1 Hr	391	50	10	0	14	4	9	478	115	16	3	0	2	1	2	139	364	78	8	1	15	4	12	482	1099
16:00	102	16	3	0	4	2	3	130	21	1	0	0	0	0	1	23	106	18	2	0	4	1	7	138	291
16:15	66	10	1	0	2	1	9	89	19	2	0	0	0	0	0	21	85	15	1	0	5	3	11	120	230
16:30	87	13	1	0	3	1	4	109	34	5	0	0	0	0	1	40	108	19	1	0	2	2	5	137	286
16:45	106	11	1	0	4	1	5	128	31	4	0	0	0	1	3	39	83	14	0	0	1	3	3	104	271
1 Hr	361	50	6	0	13	5	21	456	105	12	0	0	0	1	5	123	382	66	4	0	12	9	26	499	1078
17:00	96	8	1	0	6	2	5	118	24	1	0	0	0	0	2	27	88	12	0	0	4	1	4	109	254
17:15	104	9	0	0	3	1	3	120	22	3	1	0	0	1	2	29	80	11	2	0	4	2	10	109	258
17:30	106	10	1	0	2	2	4	125	15	2	0	0	0	1	2	20	100	16	2	0	4	1	2	125	270
17:45	124	7	0	0	3	1	2	137	35	5	1	0	0	1	4	46	106	11	2	0	7	0	13	139	322
1 Hr	430	34	2	0	14	6	14	500	96	11	2	0	0	3	10	122	374	50	6	0	19	4	29	482	1104
18:00	117	13	0	0	5	1	3	139	23	1	0	0	0	0	3	27	90	10	1	0	3	3	5	112	278
18:15	126	7	0	0	3	1	4	141	23	1	0	0	0	0	0	24	84	15	1	0	4	3	6	113	278
18:30	110	12	0	0	4	1	2	129	27	2	1	0	0	0	0	30	87	7	1	0	6	0	4	105	264
18:45	106	7	2	0	1	1	5	122	17	2	0	0	0	2	3	24	76	9	0	0	2	1	6	94	240
1 Hr	459	39	2	0	13	4	14	531	90	6	1	0	0	2	6	105	337	41	3	0	15	7	21	424	1060
Total	4980	737	101	9	161	59	179	6226	1035	121	15	2	10	12	34	1229	3582	632	102	11	172	48	155	4702	12157

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 3 - R810 Emmet Road(ENE) / Bulfin Road / R810 Emmet Road(WSW)

Origin : Arm A R810 Emmet Road(ENE)

	Destination : Arm A R810 Emmet Road(ENE)								**Destination :** Arm B Bulfin Road								**Destination :** Arm C R810 Emmet Road(WSW)								
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Arm Totals
07:00	1	0	0	0	0	0	0	1	5	0	0	0	0	0	0	5	26	7	2	0	2	1	0	38	44
07:15	0	0	0	0	0	0	0	0	10	1	1	0	0	0	1	13	27	7	0	1	6	1	1	43	56
07:30	0	0	0	0	0	0	0	0	7	0	0	0	0	0	1	8	46	6	1	0	2	1	0	56	64
07:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**2**	**0**	**0**	**0**	**0**	**0**	**10**	**40**	**9**	**2**	**0**	**3**	**0**	**1**	**55**	**65**
08:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**3**	**0**	**0**	**1**	**0**	**0**	**8**	**45**	**6**	**3**	**0**	**3**	**1**	**1**	**59**	**67**
08:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**4**	**10**	**55**	**16**	**3**	**0**	**2**	**2**	**3**	**81**	**91**
08:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**3**	**0**	**0**	**0**	**0**	**0**	**10**	**50**	**11**	**4**	**0**	**1**	**1**	**6**	**73**	**83**
08:45	0	0	0	0	0	0	0	0	10	1	0	0	1	0	0	12	50	12	2	0	5	2	2	73	85
09:00	0	0	0	0	0	0	0	0	6	0	0	0	0	0	1	7	39	7	0	0	2	1	0	49	56
09:15	0	0	0	0	0	0	0	0	8	0	1	0	0	0	0	9	40	9	3	1	1	0	3	57	66
09:30	0	0	0	0	0	0	0	0	7	1	0	0	0	1	0	9	34	11	0	0	4	0	2	51	60
09:45	0	0	0	0	0	0	0	0	9	4	0	0	0	0	0	13	36	7	4	1	5	1	1	55	68
10:00	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	38	9	0	0	1	0	1	49	54
10:15	0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	11	46	10	1	0	5	0	2	64	75
10:30	0	0	0	0	0	0	0	0	9	1	0	0	0	0	1	11	40	9	3	0	1	0	4	57	68
10:45	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	37	7	0	1	3	0	0	48	52
11:00	0	0	0	0	0	0	0	0	5	2	0	0	0	0	1	8	42	15	3	1	4	0	0	65	73
11:15	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	5	53	11	4	1	3	0	1	73	78
11:30	0	0	0	0	0	0	0	0	8	3	0	0	0	0	0	11	44	13	1	0	3	1	1	63	74
11:45	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9	50	15	3	0	2	0	2	72	81
12:00	0	0	0	0	0	0	0	0	5	3	0	0	0	0	0	8	59	13	3	2	5	1	0	83	91
12:15	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	53	9	2	0	3	1	1	69	74
12:30	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10	47	13	5	0	1	1	1	68	78
12:45	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	61	10	2	0	3	0	0	76	82
13:00	0	0	0	0	0	0	0	0	14	2	0	0	0	0	0	16	66	13	0	0	5	1	1	86	102
13:15	0	0	0	0	0	0	0	0	13	2	0	0	0	0	0	15	52	12	5	0	4	0	4	77	92
13:30	0	0	0	0	0	0	0	0	7	3	0	0	0	0	0	10	54	10	1	0	3	0	1	69	79
13:45	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10	58	10	1	0	3	1	1	74	84
14:00	0	0	0	0	0	0	0	0	8	3	0	0	0	0	2	13	63	11	0	1	5	0	2	82	95
14:15	0	0	0	0	0	0	0	0	7	0	1	0	0	0	0	8	59	12	4	0	5	0	3	83	91
14:30	0	0	0	0	0	0	0	0	11	1	0	0	0	1	1	14	51	6	3	1	3	1	1	66	80
14:45	0	0	0	0	0	0	0	0	6	0	0	0	0	1	0	7	63	16	1	0	4	2	3	89	96
15:00	0	0	0	0	0	0	0	0	10	2	0	0	0	0	0	12	59	9	3	1	1	0	2	75	87
15:15	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**1**	**1**	**0**	**0**	**0**	**0**	**7**	**77**	**18**	**3**	**0**	**7**	**0**	**3**	**108**	**116**
15:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**1**	**0**	**0**	**0**	**0**	**0**	**12**	**67**	**12**	**2**	**0**	**1**	**2**	**1**	**85**	**97**
15:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**2**	**0**	**0**	**0**	**0**	**0**	**12**	**57**	**17**	**1**	**0**	**3**	**0**	**0**	**78**	**90**
16:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**6**	**72**	**15**	**1**	**0**	**3**	**1**	**3**	**95**	**101**
16:15	0	0	0	0	0	0	0	0	6	0	0	0	0	0	2	8	44	8	0	0	5	3	5	65	73
16:30	0	0	0	0	0	0	0	0	12	1	0	0	0	0	1	14	60	14	1	0	2	2	3	82	96
16:45	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9	62	12	1	0	1	4	1	81	90
17:00	0	0	0	0	0	0	0	0	11	1	0	0	0	0	0	12	54	9	0	0	5	1	2	71	83
17:15	0	0	0	0	0	0	0	0	7	2	1	0	0	0	0	10	46	5	2	0	3	2	4	62	72
17:30	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8	80	13	2	0	3	1	2	101	109
17:45	0	0	0	0	0	0	0	0	7	0	0	0	0	0	1	8	72	9	1	0	7	0	6	95	103
18:00	0	0	0	0	0	0	0	0	8	2	0	0	0	0	1	11	65	9	0	0	3	3	6	86	97
18:15	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11	58	9	1	0	3	2	5	78	89
18:30	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12	58	4	2	0	6	0	2	72	84
18:45	0	0	0	0	0	0	0	0	11	1	1	0	0	0	0	13	44	5	0	0	2	1	5	57	70
Total	2	0	0	0	0	0	0	2	379	58	6	0	2	3	17	465	2499	500	86	11	157	42	99	3394	#REF!

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 3 - R810 Emmet Road(ENE) / Bulfin Road / R810 Emmet Road(WSW)

Origin : Arm B Bulfin Road

	Destination : Arm A R810 Emmet Road(ENE)								**Destination :** Arm B Bulfin Road								**Destination :** Arm C R810 Emmet Road(WSW)								Arm
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Totals
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12	12
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	4	1	0	0	0	0	17	17
07:30	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	15	2	0	0	1	0	0	18	19
07:45	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**26**	**4**	**1**	**0**	**0**	**0**	**1**	**32**	**34**
08:00	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**32**	**2**	**0**	**0**	**2**	**1**	**0**	**37**	**41**
08:15	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**39**	**0**	**1**	**0**	**0**	**0**	**1**	**41**	**43**
08:30	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**47**	**4**	**1**	**0**	**1**	**0**	**0**	**53**	**55**
08:45	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	24	5	0	0	1	0	3	33	35
09:00	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	29	3	0	0	1	0	1	34	37
09:15	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	20	4	0	0	0	0	0	24	29
09:30	3	2	0	0	0	0	0	5	0	0	0	0	0	0	0	0	26	0	0	0	1	0	0	27	32
09:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	14	0	0	0	0	0	0	14	15
10:00	4	3	0	0	0	0	0	7	0	0	0	0	0	0	0	0	28	6	0	0	1	0	0	35	42
10:15	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	19	4	0	0	0	0	2	25	28
10:30	4	2	0	0	0	0	0	6	0	0	0	0	0	0	0	0	23	5	1	0	0	0	0	29	35
10:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	19	3	2	0	2	1	0	27	28
11:00	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	24	5	1	0	0	0	0	30	32
11:15	0	1	0	0	0	0	2	3	0	0	0	0	0	0	0	0	20	2	0	0	0	0	1	23	26
11:30	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	24	0	1	0	0	0	0	25	28
11:45	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	25	4	0	0	0	2	1	32	34
12:00	1	3	0	0	0	0	0	4	0	0	0	0	0	1	0	1	21	4	1	0	1	1	0	28	33
12:15	0	2	1	0	0	0	0	3	0	0	0	0	0	0	0	0	21	6	0	1	0	1	0	29	32
12:30	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	29	7	0	0	0	1	1	38	40
12:45	1	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0	27	7	0	0	0	0	0	34	37
13:00	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	32	3	0	0	2	0	0	37	43
13:15	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	31	5	0	0	0	0	0	36	40
13:30	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	32	1	0	0	0	0	1	34	39
13:45	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	18	0	1	0	0	0	0	19	23
14:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	23	2	1	0	2	1	2	31	32
14:15	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	33	4	0	0	0	0	4	41	44
14:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	26	2	0	0	1	0	2	31	33
14:45	3	0	0	0	1	0	0	4	0	0	0	0	0	0	0	0	39	1	0	0	0	0	1	41	45
15:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	27	9	0	0	1	1	2	40	41
15:15	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**32**	**2**	**0**	**0**	**1**	**1**	**4**	**40**	**43**
15:30	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**49**	**10**	**1**	**0**	**1**	**1**	**0**	**62**	**66**
15:45	**9**	**1**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**31**	**6**	**0**	**0**	**0**	**0**	**2**	**39**	**49**
16:00	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**39**	**4**	**1**	**0**	**1**	**0**	**1**	**46**	**52**
16:15	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	44	5	1	0	0	0	6	56	58
16:30	2	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0	57	6	0	0	0	0	5	68	71
16:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	34	3	0	0	0	0	3	40	41
17:00	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0	35	5	0	0	0	0	2	42	51
17:15	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	40	5	0	0	1	0	5	51	56
17:30	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	29	5	0	0	0	2	2	38	42
17:45	3	0	0	0	0	0	2	5	0	0	0	0	0	0	0	0	36	4	1	0	0	0	7	48	53
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	2	0	0	0	0	2	37	37
18:15	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	30	5	1	0	1	1	0	38	42
18:30	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	35	1	0	0	0	0	2	38	43
18:45	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	33	3	0	0	0	0	1	37	41
Total	128	25	3	0	1	0	4	161	0	0	0	0	0	1	0	1	1394	174	17	1	22	14	65	1687	#REF!

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 3 - R810 Emmet Road(ENE) / Bulfin Road / R810 Emmet Road(WSW)

Origin : Arm C R810 Emmet Road(WSW)

	Destination : Arm A R810 Emmet Road(ENE)								**Destination :** Arm B Bulfin Road								**Destination :** Arm C R810 Emmet Road(WSW)								Arm
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Totals
07:00	95	16	4	0	2	1	0	118	46	6	1	0	1	0	1	55	0	0	0	0	0	0	0	0	173
07:15	92	22	3	0	2	4	2	125	54	4	1	0	1	0	4	64	0	0	0	0	0	0	0	0	189
07:30	85	23	1	0	4	1	2	116	53	6	0	0	0	0	1	60	0	0	0	0	0	0	0	0	176
07:45	**67**	**12**	**5**	**0**	**2**	**2**	**2**	**90**	**60**	**8**	**0**	**0**	**1**	**1**	**3**	**73**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**163**
08:00	**85**	**6**	**3**	**0**	**6**	**1**	**4**	**105**	**52**	**9**	**1**	**0**	**2**	**0**	**3**	**67**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**172**
08:15	**73**	**9**	**2**	**0**	**2**	**0**	**4**	**90**	**64**	**7**	**1**	**0**	**1**	**2**	**6**	**81**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**171**
08:30	**63**	**15**	**1**	**0**	**2**	**2**	**2**	**85**	**50**	**2**	**1**	**0**	**0**	**0**	**7**	**60**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**145**
08:45	58	16	1	1	4	0	3	83	49	4	0	0	1	3	3	60	0	0	0	0	0	0	0	0	143
09:00	82	17	2	2	3	1	1	108	49	9	0	0	0	1	2	61	0	0	0	0	0	0	0	0	169
09:15	73	13	2	0	4	0	0	92	54	4	0	0	0	0	1	59	0	0	0	0	0	0	0	0	151
09:30	78	9	1	0	3	1	1	93	62	6	1	0	1	0	1	71	1	0	0	0	0	0	0	1	165
09:45	65	11	2	0	3	1	3	85	41	8	0	0	0	0	1	50	0	0	0	0	0	0	0	0	135
10:00	54	11	0	0	3	0	5	73	43	10	2	0	1	0	1	57	0	0	0	0	0	0	1	1	131
10:15	59	18	1	0	3	0	1	82	40	6	2	0	0	0	1	49	0	0	0	0	0	0	0	0	131
10:30	52	17	3	1	4	0	1	78	23	7	0	0	1	2	1	34	0	0	0	0	0	0	0	0	112
10:45	44	10	1	0	1	1	0	57	33	7	1	0	0	2	1	44	0	0	0	0	0	0	0	0	101
11:00	63	16	3	0	2	1	1	86	32	9	0	0	0	1	0	42	0	0	0	0	0	0	0	0	128
11:15	48	4	2	0	3	1	0	58	39	9	0	1	0	0	2	51	0	0	0	0	0	0	0	0	109
11:30	62	8	1	0	1	1	3	76	35	7	1	0	1	0	0	44	0	0	0	0	0	0	0	0	120
11:45	50	11	2	1	2	1	4	71	32	5	0	0	0	0	0	37	0	0	0	0	0	0	0	0	108
12:00	41	9	2	1	1	0	7	61	37	6	0	0	0	0	1	44	0	0	0	0	0	0	0	0	105
12:15	47	16	0	0	5	1	1	70	33	6	0	0	0	0	0	39	0	0	0	0	0	0	0	0	109
12:30	62	15	0	1	3	1	2	84	38	5	1	0	1	0	1	46	0	0	0	0	0	0	0	0	130
12:45	50	9	2	0	3	1	4	69	36	9	2	0	0	0	0	47	0	0	0	0	0	0	0	0	116
13:00	54	5	2	0	2	0	3	66	42	3	0	0	0	0	0	45	0	0	0	0	0	0	0	0	111
13:15	63	5	1	0	3	1	2	75	36	6	1	0	0	0	3	46	2	0	0	0	0	0	0	2	123
13:30	54	14	2	0	2	1	2	75	47	6	0	0	0	0	0	53	0	0	0	0	0	0	0	0	128
13:45	49	10	2	0	4	0	0	65	40	2	1	0	2	0	1	46	0	0	0	0	0	0	0	0	111
14:00	54	8	2	0	1	1	5	71	39	5	1	0	0	0	2	47	0	0	0	0	0	0	0	0	118
14:15	42	6	0	1	6	0	2	57	36	4	0	0	0	2	1	43	1	0	0	0	0	0	0	1	101
14:30	47	11	2	0	1	0	2	63	51	4	2	0	2	0	0	59	1	0	0	0	0	0	0	1	123
14:45	49	4	3	0	3	1	1	61	37	4	1	0	1	0	0	43	0	0	0	0	0	0	0	0	104
15:00	51	7	2	0	1	3	1	65	41	4	1	0	0	0	2	48	1	1	0	0	0	0	0	2	115
15:15	**54**	**12**	**0**	**0**	**4**	**0**	**1**	**71**	**40**	**4**	**0**	**0**	**1**	**0**	**0**	**45**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**116**
15:30	**56**	**10**	**4**	**0**	**3**	**1**	**2**	**76**	**39**	**3**	**0**	**0**	**2**	**0**	**1**	**45**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**121**
15:45	**54**	**3**	**4**	**0**	**2**	**0**	**0**	**63**	**50**	**4**	**0**	**0**	**1**	**0**	**3**	**58**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**121**
16:00	**54**	**10**	**1**	**0**	**4**	**3**	**3**	**75**	**47**	**6**	**2**	**0**	**0**	**0**	**1**	**56**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**131**
16:15	39	7	1	0	2	1	5	55	29	5	0	0	0	0	4	38	0	1	0	0	0	0	0	1	94
16:30	51	4	0	0	2	1	2	60	38	8	0	0	1	0	1	48	0	0	0	0	0	0	0	0	108
16:45	52	9	1	0	4	0	3	69	56	2	0	0	0	1	3	62	0	0	0	0	0	0	0	0	131
17:00	51	3	1	0	5	0	3	63	48	3	0	0	1	2	1	55	0	0	0	0	0	0	0	0	118
17:15	53	6	0	0	3	0	3	65	47	2	0	0	0	0	3	52	0	0	0	0	0	0	0	0	117
17:30	55	8	1	0	2	1	3	70	53	1	0	0	0	1	2	57	0	0	0	0	0	0	0	0	127
17:45	68	4	0	0	3	1	2	78	57	5	0	0	0	0	0	62	0	0	0	0	0	0	0	0	140
18:00	70	6	0	0	3	1	2	82	52	6	0	0	1	0	0	59	0	0	0	0	0	0	0	0	141
18:15	81	2	0	0	4	1	2	90	42	4	0	0	0	0	3	49	0	0	0	0	0	0	0	0	139
18:30	72	8	0	0	2	1	2	85	45	2	0	0	1	0	0	48	0	0	0	0	0	0	0	0	133
18:45	58	4	1	0	2	0	2	67	43	3	1	0	0	1	2	50	0	0	0	0	0	0	0	0	117
Total	2879	479	74	8	136	40	106	3722	2110	255	25	1	25	19	74	2509	6	2	0	0	0	0	1	9	#REF!

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 3 - R810 Emmet Road(ENE) / Bulfin Road / R810 Emmet Road(WSW)

ORIGIN SUMMARY

	Origin : Arm A R810 Emmet Road(ENE)								Origin : Arm B Bulfin Road								Origin : Arm C R810 Emmet Road(WSW)								Origin Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	
07:00	32	7	2	0	2	1	0	44	12	0	0	0	0	0	0	12	141	22	5	0	3	1	1	173	229
07:15	37	8	1	1	6	1	2	56	12	4	1	0	0	0	0	17	146	26	4	0	3	4	6	189	262
07:30	53	6	1	0	2	1	1	64	15	2	1	0	1	0	0	19	138	29	1	0	4	1	3	176	259
07:45	48	11	2	0	3	0	1	65	28	4	1	0	0	0	1	34	127	20	5	0	3	3	5	163	262
1 Hr	170	32	6	1	13	3	4	229	67	10	3	0	1	0	1	82	552	97	15	0	13	9	15	701	1012
08:00	49	9	3	0	4	1	1	67	35	3	0	0	2	1	0	41	137	15	4	0	8	1	7	172	280
08:15	61	16	3	0	2	2	7	91	41	0	1	0	0	0	1	43	137	16	3	0	3	2	10	171	305
08:30	57	14	4	0	1	1	6	83	48	5	1	0	1	0	0	55	113	17	2	0	2	2	9	145	283
08:45	60	13	2	0	6	2	2	85	26	5	0	0	1	0	3	35	107	20	1	1	5	3	6	143	263
1 Hr	227	52	12	0	13	6	16	326	150	13	2	0	4	1	4	174	494	68	10	1	18	8	32	631	1131
09:00	45	7	0	0	2	1	1	56	32	3	0	0	1	0	1	37	131	26	2	2	3	2	3	169	262
09:15	48	9	4	1	1	0	3	66	25	4	0	0	0	0	0	29	127	17	2	0	4	0	1	151	246
09:30	41	12	0	0	4	1	2	60	29	2	0	0	1	0	0	32	141	15	2	0	4	1	2	165	257
09:45	45	11	4	1	5	1	1	68	15	0	0	0	0	0	0	15	106	19	2	0	3	1	4	135	218
1 Hr	179	39	8	2	12	3	7	250	101	9	0	0	2	0	1	113	505	77	8	2	14	4	10	620	983
10:00	43	9	0	0	1	0	1	54	32	9	0	0	1	0	0	42	97	21	2	0	4	0	7	131	227
10:15	56	11	1	0	5	0	2	75	22	4	0	0	0	0	2	28	99	24	3	0	3	0	2	131	234
10:30	49	10	3	0	1	0	5	68	27	7	1	0	0	0	0	35	75	24	3	1	5	2	2	112	215
10:45	40	8	0	1	3	0	0	52	20	3	2	0	2	1	0	28	77	17	2	0	1	3	1	101	181
1 Hr	188	38	4	1	10	0	8	249	101	23	3	0	3	1	2	133	348	86	10	1	13	5	12	475	857
11:00	47	17	3	1	4	0	1	73	26	5	1	0	0	0	0	32	95	25	3	0	2	2	1	128	233
11:15	56	13	4	1	3	0	1	78	20	3	0	0	0	0	3	26	87	13	2	1	3	1	2	109	213
11:30	52	16	1	0	3	1	1	74	26	1	1	0	0	0	0	28	97	15	2	0	2	1	3	120	222
11:45	58	16	3	0	2	0	2	81	27	4	0	0	0	2	1	34	82	16	2	1	2	1	4	108	223
1 Hr	213	62	11	2	12	1	5	306	99	13	2	0	0	2	4	120	361	69	9	2	9	5	10	465	891
12:00	64	16	3	2	5	1	0	91	22	7	1	0	1	2	0	33	78	15	2	1	1	0	8	105	229
12:15	57	10	2	0	3	1	1	74	21	8	1	1	0	1	0	32	80	22	0	0	5	1	1	109	215
12:30	56	14	5	0	1	1	1	78	30	8	0	0	0	1	1	40	100	20	1	1	4	1	3	130	248
12:45	67	10	2	0	3	0	0	82	28	9	0	0	0	0	0	37	86	18	4	0	3	1	4	116	235
1 Hr	244	50	12	2	12	3	2	325	101	32	2	1	1	4	1	142	344	75	7	2	13	3	16	460	927
13:00	80	15	0	0	5	1	1	102	38	3	0	0	2	0	0	43	96	8	2	0	2	0	3	111	256
13:15	65	14	5	0	4	0	4	92	35	5	0	0	0	0	0	40	101	11	2	0	3	1	5	123	255
13:30	61	13	1	0	3	0	1	79	36	2	0	0	0	0	1	39	101	20	2	0	2	1	2	128	246
13:45	68	10	1	0	3	1	1	84	21	1	1	0	0	0	0	23	89	12	3	0	6	0	1	111	218
1 Hr	274	52	7	0	15	2	7	357	130	11	1	0	2	0	1	145	387	51	9	0	13	2	11	473	975
14:00	71	14	0	1	5	0	4	95	24	2	1	0	2	1	2	32	93	13	3	0	1	1	7	118	245
14:15	66	12	5	0	5	0	3	91	36	4	0	0	0	0	4	44	79	10	0	1	6	2	3	101	236
14:30	62	7	3	1	3	2	2	80	28	2	0	0	1	0	2	33	99	15	4	0	3	0	2	123	236
14:45	69	16	1	0	4	3	3	96	42	1	0	0	1	0	1	45	86	8	4	0	4	1	1	104	245
1 Hr	268	49	9	2	17	5	12	362	130	9	1	0	4	1	9	154	357	46	11	1	14	4	13	446	962
15:00	69	11	3	1	1	0	2	87	28	9	0	0	1	1	2	41	93	12	3	0	1	3	3	115	243
15:15	83	19	4	0	7	0	3	116	35	2	0	0	1	1	4	43	94	16	0	0	5	0	1	116	275
15:30	78	13	2	0	1	2	1	97	53	10	1	0	1	1	0	66	95	13	4	0	5	1	3	121	284
15:45	67	19	1	0	3	0	0	90	40	7	0	0	0	0	2	49	104	7	4	0	3	0	3	121	260
1 Hr	297	62	10	1	12	2	6	390	156	28	1	0	3	3	8	199	386	48	11	0	14	4	10	473	1062
16:00	77	16	1	0	3	1	3	101	45	4	1	0	1	0	1	52	101	16	3	0	4	3	4	131	284
16:15	50	8	0	0	5	3	7	73	46	5	1	0	0	0	6	58	68	13	1	0	2	1	9	94	225
16:30	72	15	1	0	2	2	4	96	59	6	1	0	0	0	5	71	89	12	0	0	3	1	3	108	275
16:45	70	13	1	0	1	4	1	90	35	3	0	0	0	0	3	41	108	11	1	0	4	1	6	131	262
1 Hr	269	52	3	0	11	10	15	360	185	18	3	0	1	0	15	222	366	52	5	0	13	6	22	464	1046
17:00	65	10	0	0	5	1	2	83	43	6	0	0	0	0	2	51	99	6	1	0	6	2	4	118	252
17:15	53	7	3	0	3	2	4	72	45	5	0	0	1	0	5	56	100	8	0	0	3	0	6	117	245
17:30	87	14	2	0	3	1	2	109	33	5	0	0	0	2	2	42	108	9	1	0	2	2	5	127	278
17:45	79	9	1	0	7	0	7	103	39	4	1	0	0	0	9	53	125	9	0	0	3	1	2	140	296
1 Hr	284	40	6	0	18	4	15	367	160	20	1	0	1	2	18	202	432	32	2	0	14	5	17	502	1071
18:00	73	11	0	0	3	3	7	97	33	2	0	0	0	0	2	37	122	12	0	0	4	1	2	141	275
18:15	69	9	1	0	3	2	5	89	34	5	1	0	1	1	0	42	123	6	0	0	4	1	5	139	270
18:30	70	4	2	0	6	0	2	84	39	2	0	0	0	0	2	43	117	10	0	0	3	1	2	133	260
18:45	55	6	1	0	2	1	5	70	36	4	0	0	0	0	1	41	101	7	2	0	2	1	4	117	228
1 Hr	267	30	4	0	14	6	19	340	142	13	1	0	1	1	5	163	463	35	2	0	13	4	13	530	1033
Total	2880	558	92	11	159	45	116	3861	1522	199	20	1	23	15	69	1849	4995	736	99	9	161	59	181	6240	11950

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 3 - R810 Emmet Road(ENE) / Bulfin Road / R810 Emmet Road(WSW)

DESTINATION SUMMARY

	Destination : Arm A R810 Emmet Road(ENE)								**Destination :** Arm B Bulfin Road								**Destination :** Arm C R810 Emmet Road(WSW)								Dest
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Totals
07:00	96	16	4	0	2	1	0	119	51	6	1	0	1	0	1	60	38	7	2	0	2	1	0	50	229
07:15	92	22	3	0	2	4	2	125	64	5	2	0	1	0	5	77	39	11	1	1	6	1	1	60	262
07:30	85	23	2	0	4	1	2	117	60	6	0	0	0	0	2	68	61	8	1	0	3	1	0	74	259
07:45	69	12	5	0	2	2	2	92	68	10	0	0	1	1	3	83	66	13	3	0	3	0	2	87	262
1 Hr	342	73	14	0	10	8	6	453	243	27	3	0	3	1	11	288	204	39	7	1	14	3	3	271	1012
08:00	88	7	3	0	6	1	4	109	56	12	1	0	3	0	3	75	77	8	3	0	5	2	1	96	280
08:15	75	9	2	0	2	0	4	92	70	7	1	0	1	2	10	91	94	16	4	0	2	2	4	122	305
08:30	64	16	1	0	2	2	2	87	57	5	1	0	0	0	7	70	97	15	5	0	2	1	6	126	283
08:45	60	16	1	1	4	0	3	85	59	5	0	0	2	3	3	72	74	17	2	0	6	2	5	106	263
1 Hr	287	48	7	1	14	3	13	373	242	29	3	0	6	5	23	308	342	56	14	0	15	7	16	450	1131
09:00	85	17	2	2	3	1	1	111	55	9	0	0	0	1	3	68	68	10	0	0	3	1	1	83	262
09:15	78	13	2	0	4	0	0	97	62	4	1	0	0	0	1	68	60	13	3	1	1	0	3	81	246
09:30	81	11	1	0	3	1	1	98	69	7	1	0	1	1	1	80	61	11	0	0	5	0	2	79	257
09:45	66	11	2	0	3	1	3	86	50	12	0	0	0	0	1	63	50	7	4	1	5	1	1	69	218
1 Hr	310	52	7	2	13	3	5	392	236	32	2	0	1	2	6	279	239	41	7	2	14	2	7	312	983
10:00	58	14	0	0	3	0	5	80	48	10	2	0	1	0	1	62	66	15	0	0	2	0	2	85	227
10:15	62	18	1	0	3	0	1	85	50	7	2	0	0	0	1	60	65	14	1	0	5	0	4	89	234
10:30	56	19	3	1	4	0	1	84	32	8	0	0	1	2	2	45	63	14	4	0	1	0	4	86	215
10:45	45	10	1	0	1	1	0	58	36	8	1	0	0	2	1	48	56	10	2	1	5	1	0	75	181
1 Hr	221	61	5	1	11	1	7	307	166	33	5	0	2	4	5	215	250	53	7	1	13	1	10	335	857
11:00	65	16	3	0	2	1	1	88	37	11	0	0	0	1	1	50	66	20	4	1	4	0	0	95	233
11:15	48	5	2	0	3	1	2	61	42	11	0	1	0	0	2	56	73	13	4	1	3	0	2	96	213
11:30	64	9	1	0	1	1	3	79	43	10	1	0	1	0	0	55	68	13	2	0	3	1	1	88	222
11:45	52	11	2	1	2	1	4	73	40	6	0	0	0	0	0	46	75	19	3	0	2	2	3	104	223
1 Hr	229	41	8	1	8	4	10	301	162	38	1	1	1	1	3	207	282	65	13	2	12	3	6	383	891
12:00	42	12	2	1	1	0	7	65	42	9	0	0	0	1	1	53	80	17	4	2	6	2	0	111	229
12:15	47	18	1	0	5	1	1	73	37	7	0	0	0	0	0	44	74	15	2	1	3	2	1	98	215
12:30	63	16	0	1	3	1	2	86	47	6	1	0	1	0	1	56	76	20	5	0	1	2	2	106	248
12:45	51	11	2	0	3	1	4	72	42	9	2	0	0	0	0	53	88	17	2	0	3	0	0	110	235
1 Hr	203	57	5	2	12	3	14	296	168	31	3	0	1	1	2	206	318	69	13	3	13	6	3	425	927
13:00	60	5	2	0	2	0	3	72	56	5	0	0	0	0	0	61	98	16	0	0	7	1	1	123	256
13:15	67	5	1	0	3	1	2	79	49	8	1	0	0	0	3	61	85	17	5	0	4	0	4	115	255
13:30	58	15	2	0	2	1	2	80	54	9	0	0	0	0	0	63	86	11	1	0	3	0	2	103	246
13:45	52	11	2	0	4	0	0	69	50	2	1	0	2	0	1	56	76	10	2	0	3	1	1	93	218
1 Hr	237	36	7	0	11	2	7	300	209	24	2	0	2	0	4	241	345	54	8	0	17	2	8	434	975
14:00	55	8	2	0	1	1	5	72	47	8	1	0	0	0	4	60	86	13	1	1	7	1	4	113	245
14:15	45	6	0	1	6	0	2	60	43	4	1	0	0	2	1	51	93	16	4	0	5	0	7	125	236
14:30	49	11	2	0	1	0	2	65	62	5	2	0	2	1	1	73	78	8	3	1	4	1	3	98	236
14:45	52	4	3	0	4	1	1	65	43	4	1	0	1	1	0	50	102	17	1	0	4	2	4	130	245
1 Hr	201	29	7	1	12	2	10	262	195	21	5	0	3	4	6	234	359	54	9	2	20	4	18	466	962
15:00	52	7	2	0	1	3	1	66	51	6	1	0	0	0	2	60	87	19	3	1	2	1	4	117	243
15:15	58	12	0	0	4	0	1	75	45	5	1	0	1	0	0	52	109	20	3	0	8	1	7	148	275
15:30	60	10	4	0	3	1	2	80	50	4	0	0	2	0	1	57	116	22	3	0	2	3	1	147	284
15:45	63	4	4	0	2	0	0	73	60	6	0	0	1	0	3	70	88	23	1	0	3	0	2	117	260
1 Hr	233	33	10	0	10	4	4	294	206	21	2	0	4	0	6	239	400	84	10	1	15	5	14	529	1062
16:00	60	10	1	0	4	3	3	81	52	7	2	0	0	0	1	62	111	19	2	0	4	1	4	141	284
16:15	41	7	1	0	2	1	5	57	35	5	0	0	0	0	6	46	88	14	1	0	5	3	11	122	225
16:30	53	4	1	0	2	1	2	63	50	9	0	0	1	0	2	62	117	20	1	0	2	2	8	150	275
16:45	53	9	1	0	4	0	3	70	64	3	0	0	0	1	3	71	96	15	1	0	1	4	4	121	262
1 Hr	207	30	4	0	12	5	13	271	201	24	2	0	1	1	12	241	412	68	5	0	12	10	27	534	1046
17:00	59	4	1	0	5	0	3	72	59	4	0	0	1	2	1	67	89	14	0	0	5	1	4	113	252
17:15	58	6	0	0	3	0	3	70	54	4	1	0	0	0	3	62	86	10	2	0	4	2	9	113	245
17:30	59	8	1	0	2	1	3	74	60	2	0	0	0	1	2	65	109	18	2	0	3	3	4	139	278
17:45	71	4	0	0	3	1	4	83	64	5	0	0	0	0	1	70	108	13	2	0	7	0	13	143	296
1 Hr	247	22	2	0	13	2	13	299	237	15	1	0	1	3	7	264	392	55	6	0	19	6	30	508	1071
18:00	70	6	0	0	3	1	2	82	60	8	0	0	1	0	1	70	98	11	0	0	3	3	8	123	275
18:15	85	2	0	0	4	1	2	94	53	4	0	0	0	0	3	60	88	14	2	0	4	3	5	116	270
18:30	76	9	0	0	2	1	2	90	57	2	0	0	1	0	0	60	93	5	2	0	6	0	4	110	260
18:45	61	5	1	0	2	0	2	71	54	4	2	0	0	1	2	63	77	8	0	0	2	1	6	94	228
1 Hr	292	22	1	0	11	3	8	337	224	18	2	0	2	1	6	253	356	38	4	0	15	7	23	443	1033
Total	3009	504	77	8	137	40	110	3885	2489	313	31	1	27	23	91	2975	3899	676	103	12	179	56	165	5090	11950

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 4 - Turvey Avenue / R810 Emmet Road(E) / Luby Road / R810 Emmet Road(W)

Origin : Arm A Turvey Avenue

	Destination : Arm A Turvey Avenue							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
08:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
08:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
08:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
08:45	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0
15:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
15:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
15:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0

	Destination : Arm B R810 Emmet Road(E)							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	1	0	0	0	0	0	0	1
07:15	1	0	0	0	0	0	1	2
07:30	4	1	0	0	0	0	0	5
07:45	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
08:00	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
08:15	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**4**
08:30	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**3**
08:45	2	0	0	0	0	0	1	3
09:00	1	0	0	0	0	0	0	1
09:15	0	0	0	0	0	0	0	0
09:30	3	1	1	0	0	0	0	5
09:45	1	0	0	0	0	0	0	1
10:00	0	0	0	0	0	0	1	1
10:15	1	0	1	0	0	0	0	2
10:30	4	0	0	0	0	0	1	5
10:45	4	0	0	0	0	0	0	4
11:00	0	0	0	0	0	0	0	0
11:15	2	0	0	0	0	0	0	2
11:30	1	1	0	0	0	0	0	2
11:45	1	0	0	0	0	0	2	3
12:00	3	0	0	0	0	0	0	3
12:15	1	2	0	0	0	0	1	4
12:30	2	0	0	0	0	0	1	3
12:45	3	0	0	0	0	1	0	4
13:00	2	1	0	0	0	0	1	4
13:15	0	1	0	0	0	0	0	1
13:30	3	0	0	0	0	0	0	3
13:45	0	0	0	0	0	0	0	0
14:00	1	1	0	0	0	0	1	3
14:15	3	0	0	0	0	0	0	3
14:30	0	0	0	0	0	0	0	0
14:45	4	0	0	0	0	0	0	4
15:00	1	0	0	0	0	0	1	2
15:15	**3**	**1**	**1**	**0**	**0**	**0**	**0**	**5**
15:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
15:45	**2**	**0**	**0**	**0**	**0**	**0**	**3**	**5**
16:00	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
16:15	1	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0
16:45	1	0	0	0	0	0	1	2
17:00	2	1	0	0	0	0	1	4
17:15	3	1	0	0	0	0	0	4
17:30	0	0	0	0	0	0	1	1
17:45	2	0	0	0	0	0	0	2
18:00	0	1	0	0	0	0	0	1
18:15	2	0	0	0	0	0	0	2
18:30	2	0	0	0	0	0	0	2
18:45	3	0	0	0	0	0	0	3
Total	81	12	3	0	0	2	18	116

	Destination : Arm C Luby Road							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
08:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
08:15	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
08:30	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
08:45	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0
12:45	0	2	0	0	0	0	0	2
13:00	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0
15:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
15:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
15:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0
Total	0	2	0	0	0	0	2	4

	Destination : Arm D R810 Emmet Road(W)							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	5	0	0	0	0	0	0	5
07:15	1	0	0	0	0	0	0	1
07:30	2	0	0	0	0	1	0	3
07:45	**3**	**0**	**1**	**0**	**0**	**0**	**0**	**4**
08:00	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**4**
08:15	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
08:30	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
08:45	3	0	0	0	0	0	0	3
09:00	4	0	0	0	0	0	0	4
09:15	3	0	1	0	0	0	0	4
09:30	2	0	0	0	0	0	0	2
09:45	2	1	0	0	0	0	0	3
10:00	1	0	0	0	0	0	0	1
10:15	1	0	0	0	0	0	0	1
10:30	1	0	0	0	0	0	0	1
10:45	1	0	0	0	0	0	0	1
11:00	1	0	0	0	0	0	0	1
11:15	1	0	0	0	0	0	0	1
11:30	1	2	0	0	0	0	0	3
11:45	3	0	0	0	0	0	0	3
12:00	0	0	0	0	0	0	0	0
12:15	2	0	0	0	0	0	0	2
12:30	2	0	0	0	0	0	0	2
12:45	3	0	0	0	0	0	0	3
13:00	3	0	0	0	0	0	0	3
13:15	1	0	0	0	0	0	0	1
13:30	0	0	0	0	0	0	0	0
13:45	4	0	0	0	0	1	0	5
14:00	2	0	0	0	0	0	0	2
14:15	1	0	0	0	0	0	0	1
14:30	1	0	0	0	0	0	0	1
14:45	1	0	0	0	0	0	0	1
15:00	1	1	0	0	0	0	0	2
15:15	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
15:30	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
15:45	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
16:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:15	0	0	0	0	0	0	0	0
16:30	4	0	0	0	0	1	0	5
16:45	1	0	0	0	0	0	0	1
17:00	1	0	0	0	0	0	0	1
17:15	4	0	0	0	0	0	0	4
17:30	0	0	0	0	0	0	0	0
17:45	1	0	0	0	0	0	0	1
18:00	1	0	0	0	0	0	0	1
18:15	1	0	0	0	0	0	0	1
18:30	5	0	0	0	0	0	0	5
18:45	0	1	0	0	0	0	1	2
Total	83	6	2	0	0	3	2	96

Arm Totals
6
3
8
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7
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6
5
4
7
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2
3
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TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 4 - Turvey Avenue / R810 Emmet Road(E) / Luby Road / R810 Emmet Road(W)

Origin : Arm B R810 Emmet Road(E)

	Destination : Arm A Turvey Avenue								**Destination :** Arm B R810 Emmet Road(E)								**Destination :** Arm C Luby Road								**Destination :** Arm D R810 Emmet Road(W)								Arm
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Totals
07:00	0	0	0	0	0	0	1	1	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	21	8	2	0	2	1	1	35	39
07:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	31	6	1	1	6	1	1	47	49
07:30	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	51	6	1	0	2	0	0	60	63
07:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**39**	**10**	**1**	**0**	**3**	**0**	**1**	**54**	**55**
08:00	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**48**	**5**	**3**	**0**	**4**	**1**	**0**	**61**	**66**
08:15	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**57**	**16**	**2**	**0**	**2**	**3**	**5**	**85**	**87**
08:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**53**	**11**	**4**	**0**	**1**	**1**	**4**	**74**	**78**
08:45	1	0	0	0	0	0	0	1	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	50	12	2	0	6	2	2	74	79
09:00	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	42	7	0	0	2	1	1	53	56
09:15	3	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	7	3	1	1	0	4	55	59
09:30	2	1	1	0	0	0	0	4	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	38	11	0	0	4	1	3	57	63
09:45	1	0	0	0	0	0	0	1	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	47	10	4	1	5	1	1	69	73
10:00	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	40	11	0	0	1	1	1	54	57
10:15	0	0	1	0	0	0	0	1	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	49	10	1	0	6	0	2	68	71
10:30	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	9	2	0	0	0	5	59	60
10:45	3	0	0	0	0	0	0	3	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	37	7	0	1	3	0	0	48	53
11:00	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	42	15	3	1	4	0	2	67	70
11:15	5	1	0	0	0	0	0	6	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	56	13	5	1	3	0	1	79	89
11:30	1	0	0	0	0	0	0	1	2	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0	47	13	1	0	3	1	1	66	71
11:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	49	15	2	0	2	0	1	69	70
12:00	3	0	0	0	0	0	0	3	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	66	15	3	2	5	1	0	92	100
12:15	0	1	0	0	0	0	1	2	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	49	10	3	0	3	1	1	67	71
12:30	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	47	12	4	0	1	1	1	66	70
12:45	2	0	0	0	0	0	1	3	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	70	11	2	0	3	0	0	86	94
13:00	2	0	0	0	0	0	0	2	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	64	13	1	0	5	1	1	85	91
13:15	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	57	14	4	0	4	0	3	82	85
13:30	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62	14	2	0	3	0	1	82	84
13:45	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	10	1	0	4	0	2	73	75
14:00	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	61	12	1	1	4	0	4	83	85
14:15	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	59	11	5	0	5	0	3	83	87
14:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	10	2	1	3	2	1	84	85
14:45	2	0	1	0	0	0	0	3	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	70	18	2	0	4	3	4	101	108
15:00	1	0	0	0	0	0	1	2	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	62	10	3	1	1	1	1	79	85
15:15	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**74**	**16**	**4**	**0**	**7**	**0**	**4**	**105**	**109**
15:30	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**77**	**14**	**1**	**0**	**1**	**3**	**1**	**97**	**100**
15:45	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**55**	**16**	**2**	**0**	**3**	**0**	**1**	**77**	**84**
16:00	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**75**	**16**	**0**	**0**	**3**	**1**	**5**	**100**	**101**
16:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	49	8	0	0	5	2	9	73	75
16:30	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	67	16	1	0	2	2	2	90	92
16:45	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	70	10	0	0	1	4	1	86	90
17:00	2	1	0	0	0	0	1	4	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	52	10	0	0	5	1	2	70	75
17:15	4	0	0	0	0	0	0	4	2	1	0	0	0	0	0	3	0	0	0	0	0	0	1	1	49	8	2	0	3	2	5	69	77
17:30	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	79	13	3	0	3	1	2	101	104
17:45	1	0	0	0	0	1	1	3	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	75	8	0	0	7	0	6	96	100
18:00	2	0	0	0	0	0	2	4	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	68	8	0	0	3	3	7	89	95
18:15	1	1	0	0	0	0	0	2	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	66	10	1	0	3	2	5	87	94
18:30	4	0	0	0	0	0	1	5	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	61	5	1	0	7	0	4	78	84
18:45	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	0	0	0	0	1	1	52	8	0	0	2	0	3	65	70
Total	68	5	4	0	0	1	13	91	93	10	2	0	0	0	0	105	0	0	0	0	0	0	2	2	2636	528	85	11	160	45	115	3580	#REF!

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 4 - Turvey Avenue / R810 Emmet Road(E) / Luby Road / R810 Emmet Road(W)

Origin :Arm C Luby Road

	Destination : Arm A Turvey Avenue								**Destination :** Arm B R810 Emmet Road(E)								**Destination :** Arm C Luby Road								**Destination :** Arm D R810 Emmet Road(W)								Arm
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Totals
07:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	8
07:30	0	0	0	0	0	0	0	0	5	1	1	0	0	0	0	7	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	8
07:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**1**	**0**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**13**
08:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**10**
08:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**1**	**0**	**0**	**0**	**0**	**2**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**15**
08:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**1**	**0**	**0**	**0**	**0**	**2**	**21**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**24**
08:45	0	0	0	0	0	0	0	0	9	2	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
09:00	0	0	0	0	0	0	0	0	5	2	0	0	0	0	1	8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	9
09:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2
09:30	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	6
09:45	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	4
10:00	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	6
10:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	3
10:30	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
10:45	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
11:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	4
11:15	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	4
11:30	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	6
11:45	2	0	0	0	0	0	0	2	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	14
12:00	1	1	0	0	0	0	0	2	4	2	0	0	0	0	0	6	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	12
12:15	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	7	10
12:30	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	11
12:45	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	6
13:00	0	0	0	0	0	0	0	0	11	2	0	0	0	0	0	13	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	5	18
13:15	1	0	0	0	0	0	0	1	3	1	0	0	0	0	1	5	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	9
13:30	1	0	0	0	0	0	0	1	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	10
13:45	1	0	0	0	0	0	0	1	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	5
14:00	1	0	0	0	0	0	0	1	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	12
14:15	1	0	0	0	0	0	0	1	8	1	0	0	0	0	1	10	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	3	14
14:30	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	4
14:45	2	0	0	0	0	0	0	2	12	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	16
15:00	1	0	0	0	0	0	0	1	6	3	0	0	0	0	0	9	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8	18
15:15	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**9**	**1**	**0**	**0**	**0**	**0**	**2**	**12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	**19**
15:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**2**	**0**	**0**	**0**	**0**	**1**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**13**
15:45	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**16**	**2**	**0**	**0**	**0**	**0**	**0**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**22**
16:00	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**17**	**1**	**0**	**0**	**0**	**0**	**0**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**21**
16:15	0	0	0	0	0	0	0	0	13	1	0	0	0	1	1	16	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	17
16:30	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	13
16:45	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	7
17:00	0	0	0	0	0	0	0	0	13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	21
17:15	1	0	0	0	0	0	0	1	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	16
17:30	1	0	0	0	0	0	0	1	12	0	0	0	1	0	0	13	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	16
17:45	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	14
18:00	1	0	0	0	0	0	1	2	11	2	0	0	0	1	0	14	0	0	0	0	0	0	0	0	3	2	1	0	0	0	0	6	22
18:15	1	0	0	0	0	0	0	1	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	13
18:30	2	1	0	0	0	0	0	3	14	0	0	0	1	0	0	15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	19
18:45	1	0	0	0	0	0	0	1	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	16
Total	22	2	0	0	0	0	1	25	354	32	1	0	3	2	12	404	0	0	0	0	0	0	0	0	101	17	2	0	0	0	1	121	#REF!

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 4 - Turvey Avenue / R810 Emmet Road(E) / Luby Road / R810 Emmet Road(W)

Origin :Arm D R810 Emmet Road(W)

	Destination : Arm A Turvey Avenue								**Destination :** Arm B R810 Emmet Road(E)								**Destination :** Arm C Luby Road								**Destination :** Arm D R810 Emmet Road(W)								Arm
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Totals
07:00	1	0	0	0	0	0	0	1	92	14	3	0	2	1	1	113	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	115
07:15	0	0	0	0	0	0	0	0	96	20	3	0	2	4	3	128	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	129
07:30	0	0	0	0	0	0	0	0	81	21	2	0	3	1	1	109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109
07:45	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**74**	**14**	**2**	**0**	**3**	**2**	**3**	**98**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**100**
08:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**87**	**7**	**2**	**0**	**6**	**1**	**6**	**109**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**109**
08:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**72**	**9**	**3**	**0**	**1**	**1**	**6**	**92**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**92**
08:30	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**65**	**15**	**2**	**0**	**3**	**2**	**2**	**89**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**90**
08:45	0	0	0	0	0	0	0	0	54	15	1	1	4	0	3	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78
09:00	2	0	0	0	0	0	0	2	83	18	1	2	2	1	1	108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110
09:15	0	1	0	0	0	0	0	1	76	13	2	0	5	0	1	97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98
09:30	1	0	0	0	0	0	0	1	84	11	1	0	3	1	1	101	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	103
09:45	1	0	0	0	0	0	0	1	63	13	2	0	2	1	3	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85
10:00	1	0	0	0	0	0	0	1	55	12	0	0	4	0	4	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76
10:15	0	0	0	0	0	0	0	0	60	20	1	0	3	0	2	86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86
10:30	2	0	0	0	0	0	0	2	52	18	3	1	4	0	2	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82
10:45	1	0	0	0	0	0	0	1	42	9	1	0	0	1	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54
11:00	0	1	0	0	0	0	0	1	62	14	3	0	2	1	1	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84
11:15	3	1	0	0	0	0	0	4	45	6	1	0	4	1	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61
11:30	2	1	0	0	0	0	0	3	61	7	1	0	1	1	3	74	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	78
11:45	2	0	0	0	0	0	0	2	48	10	2	1	2	1	4	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
12:00	1	0	0	0	0	0	0	1	42	12	2	1	1	0	7	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66
12:15	1	0	0	0	0	0	0	1	44	16	1	0	5	1	1	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
12:30	0	1	0	0	0	0	0	1	62	15	1	1	3	1	3	86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87
12:45	3	0	0	0	0	0	0	3	42	10	3	0	2	0	3	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
13:00	2	0	0	0	0	0	0	2	61	5	2	0	3	0	2	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
13:15	1	0	0	0	0	0	0	1	62	5	1	0	3	1	1	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74
13:30	1	0	0	0	0	0	0	1	58	13	2	0	2	1	3	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
13:45	2	0	0	0	0	0	0	2	47	12	2	0	4	0	0	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67
14:00	1	1	0	0	0	0	0	2	47	8	1	0	1	1	5	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65
14:15	0	0	0	0	0	0	0	0	44	5	0	1	6	0	2	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
14:30	3	0	0	0	0	0	0	3	54	11	1	0	1	0	3	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
14:45	2	0	0	0	0	0	0	2	48	5	3	0	4	2	1	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65
15:00	2	1	1	0	0	0	0	4	54	8	1	0	1	3	3	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74
15:15	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**57**	**11**	**0**	**0**	**4**	**0**	**1**	**73**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**75**
15:30	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**59**	**10**	**5**	**0**	**3**	**1**	**3**	**81**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**82**
15:45	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**60**	**5**	**3**	**0**	**2**	**0**	**1**	**71**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**72**
16:00	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**3**	**59**	**10**	**1**	**0**	**4**	**3**	**2**	**79**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**82**
16:15	0	0	0	0	0	0	0	0	39	6	1	0	2	1	6	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
16:30	2	0	0	0	0	0	0	2	52	4	0	0	2	1	2	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
16:45	3	0	0	0	0	0	0	3	50	9	1	0	4	1	3	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71
17:00	1	0	0	0	0	0	0	1	52	3	1	0	4	0	3	63	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	65
17:15	1	0	0	0	0	0	0	1	53	7	0	0	4	0	3	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68
17:30	3	0	0	0	0	0	0	3	56	6	2	0	0	1	3	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71
17:45	1	0	0	0	0	0	0	1	64	3	0	0	4	1	6	78	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	80
18:00	2	1	0	0	0	0	0	3	70	5	0	0	4	1	2	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85
18:15	1	0	0	0	0	0	0	1	78	3	0	0	4	1	2	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89
18:30	3	0	0	0	0	0	0	3	75	7	0	0	2	1	2	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90
18:45	1	1	0	0	0	0	0	2	59	5	0	0	2	0	5	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73
Total	58	10	2	0	0	1	2	73	2900	485	70	8	137	42	125	3767	1	0	0	0	0	0	0	1	4	1	0	0	0	0	0	5	#REF!

TRAFFIC DATA

Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 4 - Turvey Avenue / R810 Emmet Road(E) / Luby Road / R810 Emmet Road(W)

ORIGIN SUMMARY

	Origin : Arm A Turvey Avenue							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	6	0	0	0	0	0	0	6
07:15	2	0	0	0	0	0	1	3
07:30	6	1	0	0	0	1	0	8
07:45	5	0	1	0	0	0	0	6
1 Hr	19	1	1	0	0	1	1	23
08:00	6	1	0	0	0	0	0	7
08:15	4	0	0	0	0	0	2	6
08:30	3	0	0	0	0	1	2	6
08:45	5	0	0	0	0	0	1	6
1 Hr	18	1	0	0	0	1	5	25
09:00	5	0	0	0	0	0	0	5
09:15	3	0	1	0	0	0	0	4
09:30	5	1	1	0	0	0	0	7
09:45	3	1	0	0	0	0	0	4
1 Hr	16	2	2	0	0	0	0	20
10:00	1	0	0	0	0	0	1	2
10:15	2	0	1	0	0	0	0	3
10:30	5	0	0	0	0	0	1	6
10:45	5	0	0	0	0	0	0	5
1 Hr	13	0	1	0	0	0	2	16
11:00	1	0	0	0	0	0	0	1
11:15	3	0	0	0	0	0	0	3
11:30	2	3	0	0	0	0	0	5
11:45	4	0	0	0	0	0	2	6
1 Hr	10	3	0	0	0	0	2	15
12:00	3	0	0	0	0	0	0	3
12:15	3	2	0	0	0	0	1	6
12:30	4	0	0	0	0	0	1	5
12:45	6	2	0	0	0	1	0	9
1 Hr	16	4	0	0	0	1	2	23
13:00	5	1	0	0	0	0	1	7
13:15	1	1	0	0	0	0	0	2
13:30	3	0	0	0	0	0	0	3
13:45	4	0	0	0	0	1	0	5
1 Hr	13	2	0	0	0	1	1	17
14:00	3	1	0	0	0	0	1	5
14:15	4	0	0	0	0	0	0	4
14:30	1	0	0	0	0	0	0	1
14:45	5	0	0	0	0	0	0	5
1 Hr	13	1	0	0	0	0	1	15
15:00	2	1	0	0	0	0	1	4
15:15	4	1	1	0	0	0	0	6
15:30	2	0	0	0	0	0	0	2
15:45	3	0	0	0	0	0	3	6
1 Hr	11	2	1	0	0	0	4	18
16:00	1	0	0	0	0	0	0	1
16:15	1	0	0	0	0	0	0	1
16:30	4	0	0	0	0	1	0	5
16:45	2	0	0	0	0	0	1	3
1 Hr	8	0	0	0	0	1	1	10
17:00	3	1	0	0	0	0	1	5
17:15	7	1	0	0	0	0	0	8
17:30	0	0	0	0	0	0	1	1
17:45	3	0	0	0	0	0	0	3
1 Hr	13	2	0	0	0	0	2	17
18:00	1	1	0	0	0	0	0	2
18:15	3	0	0	0	0	0	0	3
18:30	7	0	0	0	0	0	0	7
18:45	3	1	0	0	0	0	1	5
1 Hr	14	2	0	0	0	0	1	17
Total	164	20	5	0	0	5	22	216

	Origin : Arm B R810 Emmet Road(E)							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	24	8	2	0	2	1	2	39
07:15	33	6	1	1	6	1	1	49
07:30	54	6	1	0	2	0	0	63
07:45	40	10	1	0	3	0	1	55
1 Hr	151	30	5	1	13	2	4	206
08:00	53	5	3	0	4	1	0	66
08:15	59	16	2	0	2	3	5	87
08:30	56	12	4	0	1	1	4	78
08:45	55	12	2	0	6	2	2	79
1 Hr	223	45	11	0	13	7	11	310
09:00	45	7	0	0	2	1	1	56
09:15	42	7	4	1	1	0	4	59
09:30	42	12	1	0	4	1	3	63
09:45	51	10	4	1	5	1	1	73
1 Hr	180	36	9	2	12	3	9	251
10:00	43	11	0	0	1	1	1	57
10:15	51	10	2	0	6	0	2	71
10:30	43	9	2	0	0	0	6	60
10:45	42	7	0	1	3	0	0	53
1 Hr	179	37	4	1	10	1	9	241
11:00	45	15	3	1	4	0	2	70
11:15	64	15	5	1	3	0	1	89
11:30	50	15	1	0	3	1	1	71
11:45	50	15	2	0	2	0	1	70
1 Hr	209	60	11	2	12	1	5	300
12:00	73	16	3	2	5	1	0	100
12:15	49	12	4	0	3	1	2	71
12:30	51	12	4	0	1	1	1	70
12:45	76	12	2	0	3	0	1	94
1 Hr	249	52	13	2	12	3	4	335
13:00	70	13	1	0	5	1	1	91
13:15	60	14	4	0	4	0	3	85
13:30	63	14	2	0	3	0	2	84
13:45	58	10	1	0	4	0	2	75
1 Hr	251	51	8	0	16	1	8	335
14:00	63	12	1	1	4	0	4	85
14:15	63	11	5	0	5	0	3	87
14:30	66	10	2	1	3	2	1	85
14:45	75	19	3	0	4	3	4	108
1 Hr	267	52	11	2	16	5	12	365
15:00	66	11	3	1	1	1	2	85
15:15	77	16	4	0	7	0	5	109
15:30	80	14	1	0	1	3	1	100
15:45	60	16	3	0	3	0	2	84
1 Hr	283	57	11	1	12	4	10	378
16:00	76	16	0	0	3	1	5	101
16:15	51	8	0	0	5	2	9	75
16:30	69	16	1	0	2	2	2	92
16:45	74	10	0	0	1	4	1	90
1 Hr	270	50	1	0	11	9	17	358
17:00	55	11	0	0	5	1	3	75
17:15	55	9	2	0	3	2	6	77
17:30	82	13	3	0	3	1	2	104
17:45	77	8	0	0	7	1	7	100
1 Hr	269	41	5	0	18	5	18	356
18:00	72	8	0	0	3	3	9	95
18:15	72	11	1	0	3	2	5	94
18:30	66	5	1	0	7	0	5	84
18:45	56	8	0	0	2	0	4	70
1 Hr	266	32	2	0	15	5	23	343
Total	2797	543	91	11	160	46	130	3778

	Origin : Arm C Luby Road							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	0	1	0	0	0	0	0	1
07:15	7	1	0	0	0	0	0	8
07:30	6	1	1	0	0	0	0	8
07:45	12	0	0	0	1	0	0	13
1 Hr	25	3	1	0	1	0	0	30
08:00	8	1	0	0	0	0	1	10
08:15	11	1	1	0	0	0	2	15
08:30	20	2	0	0	0	0	2	24
08:45	9	2	0	0	0	0	0	11
1 Hr	48	6	1	0	0	0	5	60
09:00	6	2	0	0	0	0	1	9
09:15	2	0	0	0	0	0	0	2
09:30	6	0	0	0	0	0	0	6
09:45	4	0	0	0	0	0	0	4
1 Hr	18	2	0	0	0	0	1	21
10:00	6	0	0	0	0	0	0	6
10:15	3	0	0	0	0	0	0	3
10:30	4	0	0	0	0	0	0	4
10:45	4	0	0	0	0	0	0	4
1 Hr	17	0	0	0	0	0	0	17
11:00	4	0	0	0	0	0	0	4
11:15	3	1	0	0	0	0	0	4
11:30	6	0	0	0	0	0	0	6
11:45	13	1	0	0	0	0	0	14
1 Hr	26	2	0	0	0	0	0	28
12:00	8	4	0	0	0	0	0	12
12:15	8	2	0	0	0	0	0	10
12:30	11	0	0	0	0	0	0	11
12:45	5	1	0	0	0	0	0	6
1 Hr	32	7	0	0	0	0	0	39
13:00	14	4	0	0	0	0	0	18
13:15	7	1	0	0	0	0	1	9
13:30	8	2	0	0	0	0	0	10
13:45	5	0	0	0	0	0	0	5
1 Hr	34	7	0	0	0	0	1	42
14:00	11	1	0	0	0	0	0	12
14:15	11	1	0	0	0	0	2	14
14:30	4	0	0	0	0	0	0	4
14:45	16	0	0	0	0	0	0	16
1 Hr	42	2	0	0	0	0	2	46
15:00	14	4	0	0	0	0	0	18
15:15	15	2	0	0	0	0	2	19
15:30	10	2	0	0	0	0	1	13
15:45	19	3	0	0	0	0	0	22
1 Hr	58	11	0	0	0	0	3	72
16:00	20	1	0	0	0	0	0	21
16:15	14	1	0	0	0	1	1	17
16:30	13	0	0	0	0	0	0	13
16:45	7	0	0	0	0	0	0	7
1 Hr	54	2	0	0	0	1	1	58
17:00	20	1	0	0	0	0	0	21
17:15	15	1	0	0	0	0	0	16
17:30	15	0	0	0	1	0	0	16
17:45	13	1	0	0	0	0	0	14
1 Hr	63	3	0	0	1	0	0	67
18:00	15	4	1	0	0	1	1	22
18:15	13	0	0	0	0	0	0	13
18:30	17	1	0	0	1	0	0	19
18:45	15	1	0	0	0	0	0	16
1 Hr	60	6	1	0	1	1	1	70
Total	477	51	3	0	3	2	14	550

	Origin : Arm D R810 Emmet Road(W)							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	94	14	3	0	2	1	1	115
07:15	96	21	3	0	2	4	3	129
07:30	81	21	2	0	3	1	1	109
07:45	75	14	3	0	3	2	3	100
1 Hr	346	70	11	0	10	8	8	453
08:00	87	7	2	0	6	1	6	109
08:15	72	9	3	0	1	1	6	92
08:30	66	15	2	0	3	2	2	90
08:45	54	15	1	1	4	0	3	78
1 Hr	279	46	8	1	14	4	17	369
09:00	85	18	1	2	2	1	1	110
09:15	76	14	2	0	5	0	1	98
09:30	86	11	1	0	3	1	1	103
09:45	64	13	2	0	2	1	3	85
1 Hr	311	56	6	2	12	3	6	396
10:00	56	12	0	0	4	0	4	76
10:15	60	20	1	0	3	0	2	86
10:30	54	18	3	1	4	0	2	82
10:45	43	9	1	0	0	1	0	54
1 Hr	213	59	5	1	11	1	8	298
11:00	62	15	3	0	2	1	1	84
11:15	48	7	1	0	4	1	0	61
11:30	64	8	1	0	1	1	3	78
11:45	50	10	2	1	2	1	4	70
1 Hr	224	40	7	1	9	4	8	293
12:00	43	12	2	1	1	0	7	66
12:15	45	16	1	0	5	1	1	69
12:30	62	16	1	1	3	1	3	87
12:45	45	10	3	0	2	0	3	63
1 Hr	195	54	7	2	11	2	14	285
13:00	63	5	2	0	3	0	2	75
13:15	63	5	1	0	3	1	1	74
13:30	59	13	2	0	2	1	3	80
13:45	49	12	2	0	4	0	0	67
1 Hr	234	35	7	0	12	2	6	296
14:00	48	9	1	0	1	1	5	65
14:15	44	5	0	1	6	0	2	58
14:30	57	11	1	0	1	0	3	73
14:45	50	5	3	0	4	2	1	65
1 Hr	199	30	5	1	12	3	11	261
15:00	56	9	2	0	1	3	3	74
15:15	59	11	0	0	4	0	1	75
15:30	59	11	5	0	3	1	3	82
15:45	61	5	3	0	2	0	1	72
1 Hr	235	36	10	0	10	4	8	303
16:00	59	10	1	0	4	4	4	82
16:15	39	6	1	0	2	1	6	55
16:30	54	4	0	0	2	1	2	63
16:45	53	9	1	0	4	1	3	71
1 Hr	205	29	3	0	12	7	15	271
17:00	54	3	1	0	4	0	3	65
17:15	54	7	0	0	4	0	3	68
17:30	59	6	2	0	0	1	3	71
17:45	66	3	0	0	4	1	6	80
1 Hr	233	19	3	0	12	2	15	284
18:00	72	6	0	0	4	1	2	85
18:15	79	3	0	0	4	1	2	89
18:30	78	7	0	0	2	1	2	90
18:45	60	6	0	0	2	0	5	73
1 Hr	289	22	0	0	12	3	11	337
Total	2963	496	72	8	137	43	127	3846

Origin Totals
161
189
188
174
712
192
200
198
174
764
180
163
179
166
688
141
163
152
116
572
159
157
160
160
636
181
156
173
172
682
191
170
177
152
690
167
163
163
194
687
181
209
197
184
771
205
148
173
171
697
166
169
192
197
724
204
199
200
164
767
8390

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 4 - Turvey Avenue / R810 Emmet Road(E) / Luby Road / R810 Emmet Road(W)

DESTINATION SUMMARY

	Destination : Arm A Turvey Avenue							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	1	0	0	0	0	0	1	2
07:15	0	0	0	0	0	0	0	0
07:30	1	0	0	0	0	0	0	1
07:45	1	0	1	0	0	0	0	2
1 Hr	3	0	1	0	0	0	1	5
08:00	1	0	0	0	0	0	0	1
08:15	1	0	0	0	0	0	0	1
08:30	1	0	0	0	0	0	0	1
08:45	1	0	0	0	0	0	0	1
1 Hr	4	0	0	0	0	0	0	4
09:00	3	0	0	0	0	0	0	3
09:15	3	1	1	0	0	0	0	5
09:30	3	1	1	0	0	0	0	5
09:45	2	0	0	0	0	0	0	2
1 Hr	11	2	2	0	0	0	0	15
10:00	3	0	0	0	0	0	0	3
10:15	0	0	1	0	0	0	0	1
10:30	2	0	0	0	0	0	1	3
10:45	4	0	0	0	0	0	0	4
1 Hr	9	0	1	0	0	0	1	11
11:00	2	1	0	0	0	0	0	3
11:15	8	2	0	0	0	0	0	10
11:30	3	1	0	0	0	0	0	4
11:45	4	0	0	0	0	0	0	4
1 Hr	17	4	0	0	0	0	0	21
12:00	5	1	0	0	0	0	0	6
12:15	1	1	0	0	0	0	1	3
12:30	2	1	0	0	0	0	0	3
12:45	5	0	0	0	0	0	1	6
1 Hr	13	3	0	0	0	0	2	18
13:00	4	0	0	0	0	0	0	4
13:15	3	0	0	0	0	0	0	3
13:30	3	0	0	0	0	0	1	4
13:45	5	0	0	0	0	0	0	5
1 Hr	15	0	0	0	0	0	1	16
14:00	3	1	0	0	0	0	0	4
14:15	3	0	0	0	0	0	0	3
14:30	4	0	0	0	0	0	0	4
14:45	6	0	1	0	0	0	0	7
1 Hr	16	1	1	0	0	0	0	18
15:00	4	1	1	0	0	0	1	7
15:15	6	0	0	0	0	0	1	7
15:30	1	1	0	0	0	0	0	2
15:45	3	0	0	0	0	0	1	4
1 Hr	14	2	1	0	0	0	3	20
16:00	2	0	0	0	0	1	2	5
16:15	0	0	0	0	0	0	0	0
16:30	3	0	0	0	0	0	0	3
16:45	5	0	0	0	0	0	0	5
1 Hr	10	0	0	0	0	1	2	13
17:00	3	1	0	0	0	0	1	5
17:15	6	0	0	0	0	0	0	6
17:30	6	0	0	0	0	0	0	6
17:45	2	0	0	0	0	1	1	4
1 Hr	17	1	0	0	0	1	2	21
18:00	5	1	0	0	0	0	3	9
18:15	3	1	0	0	0	0	0	4
18:30	9	1	0	0	0	0	1	11
18:45	2	1	0	0	0	0	0	3
1 Hr	19	4	0	0	0	0	4	27
Total	148	17	6	0	0	2	16	189

	Destination : Arm B R810 Emmet Road(E)							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	96	15	3	0	2	1	1	118
07:15	104	21	3	0	2	4	4	138
07:30	92	23	3	0	3	1	1	123
07:45	87	14	2	0	4	2	3	112
1 Hr	379	73	11	0	11	8	9	491
08:00	102	7	2	0	6	1	7	125
08:15	86	10	3	0	1	1	9	110
08:30	88	17	2	0	3	3	4	117
08:45	69	17	1	1	4	0	4	96
1 Hr	345	51	8	1	14	5	24	448
09:00	91	20	1	2	2	1	2	119
09:15	77	13	2	0	5	0	1	98
09:30	92	12	2	0	3	1	1	111
09:45	70	13	2	0	2	1	3	91
1 Hr	330	58	7	2	12	3	7	419
10:00	60	12	0	0	4	0	5	81
10:15	64	20	2	0	3	0	2	91
10:30	60	18	3	1	4	0	3	89
10:45	52	9	1	0	0	1	0	63
1 Hr	236	59	6	1	11	1	10	324
11:00	65	14	3	0	2	1	1	86
11:15	51	8	1	0	4	1	0	65
11:30	69	10	1	0	1	1	3	85
11:45	57	10	2	1	2	1	6	79
1 Hr	242	42	7	1	9	4	10	315
12:00	53	15	2	1	1	0	7	79
12:15	48	19	2	0	5	1	2	77
12:30	73	15	1	1	3	1	4	98
12:45	53	12	3	0	2	1	3	74
1 Hr	227	61	8	2	11	3	16	328
13:00	78	8	2	0	3	0	3	94
13:15	67	7	1	0	3	1	2	81
13:30	68	14	2	0	2	1	3	90
13:45	50	12	2	0	4	0	0	68
1 Hr	263	41	7	0	12	2	8	333
14:00	56	9	1	0	1	1	6	74
14:15	57	6	0	1	6	0	3	73
14:30	57	11	1	0	1	0	3	73
14:45	67	6	3	0	4	2	1	83
1 Hr	237	32	5	1	12	3	13	303
15:00	64	12	1	0	1	3	4	85
15:15	70	13	1	0	4	0	3	91
15:30	68	12	5	0	3	1	4	93
15:45	82	7	4	0	2	0	4	99
1 Hr	284	44	11	0	10	4	15	368
16:00	77	11	1	0	4	3	2	98
16:15	55	7	1	0	2	2	7	74
16:30	63	4	0	0	2	1	2	72
16:45	59	9	1	0	4	1	4	78
1 Hr	254	31	3	0	12	7	15	322
17:00	68	5	1	0	4	0	4	82
17:15	68	10	0	0	4	0	3	85
17:30	69	6	2	0	1	1	4	83
17:45	79	3	0	0	4	1	6	93
1 Hr	284	24	3	0	13	2	17	343
18:00	83	8	0	0	4	2	2	99
18:15	96	3	0	0	4	1	2	106
18:30	92	7	0	0	3	1	2	105
18:45	76	5	0	0	2	0	5	88
1 Hr	347	23	0	0	13	4	11	398
Total	3428	539	76	8	140	46	155	4392

	Destination : Arm C Luby Road							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	1	1
08:30	0	0	0	0	0	0	1	1
08:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	2	2
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0
12:45	0	2	0	0	0	0	0	2
1 Hr	0	2	0	0	0	0	0	2
13:00	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
1 Hr	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	1	1
17:30	0	0	0	0	0	0	0	0
17:45	1	0	0	0	0	0	0	1
1 Hr	1	0	0	0	0	0	1	2
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	1	1
1 Hr	0	0	0	0	0	0	1	1
Total	1	2	0	0	0	0	4	7

	Destination : Arm D R810 Emmet Road(W)							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	27	8	2	0	2	1	1	41
07:15	34	7	1	1	6	1	1	51
07:30	54	6	1	0	2	1	0	64
07:45	44	10	2	0	3	0	1	60
1 Hr	159	31	6	1	13	3	3	216
08:00	51	7	3	0	4	1	0	66
08:15	59	16	3	0	2	3	5	88
08:30	56	12	4	0	1	1	5	79
08:45	53	12	2	0	6	2	2	77
1 Hr	219	47	12	0	13	7	12	310
09:00	47	7	0	0	2	1	1	58
09:15	43	7	4	1	1	0	4	60
09:30	44	11	0	0	4	1	3	63
09:45	50	11	4	1	5	1	1	73
1 Hr	184	36	8	2	12	3	9	254
10:00	43	11	0	0	1	1	1	57
10:15	52	10	1	0	6	0	2	71
10:30	44	9	2	0	0	0	5	60
10:45	38	7	0	1	3	0	0	49
1 Hr	177	37	3	1	10	1	8	237
11:00	45	15	3	1	4	0	2	70
11:15	59	13	5	1	3	0	1	82
11:30	50	15	1	0	3	1	1	71
11:45	56	16	2	0	2	0	1	77
1 Hr	210	59	11	2	12	1	5	300
12:00	69	16	3	2	5	1	0	96
12:15	56	12	3	0	3	1	1	76
12:30	53	12	4	0	1	1	1	72
12:45	74	11	2	0	3	0	0	90
1 Hr	252	51	12	2	12	3	2	334
13:00	70	15	1	0	5	1	1	93
13:15	61	14	4	0	4	0	3	86
13:30	62	15	2	0	3	0	1	83
13:45	61	10	1	0	4	1	2	79
1 Hr	254	54	8	0	16	2	7	341
14:00	66	13	1	1	4	0	4	89
14:15	62	11	5	0	5	0	4	87
14:30	67	10	2	1	3	2	1	86
14:45	73	18	2	0	4	3	4	104
1 Hr	268	52	10	2	16	5	13	366
15:00	70	12	3	1	1	1	1	89
15:15	79	17	4	0	7	0	4	111
15:30	82	14	1	0	1	3	1	102
15:45	58	17	2	0	3	0	1	81
1 Hr	289	60	10	1	12	4	7	383
16:00	77	16	0	0	3	1	5	102
16:15	50	8	0	0	5	2	9	74
16:30	74	16	1	0	2	3	2	98
16:45	72	10	0	0	1	4	1	88
1 Hr	273	50	1	0	11	10	17	362
17:00	61	10	0	0	5	1	2	79
17:15	57	8	2	0	3	2	5	77
17:30	81	13	3	0	3	1	2	103
17:45	77	9	0	0	7	0	6	99
1 Hr	276	40	5	0	18	4	15	358
18:00	72	10	1	0	3	3	7	96
18:15	68	10	1	0	3	2	5	89
18:30	67	5	1	0	7	0	4	84
18:45	56	10	0	0	2	0	4	72
1 Hr	263	35	3	0	15	5	20	341
Total	2824	552	89	11	160	48	118	3802

Dest Totals
161
189
188
174
712
192
200
198
174
764
180
163
179
166
688
141
163
152
116
572
159
157
160
160
636
181
156
173
172
682
191
170
177
152
690
167
163
163
194
687
181
209
197
184
771
205
148
173
171
697
166
169
192
197
724
204
199
200
164
767
8390

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 5 - R111 South Circular Road(N) / R810 Old Kilmainham / R111 South Circular Road(S) / R810 Emmet Road

Origin :Arm A R111 South Circular Road(N)

	Destination : Arm A R111 South Circular Road(N)							Total	**Destination :** Arm B R810 Old Kilmainham							Total	**Destination :** Arm C R111 South Circular Road(S)							Total	**Destination :** Arm D R810 Emmet Road							Total	Arm Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		
07:00	0	0	0	0	0	0	0	0	34	9	0	0	0	0	0	43	99	16	3	2	0	2	8	130	3	1	0	0	0	0	1	5	178
07:15	0	0	0	0	0	0	0	0	43	8	0	0	0	0	2	53	95	10	0	0	0	4	13	122	6	0	1	0	1	0	0	8	183
07:30	0	0	0	0	0	0	0	0	21	9	2	0	0	0	0	32	87	16	1	1	0	0	14	119	7	0	0	0	0	0	0	7	158
07:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**8**	**0**	**0**	**0**	**1**	**1**	**50**	**92**	**24**	**0**	**1**	**0**	**0**	**9**	**126**	**3**	**1**	**0**	**0**	**1**	**0**	**0**	**5**	**181**
08:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**36**	**8**	**1**	**0**	**0**	**0**	**2**	**47**	**83**	**17**	**0**	**0**	**0**	**0**	**15**	**115**	**5**	**2**	**0**	**0**	**0**	**1**	**0**	**8**	**170**
08:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**37**	**5**	**0**	**0**	**0**	**1**	**0**	**43**	**72**	**12**	**3**	**0**	**0**	**1**	**25**	**113**	**6**	**0**	**0**	**0**	**0**	**0**	**1**	**7**	**163**
08:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21**	**4**	**1**	**0**	**0**	**2**	**0**	**28**	**72**	**9**	**1**	**2**	**0**	**7**	**17**	**108**	**9**	**1**	**0**	**0**	**0**	**0**	**0**	**10**	**146**
08:45	0	0	0	0	0	0	0	0	26	7	1	0	0	1	1	36	83	15	0	0	0	2	17	117	11	1	0	0	2	0	1	15	168
09:00	0	0	0	0	0	0	0	0	27	1	1	0	0	0	1	30	87	9	2	1	2	2	9	112	5	0	0	0	0	0	0	5	147
09:15	0	0	0	0	0	0	0	0	21	5	3	0	0	0	0	29	81	10	4	0	0	1	12	108	10	0	0	0	0	0	1	11	148
09:30	0	0	0	0	0	0	0	0	47	6	0	1	0	1	0	55	73	12	2	0	0	3	7	97	7	1	0	0	1	0	0	9	161
09:45	0	0	0	0	0	0	0	0	23	3	0	0	0	1	0	27	73	7	0	0	0	1	3	84	3	1	1	0	1	0	1	7	118
10:00	0	0	0	0	0	0	0	0	26	3	0	1	0	1	0	31	71	14	1	1	0	1	3	91	10	0	0	0	0	1	0	11	133
10:15	0	0	0	0	0	0	0	0	24	2	2	1	0	0	0	29	79	16	3	2	1	0	3	104	8	2	0	0	1	0	0	11	144
10:30	0	0	0	0	0	0	0	0	27	5	1	2	0	1	0	36	71	11	1	1	0	0	5	89	5	3	0	0	0	0	0	8	133
10:45	0	0	0	0	0	0	0	0	18	10	2	0	0	1	0	31	77	15	3	1	0	0	5	101	10	0	0	0	0	0	0	10	142
11:00	0	0	0	0	0	0	0	0	22	3	4	0	0	0	0	29	90	11	0	3	1	1	1	107	6	1	1	0	0	0	0	8	144
11:15	0	0	0	0	0	0	0	0	23	4	0	1	0	0	1	29	59	10	1	1	1	1	2	75	7	1	0	0	0	0	0	8	112
11:30	0	0	0	0	0	0	0	0	30	3	0	0	1	0	0	34	82	17	4	1	1	1	0	106	7	1	0	0	1	1	0	10	150
11:45	0	0	0	0	0	0	0	0	22	6	0	0	1	1	1	31	71	13	6	2	0	0	6	98	6	4	1	0	1	0	0	12	141
12:00	0	0	0	0	0	0	0	0	17	4	2	1	0	0	0	24	63	7	1	0	0	0	2	73	6	3	0	0	0	0	0	9	106
12:15	0	0	0	0	0	0	0	0	16	2	2	0	0	0	1	21	84	17	2	1	0	1	6	111	5	1	0	0	0	1	0	7	139
12:30	0	0	0	0	0	0	0	0	21	2	0	0	0	0	0	23	70	16	3	1	0	1	2	93	3	1	0	0	0	0	1	5	121
12:45	0	0	0	0	0	0	0	0	32	2	0	1	3	0	0	38	74	12	1	0	0	2	5	94	8	0	0	0	1	0	0	9	141
13:00	0	0	0	0	0	0	0	0	26	2	0	0	0	0	1	29	73	15	3	0	2	1	4	98	1	5	1	0	0	0	1	8	135
13:15	0	0	0	0	0	0	0	0	26	4	0	3	0	2	0	35	85	12	0	1	0	1	6	105	6	1	0	0	2	0	0	9	149
13:30	0	0	0	0	0	0	0	0	19	2	0	0	0	0	0	21	69	11	5	1	1	3	8	98	4	0	0	0	0	0	0	4	123
13:45	0	0	0	0	0	0	0	0	18	2	0	0	1	0	1	22	88	14	2	1	0	0	11	116	10	3	0	0	0	0	0	13	151
14:00	0	0	0	0	0	0	0	0	23	4	0	0	0	0	0	27	81	10	2	1	0	1	6	101	4	1	0	0	1	0	1	7	135
14:15	0	0	0	0	0	0	0	0	28	4	0	0	0	1	1	34	76	9	1	2	1	1	7	97	5	0	1	0	1	0	0	7	138
14:30	0	0	0	0	0	0	0	0	24	5	0	0	0	0	0	29	83	9	2	0	1	1	4	100	8	0	1	0	0	1	0	10	139
14:45	0	0	0	0	0	0	0	0	19	3	0	0	0	0	2	24	69	12	1	1	0	1	3	87	10	3	2	0	1	1	1	18	129
15:00	0	0	0	0	0	0	0	0	15	5	0	0	0	0	1	21	69	15	2	0	3	1	8	98	16	2	0	0	1	1	0	20	139
15:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27**	**1**	**0**	**1**	**0**	**0**	**0**	**29**	**73**	**3**	**0**	**0**	**2**	**2**	**9**	**89**	**4**	**3**	**1**	**0**	**1**	**0**	**1**	**10**	**128**
15:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**3**	**0**	**1**	**0**	**2**	**0**	**24**	**57**	**8**	**1**	**1**	**1**	**0**	**9**	**77**	**8**	**3**	**0**	**0**	**0**	**0**	**0**	**11**	**112**
15:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**3**	**0**	**0**	**0**	**0**	**3**	**15**	**46**	**3**	**1**	**1**	**0**	**3**	**6**	**60**	**7**	**1**	**0**	**0**	**0**	**0**	**0**	**8**	**83**
16:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**19**	**69**	**10**	**0**	**0**	**0**	**0**	**8**	**87**	**7**	**1**	**0**	**0**	**2**	**0**	**0**	**10**	**116**
16:15	0	0	0	0	0	0	0	0	27	1	1	0	0	0	0	29	80	12	0	0	2	1	8	103	10	1	0	0	0	0	1	12	144
16:30	0	0	0	0	0	0	0	0	22	2	0	0	0	0	0	24	67	9	0	0	1	0	7	84	18	1	0	0	0	0	1	20	128
16:45	0	0	0	0	0	0	0	0	10	2	0	0	0	0	1	13	65	2	0	0	0	2	15	84	7	2	0	0	0	0	0	9	106
17:00	0	0	0	0	0	0	0	0	34	1	0	0	0	0	0	35	85	7	1	0	1	2	10	106	12	1	0	0	2	0	3	18	159
17:15	1	0	0	0	0	0	0	1	16	2	0	0	0	0	3	21	50	2	0	1	0	2	14	69	8	0	0	0	0	0	1	9	100
17:30	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	17	61	3	0	0	0	1	15	80	8	1	1	0	2	0	1	13	110
17:45	0	0	0	0	0	0	0	0	19	3	0	0	0	0	0	22	58	7	0	0	0	0	8	73	4	0	0	0	1	1	3	9	104
18:00	0	0	0	0	0	0	0	0	19	3	0	0	0	0	0	22	74	4	0	0	0	1	16	95	10	1	0	0	3	1	0	15	132
18:15	0	0	0	0	0	0	0	0	10	0	0	0	0	0	3	13	48	0	0	0	0	0	14	62	6	1	0	0	0	0	0	7	82
18:30	0	0	0	0	0	0	0	0	16	1	0	0	0	0	0	17	77	8	0	0	0	2	14	101	10	1	0	0	1	0	0	12	130
18:45	0	0	0	0	0	0	0	0	16	1	0	0	0	0	0	17	57	3	0	0	0	1	12	73	3	1	0	0	0	0	1	5	95
Total	1	0	0	0	0	0	0	1	1131	173	23	13	6	16	26	1388	3548	504	63	31	21	58	411	4636	342	58	11	0	28	9	21	469	#REF!

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 5 - R111 South Circular Road(N) / R810 Old Kilmainham / R111 South Circular Road(S) / R810 Emmet Road

Origin : Arm B R810 Old Kilmainham

	Destination : Arm A R111 South Circular Road(N)							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	1	0	0	0	0	0	0	1
07:15	1	0	0	0	0	0	0	1
07:30	0	0	0	0	0	0	0	0
07:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
08:00	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
08:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
08:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
08:45	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0
09:45	1	0	0	0	0	0	0	1
10:00	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0
11:00	1	0	0	0	0	0	0	1
11:15	2	0	0	0	0	0	0	2
11:30	0	0	0	0	0	0	0	0
11:45	3	1	0	0	0	0	0	4
12:00	1	0	0	1	0	0	0	2
12:15	3	0	0	0	0	0	0	3
12:30	0	1	0	0	0	0	0	1
12:45	1	1	0	0	0	0	0	2
13:00	1	1	0	0	0	0	0	2
13:15	4	0	0	0	0	0	0	4
13:30	1	0	0	0	0	0	0	1
13:45	0	1	0	0	0	0	0	1
14:00	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0
14:30	0	1	0	1	0	0	0	2
14:45	0	0	0	0	0	0	0	0
15:00	0	1	1	0	0	0	0	2
15:15	**5**	**2**	**0**	**1**	**0**	**0**	**0**	**8**
15:30	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**6**
15:45	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
16:00	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
16:15	1	0	0	0	0	0	0	1
16:30	2	0	0	0	0	0	0	2
16:45	3	0	0	0	0	0	0	3
17:00	1	1	0	0	0	0	0	2
17:15	2	0	0	0	0	1	0	3
17:30	1	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0
18:00	1	0	0	0	0	0	0	1
18:15	0	1	0	0	0	0	0	1
18:30	0	2	0	0	0	0	0	2
18:45	1	0	0	0	0	0	0	1
Total	47	14	1	3	0	1	0	66

	Destination : Arm B R810 Old Kilmainham							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0
07:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
08:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
08:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
08:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
08:45	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0
15:15	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
15:30	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
15:45	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:00	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0

	Destination : Arm C R111 South Circular Road(S)							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	4	1	0	0	0	0	0	5
07:15	9	1	0	0	0	0	1	11
07:30	4	1	0	0	0	0	1	6
07:45	**7**	**1**	**0**	**0**	**0**	**0**	**0**	**8**
08:00	**5**	**1**	**1**	**0**	**0**	**1**	**1**	**9**
08:15	**9**	**2**	**0**	**0**	**0**	**0**	**0**	**11**
08:30	**8**	**0**	**1**	**0**	**0**	**1**	**1**	**11**
08:45	7	1	2	0	0	0	1	11
09:00	7	0	0	0	0	0	0	7
09:15	8	4	0	0	0	0	0	12
09:30	28	5	0	0	0	0	0	33
09:45	35	6	0	0	0	0	0	41
10:00	20	4	1	0	1	1	1	28
10:15	22	5	1	0	0	0	2	30
10:30	42	5	1	0	0	0	0	48
10:45	25	5	4	0	0	0	1	35
11:00	16	4	0	0	0	1	2	23
11:15	15	4	3	0	0	0	0	22
11:30	18	4	1	0	0	0	0	23
11:45	15	3	1	0	0	0	0	19
12:00	9	0	0	1	0	0	0	10
12:15	11	2	0	0	0	0	0	13
12:30	13	2	0	1	1	0	0	17
12:45	11	3	1	0	0	0	4	19
13:00	19	2	0	0	0	0	0	21
13:15	17	1	0	0	0	0	0	18
13:30	5	4	0	0	0	1	0	10
13:45	19	2	0	0	0	0	3	24
14:00	12	4	3	0	0	1	1	21
14:15	23	6	0	0	0	0	0	29
14:30	15	6	1	0	0	0	3	25
14:45	7	5	0	0	0	0	0	12
15:00	7	1	0	0	0	0	0	8
15:15	**8**	**1**	**0**	**0**	**0**	**0**	**2**	**11**
15:30	**10**	**2**	**2**	**0**	**0**	**2**	**0**	**16**
15:45	**4**	**2**	**0**	**0**	**0**	**1**	**0**	**7**
16:00	**6**	**0**	**1**	**0**	**0**	**0**	**1**	**8**
16:15	7	0	0	0	0	0	0	7
16:30	5	2	0	0	0	0	1	8
16:45	3	0	0	0	0	0	0	3
17:00	6	0	0	0	0	1	0	7
17:15	4	1	0	0	0	0	2	7
17:30	6	1	0	0	0	0	1	8
17:45	7	1	0	0	0	0	1	9
18:00	5	1	0	0	0	0	1	7
18:15	3	0	0	0	0	0	0	3
18:30	5	1	0	0	0	0	3	9
18:45	9	0	0	0	0	0	3	12
Total	560	107	24	2	2	10	37	742

	Destination : Arm D R810 Emmet Road							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	20	6	2	0	2	1	0	31
07:15	24	5	1	1	5	1	1	38
07:30	47	5	0	0	2	0	0	54
07:45	**32**	**10**	**1**	**0**	**2**	**0**	**1**	**46**
08:00	**48**	**3**	**3**	**0**	**4**	**0**	**0**	**58**
08:15	**52**	**16**	**4**	**0**	**2**	**2**	**2**	**78**
08:30	**47**	**10**	**2**	**0**	**2**	**1**	**3**	**65**
08:45	44	11	2	0	3	2	2	64
09:00	37	6	0	0	2	1	1	47
09:15	29	7	4	1	1	0	3	45
09:30	25	10	1	0	3	1	1	41
09:45	51	9	2	1	4	0	0	67
10:00	33	10	0	0	1	0	0	44
10:15	41	7	2	0	5	0	1	56
10:30	37	4	2	0	0	0	5	48
10:45	34	6	0	1	3	0	0	44
11:00	37	11	2	1	4	0	0	55
11:15	57	11	5	1	3	0	0	77
11:30	41	13	1	0	2	0	1	58
11:45	52	12	1	0	1	0	1	67
12:00	62	12	2	2	6	1	1	86
12:15	46	10	4	0	2	0	1	63
12:30	55	12	4	0	1	3	0	75
12:45	60	11	2	0	2	0	2	77
13:00	66	7	1	0	5	1	0	80
13:15	54	13	4	0	2	0	2	75
13:30	52	12	0	0	3	0	1	68
13:45	51	5	1	0	4	0	1	62
14:00	60	10	1	1	3	0	3	78
14:15	56	12	4	0	3	0	3	78
14:30	55	8	1	1	3	1	2	71
14:45	64	15	1	0	3	2	1	86
15:00	58	8	3	1	0	1	2	73
15:15	**72**	**14**	**3**	**0**	**6**	**0**	**4**	**99**
15:30	**75**	**11**	**2**	**0**	**1**	**2**	**1**	**92**
15:45	**58**	**15**	**1**	**0**	**3**	**0**	**1**	**78**
16:00	**67**	**16**	**0**	**0**	**1**	**1**	**4**	**89**
16:15	48	7	0	0	5	3	5	68
16:30	48	16	1	0	2	2	1	70
16:45	71	10	0	0	1	3	1	86
17:00	44	11	0	0	3	1	1	60
17:15	50	11	2	0	3	2	3	71
17:30	74	12	2	0	2	1	1	92
17:45	72	8	0	0	5	0	4	89
18:00	67	8	0	0	2	2	7	86
18:15	66	9	1	0	2	2	3	83
18:30	57	3	2	0	5	0	2	69
18:45	49	7	0	0	2	0	1	59
Total	2445	465	77	11	131	37	80	3246

Arm Totals
37
50
60
54
68
89
76
75
54
57
74
109
72
86
96
79
79
101
81
90
98
79
93
98
103
97
79
87
99
107
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72
#REF!

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 5 - R111 South Circular Road(N) / R810 Old Kilmainham / R111 South Circular Road(S) / R810 Emmet Road

Origin :Arm C R111 South Circular Road(S)

	Destination : Arm A R111 South Circular Road(N)							Total	**Destination :** Arm B R810 Old Kilmainham							Total	**Destination :** Arm C R111 South Circular Road(S)							Total	**Destination :** Arm D R810 Emmet Road							Total	Arm Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		Car	LGV	OGV1	OGV2	PSV	MC	PC		
07:00	81	11	1	0	1	0	5	99	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	104
07:15	95	3	3	2	0	1	10	114	5	1	1	1	0	0	1	9	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	128
07:30	79	4	1	0	0	1	10	95	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	98
07:45	**102**	**10**	**0**	**2**	**0**	**1**	**5**	**120**	**4**	**1**	**1**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**128**
08:00	**102**	**10**	**2**	**0**	**0**	**1**	**15**	**130**	**5**	**0**	**1**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**137**
08:15	**110**	**3**	**2**	**0**	**1**	**2**	**11**	**129**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**135**
08:30	**93**	**6**	**2**	**0**	**0**	**2**	**11**	**114**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**119**
08:45	89	10	2	0	0	0	17	118	6	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	130
09:00	81	10	1	1	1	2	8	104	7	2	1	0	0	0	0	10	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	116
09:15	83	5	1	0	0	0	6	95	4	0	1	0	0	1	1	7	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	105
09:30	86	12	1	2	0	1	7	109	9	3	0	0	0	0	0	12	0	0	0	0	0	0	0	0	7	1	0	0	0	0	1	9	130
09:45	75	11	0	0	0	1	4	91	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	93
10:00	70	10	3	1	0	0	1	85	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	7	96
10:15	87	9	2	0	1	0	7	106	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	3	113
10:30	79	13	1	1	0	0	5	99	5	0	1	0	0	1	0	7	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	4	110
10:45	71	12	0	0	0	0	3	86	1	0	1	1	0	0	0	3	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	93
11:00	74	9	5	1	0	1	1	91	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2	6	100
11:15	77	10	2	1	1	0	7	98	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	104
11:30	84	20	3	1	0	0	1	109	8	2	0	0	0	0	0	10	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	7	126
11:45	73	16	1	2	0	0	4	96	7	2	1	0	0	0	0	10	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	107
12:00	83	12	5	2	1	0	3	106	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	6	0	1	0	0	0	0	7	116
12:15	67	17	3	1	1	2	5	96	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4	104
12:30	102	12	5	1	0	1	4	125	2	2	0	0	0	0	2	6	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	132
12:45	63	10	3	0	1	0	4	81	4	0	1	0	0	0	1	6	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	89
13:00	81	16	1	0	0	0	3	101	4	0	1	0	0	0	1	6	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	111
13:15	80	16	3	0	0	0	4	103	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	108
13:30	83	12	3	1	0	2	0	101	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	1	1	2	0	0	0	2	6	111
13:45	100	9	3	0	1	0	6	119	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	3	129
14:00	72	13	1	1	0	1	0	88	7	0	0	0	0	0	1	8	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	6	102
14:15	84	11	1	1	0	1	3	101	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	108
14:30	85	18	1	0	2	3	3	112	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	4	0	0	0	0	0	1	5	120
14:45	75	10	2	1	0	1	8	97	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	103
15:00	90	17	2	0	1	0	7	117	4	2	1	0	0	0	0	7	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	125
15:15	**92**	**11**	**0**	**0**	**0**	**0**	**9**	**112**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**115**
15:30	**84**	**16**	**0**	**1**	**1**	**3**	**6**	**111**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**117**
15:45	**100**	**18**	**2**	**1**	**0**	**3**	**6**	**130**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**132**
16:00	**74**	**20**	**1**	**0**	**0**	**1**	**12**	**108**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**113**
16:15	90	19	2	0	0	1	10	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	124
16:30	78	20	1	0	0	3	11	113	1	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	3	118
16:45	70	20	1	0	0	2	14	107	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109
17:00	110	18	1	0	0	3	16	148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	3	151
17:15	96	9	0	0	0	2	18	125	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	128
17:30	67	2	0	1	1	4	28	103	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	106
17:45	75	16	0	0	0	4	9	104	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2	109
18:00	75	13	0	0	1	2	18	109	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	3	114
18:15	85	10	0	0	0	5	21	121	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	123
18:30	99	8	0	0	0	0	17	124	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	4	6	132
18:45	79	8	0	0	0	1	12	100	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	3	105
Total	4030	575	74	25	15	58	395	5172	141	26	13	2	1	2	12	197	0	0	0	0	0	0	0	0	108	22	4	0	1	2	20	157	#REF!

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 5 - R111 South Circular Road(N) / R810 Old Kilmainham / R111 South Circular Road(S) / R810 Emmet Road

Origin :Arm D R810 Emmet Road

	Destination : Arm A R111 South Circular Road(N)								**Destination :** Arm B R810 Old Kilmainham								**Destination :** Arm C R111 South Circular Road(S)								**Destination :** Arm D R810 Emmet Road								Arm
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Totals
07:00	15	1	1	0	0	0	0	17	76	12	1	0	2	1	1	93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110
07:15	19	2	0	0	0	0	0	21	73	22	4	0	3	3	2	107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128
07:30	24	4	0	0	0	0	1	29	78	15	3	0	3	2	0	101	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	131
07:45	**22**	**2**	**0**	**0**	**0**	**0**	**0**	**24**	**66**	**9**	**2**	**0**	**4**	**2**	**2**	**85**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**111**
08:00	**22**	**1**	**0**	**0**	**0**	**1**	**1**	**25**	**76**	**9**	**2**	**0**	**5**	**1**	**4**	**97**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**124**
08:15	**15**	**1**	**0**	**0**	**0**	**1**	**1**	**18**	**78**	**12**	**3**	**0**	**2**	**0**	**6**	**101**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**120**
08:30	**36**	**4**	**0**	**0**	**0**	**0**	**2**	**42**	**63**	**14**	**1**	**0**	**3**	**3**	**3**	**87**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**129**
08:45	22	1	0	0	0	0	0	23	48	13	2	1	3	0	7	74	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	98
09:00	25	6	0	0	0	0	0	31	62	14	0	1	2	1	2	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	113
09:15	11	2	0	0	0	0	0	13	63	11	2	1	5	0	0	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95
09:30	12	2	1	0	0	0	0	15	76	11	1	0	2	1	1	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	107
09:45	25	5	0	0	0	1	0	31	62	10	2	0	4	0	3	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112
10:00	18	1	0	0	0	0	1	20	47	9	0	0	4	0	3	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83
10:15	13	3	0	0	0	0	1	17	47	18	1	0	2	0	2	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87
10:30	16	1	0	0	0	0	1	18	49	17	3	1	4	0	2	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94
10:45	21	3	0	0	0	1	1	26	40	6	1	0	1	0	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74
11:00	10	3	1	0	0	0	0	14	48	12	2	0	2	0	2	66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
11:15	17	2	0	0	0	0	0	19	41	6	1	0	3	2	0	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
11:30	15	5	0	0	0	0	0	20	52	5	1	0	2	0	1	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81
11:45	18	1	0	0	0	2	1	22	51	11	2	1	2	0	4	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93
12:00	15	5	1	1	1	0	1	24	34	10	2	0	0	0	6	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76
12:15	13	5	1	0	0	0	0	19	36	10	1	0	5	1	3	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	75
12:30	20	3	0	0	0	1	2	26	59	16	1	1	3	2	1	83	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	110
12:45	13	6	1	0	0	1	2	23	43	7	2	0	2	0	2	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79
13:00	25	2	1	0	0	0	2	30	47	3	1	0	3	0	2	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86
13:15	22	2	2	0	0	1	0	27	55	4	0	0	3	0	0	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89
13:30	20	1	0	0	0	1	0	22	42	13	2	0	2	0	3	62	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	85
13:45	8	1	0	0	0	0	0	9	45	9	2	0	4	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
14:00	21	2	0	0	0	0	1	24	40	9	1	0	1	1	5	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81
14:15	26	1	0	0	0	0	0	27	33	5	0	1	5	0	1	45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72
14:30	17	4	0	0	0	0	2	23	43	6	0	0	2	0	2	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76
14:45	25	3	0	0	1	1	1	31	44	3	4	0	3	1	1	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	87
15:00	27	6	0	0	0	2	1	36	45	6	1	0	1	2	3	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94
15:15	18	3	1	0	0	0	1	23	46	10	0	0	4	0	1	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84
15:30	29	5	1	0	0	0	2	37	50	8	4	0	3	1	2	68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	105
15:45	32	3	1	0	0	0	1	37	42	5	3	0	2	0	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89
16:00	41	5	2	0	0	2	2	52	44	7	0	0	3	1	0	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	107
16:15	26	1	0	0	0	1	0	28	37	5	1	0	3	1	7	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82
16:30	27	1	0	0	0	0	1	29	26	2	0	0	2	2	1	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	62
16:45	23	3	0	0	0	1	2	29	50	7	1	0	4	0	2	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	93
17:00	26	3	1	0	0	0	1	31	39	3	0	0	4	0	2	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79
17:15	27	5	0	0	0	0	0	32	37	5	0	0	4	0	3	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81
17:30	29	2	0	0	1	1	1	34	51	5	2	0	0	0	3	61	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	97
17:45	31	1	0	0	0	1	3	36	46	1	0	0	2	1	3	53	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	90
18:00	25	2	0	0	0	1	1	29	58	5	0	0	6	1	2	72	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	102
18:15	32	2	0	0	0	0	0	34	64	2	0	0	4	0	1	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	105
18:30	24	1	0	0	0	0	0	25	58	7	0	0	2	2	2	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96
18:45	36	0	0	0	1	0	2	39	52	5	0	0	2	0	3	62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	101
Total	1054	128	15	1	4	20	39	1261	2462	414	62	7	137	32	106	3220	4	0	0	0	0	0	7	11	2	0	0	0	0	0	0	2	#REF!

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 5 - R111 South Circular Road(N) / R810 Old Kilmainham / R111 South Circular Road(S) / R810 Emmet Road

ORIGIN SUMMARY

	Origin : Arm A R111 South Circular Road(N)								Origin : Arm B R810 Old Kilmainham								Origin : Arm C R111 South Circular Road(S)								Origin : Arm D R810 Emmet Road								Origin Totals
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total	
07:00	136	26	3	2	0	2	9	178	25	7	2	0	2	1	0	37	84	13	1	0	1	0	5	104	91	13	2	0	2	1	1	110	429
07:15	144	18	1	0	1	4	15	183	34	6	1	1	5	1	2	50	104	5	4	3	0	1	11	128	92	24	4	0	3	3	2	128	489
07:30	115	25	3	1	0	0	14	158	51	6	0	0	2	0	1	60	79	6	2	0	0	1	10	98	103	19	3	0	3	2	1	131	447
07:45	135	33	0	1	1	1	10	181	39	11	1	0	2	0	1	54	108	11	1	2	0	1	5	128	88	11	2	0	4	2	4	111	474
1 Hr	530	102	7	4	2	7	48	700	149	30	4	1	11	2	4	201	375	35	8	5	1	3	31	458	374	67	11	0	12	8	8	480	1839
08:00	124	27	1	0	0	1	17	170	54	4	4	0	4	1	1	68	108	10	3	0	0	1	15	137	98	10	2	0	5	2	7	124	499
08:15	115	17	3	0	0	2	26	163	61	18	4	0	2	2	2	89	115	3	2	0	1	2	12	135	93	13	3	0	2	1	8	120	507
08:30	102	14	2	2	0	9	17	146	55	10	3	0	2	2	4	76	96	8	2	0	0	2	11	119	99	18	1	0	3	3	5	129	470
08:45	120	23	1	0	2	3	19	168	51	12	4	0	3	2	3	75	99	12	2	0	0	0	17	130	70	14	2	1	3	0	8	98	471
1 Hr	461	81	7	2	2	15	79	647	221	44	15	0	11	7	10	308	418	33	9	0	1	5	55	521	360	55	8	1	13	6	28	471	1947
09:00	119	10	3	1	2	2	10	147	44	6	0	0	2	1	1	54	89	13	2	1	1	2	8	116	87	20	0	1	2	1	2	113	430
09:15	112	15	7	0	0	1	13	148	37	11	4	1	1	0	3	57	90	5	2	0	0	1	7	105	74	13	2	1	5	0	0	95	405
09:30	127	19	2	1	1	4	7	161	53	15	1	0	3	1	1	74	102	16	1	2	0	1	8	130	88	13	2	0	2	1	1	107	472
09:45	99	11	1	0	1	2	4	118	87	15	2	1	4	0	0	109	76	12	0	0	0	1	4	93	87	15	2	0	4	1	3	112	432
1 Hr	457	55	13	2	4	9	34	574	221	47	7	2	10	2	5	294	357	46	5	3	1	5	27	444	336	61	6	2	13	3	6	427	1739
10:00	107	17	1	2	0	3	3	133	53	14	1	0	2	1	1	72	80	11	3	1	0	0	1	96	65	10	0	0	4	0	4	83	384
10:15	111	20	5	3	2	0	3	144	63	12	3	0	5	0	3	86	93	9	2	0	1	0	8	113	60	21	1	0	2	0	3	87	430
10:30	103	19	2	3	0	1	5	133	79	9	3	0	0	0	5	96	85	16	2	1	0	1	5	110	65	18	3	1	4	0	3	94	433
10:45	105	25	5	1	0	1	5	142	59	11	4	1	3	0	1	79	75	13	1	1	0	0	3	93	61	9	1	0	1	1	1	74	388
1 Hr	426	81	13	9	2	5	16	552	254	46	11	1	10	1	10	333	333	49	8	3	1	1	17	412	251	58	5	1	11	1	11	338	1635
11:00	118	15	5	3	1	1	1	144	54	15	2	1	4	1	2	79	78	12	5	1	0	1	3	100	58	15	3	0	2	0	2	80	403
11:15	89	15	1	2	1	1	3	112	74	15	8	1	3	0	0	101	82	11	2	1	1	0	7	104	58	8	1	0	3	2	0	72	389
11:30	119	21	4	1	3	2	0	150	59	17	2	0	2	0	1	81	97	24	3	1	0	0	1	126	67	10	1	0	2	0	1	81	438
11:45	99	23	7	2	2	1	7	141	70	16	2	0	1	0	1	90	81	18	2	2	0	0	4	107	69	12	2	1	2	2	5	93	431
1 Hr	425	74	17	8	7	5	11	547	257	63	14	2	10	1	4	351	338	65	12	5	1	1	15	437	252	45	7	1	9	4	8	326	1661
12:00	86	14	3	1	0	0	2	106	72	12	2	4	6	1	1	98	92	12	6	2	1	0	3	116	49	15	3	1	1	0	7	76	396
12:15	105	20	4	1	0	2	7	139	60	12	4	0	2	0	1	79	72	20	3	1	1	2	5	104	49	15	2	0	5	1	3	75	397
12:30	94	19	3	1	0	1	3	121	68	15	4	1	2	3	0	93	105	14	5	1	0	1	6	132	80	19	1	1	3	3	3	110	456
12:45	114	14	1	1	4	2	5	141	72	15	3	0	2	0	6	98	69	10	4	0	1	0	5	89	56	13	3	0	2	1	4	79	407
1 Hr	399	67	11	4	4	5	17	507	272	54	13	5	12	4	8	368	338	56	18	4	3	3	19	441	234	62	9	2	11	5	17	340	1656
13:00	100	22	4	0	2	1	6	135	86	10	1	0	5	1	0	103	89	16	2	0	0	0	4	111	72	5	2	0	3	0	4	86	435
13:15	117	17	0	4	2	3	6	149	75	14	4	0	2	0	2	97	84	17	3	0	0	0	4	108	77	6	2	0	3	1	0	89	443
13:30	92	13	5	1	1	3	8	123	58	16	0	0	3	1	1	79	87	14	5	1	0	2	2	111	63	14	2	0	2	1	3	85	398
13:45	116	19	2	1	1	0	12	151	70	8	1	0	4	0	4	87	108	10	3	0	1	0	7	129	53	10	2	0	4	0	0	69	436
1 Hr	425	71	11	6	6	7	32	558	289	48	6	0	14	2	7	366	368	57	13	1	1	2	17	459	265	35	8	0	12	2	7	329	1712
14:00	108	15	2	1	1	1	7	135	72	14	4	1	3	1	4	99	83	15	1	1	0	1	1	102	61	11	1	0	1	1	6	81	417
14:15	109	13	2	2	2	2	8	138	79	18	4	0	3	0	3	107	90	11	1	1	1	1	3	108	59	6	0	1	5	0	1	72	425
14:30	115	14	3	0	1	2	4	139	70	15	2	2	3	1	5	98	92	18	1	0	2	3	4	120	60	10	0	0	2	0	4	76	433
14:45	98	18	3	1	1	2	6	129	71	20	1	0	3	2	1	98	79	11	3	1	0	1	8	103	69	6	4	0	4	2	2	87	417
1 Hr	430	60	10	4	5	7	25	541	292	67	11	3	12	4	13	402	344	55	6	3	3	6	16	433	249	33	5	1	12	3	13	316	1692
15:00	100	22	2	0	4	2	9	139	65	10	4	1	0	1	2	83	95	19	3	0	1	0	7	125	72	12	1	0	1	4	4	94	441
15:15	104	7	1	1	3	2	10	128	85	17	3	1	6	0	6	118	95	11	0	0	0	0	9	115	64	13	1	0	4	0	2	84	445
15:30	83	14	1	2	1	2	9	112	90	14	4	0	1	4	1	114	89	16	0	1	1	4	6	117	79	13	5	0	3	1	4	105	448
15:45	62	7	1	1	0	3	9	83	64	17	1	0	3	1	1	87	101	18	3	1	0	3	6	132	74	8	4	0	2	0	1	89	391
1 Hr	349	50	5	4	8	9	37	462	304	58	12	2	10	6	10	402	380	64	6	2	2	7	28	489	289	46	11	0	10	5	11	372	1725
16:00	95	11	0	0	2	0	8	116	75	16	1	0	1	1	5	99	78	20	1	0	0	1	13	113	85	12	2	0	3	3	2	107	435
16:15	117	14	1	0	2	1	9	144	56	7	0	0	5	3	5	76	92	19	2	0	0	1	10	124	63	6	1	0	3	2	7	82	426
16:30	107	12	0	0	1	0	8	128	55	18	1	0	2	2	2	80	81	20	1	0	1	4	11	118	53	3	0	0	2	2	2	62	388
16:45	82	6	0	0	0	2	16	106	77	10	0	0	1	3	1	92	71	20	1	0	0	2	15	109	73	10	1	0	4	1	4	93	400
1 Hr	401	43	1	0	5	3	41	494	263	51	2	0	9	9	13	347	322	79	5	0	1	8	49	464	274	31	4	0	12	8	15	344	1649
17:00	131	9	1	0	3	2	13	159	51	12	0	0	3	2	1	69	112	18	1	0	0	3	17	151	65	6	1	0	4	0	3	79	458
17:15	75	4	0	1	0	2	18	100	56	12	2	0	3	3	5	81	99	9	0	0	0	2	18	128	64	10	0	0	4	0	3	81	390
17:30	86	4	1	0	2	1	16	110	81	13	2	0	2	1	2	101	69	2	0	1	1	4	29	106	81	7	2	0	1	1	5	97	414
17:45	81	10	0	0	1	1	11	104	79	9	0	0	5	0	5	98	76	16	0	0	0	4	13	109	78	2	0	0	2	2	6	90	401
1 Hr	373	27	2	1	6	6	58	473	267	46	4	0	13	6	13	349	356	45	1	1	1	13	77	494	288	25	3	0	11	3	17	347	1663
18:00	103	8	0	0	3	2	16	132	73	9	0	0	2	2	8	94	78	13	0	0	1	2	20	114	84	7	0	0	6	2	3	102	442
18:15	64	1	0	0	0	0	17	82	69	10	1	0	2	2	3	87	86	10	0	0	0	5	22	123	96	4	0	0	4	0	1	105	397
18:30	103	10	0	0	1	2	14	130	62	6	2	0	5	0	5	80	103	8	0	0	0	0	21	132	82	8	0	0	2	2	2	96	438
18:45	76	5	0	0	0	1	13	95	59	7	0	0	2	0	4	72	83	8	0	0	0	1	13	105	88	5	0	0	3	0	5	101	373
1 Hr	346	24	0	0	4	5	60	439	263	32	3	0	11	4	20	333	350	39	0	0	1	8	76	474	350	24	0	0	15	4	11	404	1650
Total	5022	735	97	44	55	83	458	6494	3052	586	102	16	133	48	117	4054	4279	623	91	27	17	62	427	5526	3522	542	77	8	141	52	152	4494	20568

TRAFFIC DATA
Transport Data Collection and Analytics

3665-IRE Emmet Rd
Junction Turning Count
28/04/2022

Site 5 - R111 South Circular Road(N) / R810 Old Kilmainham / R111 South Circular Road(S) / R810 Emmet Road

DESTINATION SUMMARY

	Destination : Arm A R111 South Circular Road(N)							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	97	12	2	0	1	0	5	117
07:15	115	5	3	2	0	1	10	136
07:30	103	8	1	0	0	1	11	124
07:45	124	12	0	2	0	1	5	144
1 Hr	439	37	6	4	1	3	31	521
08:00	125	11	2	0	0	2	16	156
08:15	125	4	2	0	1	3	12	147
08:30	129	10	2	0	0	2	13	156
08:45	111	11	2	0	0	0	17	141
1 Hr	490	36	8	0	1	7	58	600
09:00	106	16	1	1	1	2	8	135
09:15	94	7	1	0	0	0	6	108
09:30	98	14	2	2	0	1	7	124
09:45	101	16	0	0	0	2	4	123
1 Hr	399	53	4	3	1	5	25	490
10:00	88	11	3	1	0	0	2	105
10:15	100	12	2	0	1	0	8	123
10:30	95	14	1	1	0	0	6	117
10:45	92	15	0	0	0	1	4	112
1 Hr	375	52	6	2	1	1	20	457
11:00	85	12	6	1	0	1	1	106
11:15	96	12	2	1	1	0	7	119
11:30	99	25	3	1	0	0	1	129
11:45	94	18	1	2	0	2	5	122
1 Hr	374	67	12	5	1	3	14	476
12:00	99	17	6	4	2	0	4	132
12:15	83	22	4	1	1	2	5	118
12:30	122	16	5	1	0	2	6	152
12:45	77	17	4	0	1	1	6	106
1 Hr	381	72	19	6	4	5	21	508
13:00	107	19	2	0	0	0	5	133
13:15	106	18	5	0	0	1	4	134
13:30	104	13	3	1	0	3	0	124
13:45	108	11	3	0	1	0	6	129
1 Hr	425	61	13	1	1	4	15	520
14:00	93	15	1	1	0	1	1	112
14:15	110	12	1	1	0	1	3	128
14:30	102	23	1	1	2	3	5	137
14:45	100	13	2	1	1	2	9	128
1 Hr	405	63	5	4	3	7	18	505
15:00	117	24	3	0	1	2	8	155
15:15	115	16	1	1	0	0	10	143
15:30	118	22	1	1	1	3	8	154
15:45	134	21	3	1	0	3	7	169
1 Hr	484	83	8	3	2	8	33	621
16:00	117	25	3	0	0	3	14	162
16:15	117	20	2	0	0	2	10	151
16:30	107	21	1	0	0	3	12	144
16:45	96	23	1	0	0	3	16	139
1 Hr	437	89	7	0	0	11	52	596
17:00	137	22	2	0	0	3	17	181
17:15	126	14	0	0	0	3	18	161
17:30	97	4	0	1	2	5	29	138
17:45	106	17	0	0	0	5	12	140
1 Hr	466	57	2	1	2	16	76	620
18:00	101	15	0	0	1	3	19	139
18:15	117	13	0	0	0	5	21	156
18:30	123	11	0	0	0	0	17	151
18:45	116	8	0	0	1	1	14	140
1 Hr	457	47	0	0	2	9	71	586
Total	5132	717	90	29	19	79	434	6500

	Destination : Arm B R810 Old Kilmainham							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	113	22	1	0	2	1	1	140
07:15	121	31	5	1	3	3	5	169
07:30	99	25	6	0	3	2	0	135
07:45	110	18	3	0	4	3	3	141
1 Hr	443	96	15	1	12	9	9	585
08:00	117	17	4	0	5	1	6	150
08:15	117	17	3	0	2	1	6	146
08:30	86	20	2	0	3	5	3	119
08:45	80	22	3	1	3	1	8	118
1 Hr	400	76	12	1	13	8	23	533
09:00	96	17	2	1	2	1	3	122
09:15	88	16	6	1	5	1	1	118
09:30	132	20	1	1	2	2	1	159
09:45	85	14	2	0	4	1	3	109
1 Hr	401	67	11	3	13	5	8	508
10:00	77	12	0	1	4	1	3	98
10:15	75	20	3	1	2	0	2	103
10:30	81	22	5	3	4	2	2	119
10:45	59	16	4	1	1	1	0	82
1 Hr	292	70	12	6	11	4	7	402
11:00	72	16	6	0	2	0	2	98
11:15	66	10	1	1	3	2	1	84
11:30	90	10	1	0	3	0	1	105
11:45	80	19	3	1	3	1	5	112
1 Hr	308	55	11	2	11	3	9	399
12:00	54	14	4	1	0	0	6	79
12:15	55	13	3	0	5	1	4	81
12:30	82	20	1	1	3	2	3	112
12:45	79	9	3	1	5	0	3	100
1 Hr	270	56	11	3	13	3	16	372
13:00	77	5	2	0	3	0	4	91
13:15	82	8	0	3	3	2	0	98
13:30	64	16	2	0	2	0	3	87
13:45	69	12	2	0	5	0	1	89
1 Hr	292	41	6	3	13	2	8	365
14:00	70	13	1	0	1	1	6	92
14:15	66	9	0	1	5	1	2	84
14:30	70	11	0	0	2	0	2	85
14:45	63	6	5	0	3	1	3	81
1 Hr	269	39	6	1	11	3	13	342
15:00	64	13	2	0	1	2	4	86
15:15	76	11	0	1	4	0	1	93
15:30	70	11	4	1	3	3	2	94
15:45	51	8	3	0	2	0	3	67
1 Hr	261	43	9	2	10	5	10	340
16:00	63	7	0	0	3	1	0	74
16:15	64	6	2	0	3	1	7	83
16:30	49	4	0	0	3	2	1	59
16:45	61	9	1	0	4	0	4	79
1 Hr	237	26	3	0	13	4	12	295
17:00	73	4	0	0	4	0	2	83
17:15	54	7	0	0	4	0	6	71
17:30	70	5	2	0	0	0	3	80
17:45	65	4	0	0	2	1	6	78
1 Hr	262	20	2	0	10	1	17	312
18:00	78	8	0	0	6	1	3	96
18:15	75	2	0	0	4	0	4	85
18:30	76	8	0	0	2	2	2	90
18:45	70	6	0	0	2	0	3	81
1 Hr	299	24	0	0	14	3	12	352
Total	3734	613	98	22	144	50	144	4805

	Destination : Arm C R111 South Circular Road(S)							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	103	17	3	2	0	2	8	135
07:15	104	11	0	0	0	4	14	133
07:30	92	17	1	1	0	0	15	126
07:45	99	25	0	1	0	0	11	136
1 Hr	398	70	4	4	0	6	48	530
08:00	88	18	1	0	0	1	18	126
08:15	81	14	3	0	0	1	26	125
08:30	80	9	2	2	0	8	18	119
08:45	90	16	2	0	0	2	19	129
1 Hr	339	57	8	2	0	12	81	499
09:00	94	9	2	1	2	2	9	119
09:15	89	14	4	0	0	1	12	120
09:30	101	17	2	0	0	3	7	130
09:45	108	13	0	0	0	1	3	125
1 Hr	392	53	8	1	2	7	31	494
10:00	91	18	2	1	1	2	4	119
10:15	101	21	4	2	1	0	5	134
10:30	113	16	2	1	0	0	5	137
10:45	102	20	7	1	0	0	6	136
1 Hr	407	75	15	5	2	2	20	526
11:00	106	15	0	3	1	2	3	130
11:15	74	14	4	1	1	1	2	97
11:30	100	21	5	1	1	1	0	129
11:45	86	16	7	2	0	0	6	117
1 Hr	366	66	16	7	3	4	11	473
12:00	72	7	1	1	0	0	2	83
12:15	95	19	2	1	0	1	6	124
12:30	84	18	3	2	1	1	2	111
12:45	85	15	2	0	0	2	9	113
1 Hr	336	59	8	4	1	4	19	431
13:00	92	17	3	0	2	1	4	119
13:15	102	13	0	1	0	1	6	123
13:30	75	15	5	1	1	4	8	109
13:45	107	16	2	1	0	0	14	140
1 Hr	376	61	10	3	3	6	32	491
14:00	93	14	5	1	0	2	7	122
14:15	99	15	1	2	1	1	7	126
14:30	98	15	3	0	1	1	7	125
14:45	76	17	1	1	0	1	3	99
1 Hr	366	61	10	4	2	5	24	472
15:00	76	16	2	0	3	1	8	106
15:15	81	4	0	0	2	2	11	100
15:30	67	10	3	1	1	2	9	93
15:45	50	5	1	1	0	4	6	67
1 Hr	274	35	6	2	6	9	34	366
16:00	75	10	1	0	0	0	9	95
16:15	87	12	0	0	2	1	8	110
16:30	72	11	0	0	1	0	8	92
16:45	68	2	0	0	0	2	15	87
1 Hr	302	35	1	0	3	3	40	384
17:00	91	7	1	0	1	3	10	113
17:15	54	3	0	1	0	2	16	76
17:30	67	4	0	0	0	1	17	89
17:45	66	8	0	0	0	0	9	83
1 Hr	278	22	1	1	1	6	52	361
18:00	79	5	0	0	0	1	17	102
18:15	51	0	0	0	0	0	14	65
18:30	82	9	0	0	0	2	17	110
18:45	66	3	0	0	0	1	15	85
1 Hr	278	17	0	0	0	4	63	362
Total	4112	611	87	33	23	68	455	5389

	Destination : Arm D R810 Emmet Road							
	Car	LGV	OGV1	OGV2	PSV	MC	PC	Total
07:00	23	8	2	0	2	1	1	37
07:15	34	6	2	1	6	1	1	51
07:30	54	6	0	0	2	0	0	62
07:45	37	11	1	0	3	0	1	53
1 Hr	148	31	5	1	13	2	3	203
08:00	54	5	3	0	4	1	0	67
08:15	61	16	4	0	2	2	4	89
08:30	57	11	2	0	2	1	3	76
08:45	59	12	2	0	5	2	3	83
1 Hr	231	44	11	0	13	6	10	315
09:00	43	7	0	0	2	1	1	54
09:15	42	7	4	1	1	0	4	59
09:30	39	12	1	0	4	1	2	59
09:45	55	10	3	1	5	0	1	75
1 Hr	179	36	8	2	12	2	8	247
10:00	49	11	0	0	1	1	0	62
10:15	51	9	2	0	6	0	2	70
10:30	43	10	2	0	0	0	5	60
10:45	47	7	0	1	3	0	0	58
1 Hr	190	37	4	1	10	1	7	250
11:00	45	14	3	1	4	0	2	69
11:15	67	13	5	1	3	0	0	89
11:30	53	16	1	0	3	1	1	75
11:45	59	16	2	0	2	0	1	80
1 Hr	224	59	11	2	12	1	4	313
12:00	74	15	3	2	6	1	1	102
12:15	53	13	4	0	2	1	1	74
12:30	59	13	4	0	1	3	1	81
12:45	70	11	2	0	3	0	2	88
1 Hr	256	52	13	2	12	5	5	345
13:00	71	12	2	0	5	1	1	92
13:15	63	15	4	0	4	0	2	88
13:30	57	13	2	0	3	0	3	78
13:45	63	8	1	0	4	0	2	78
1 Hr	254	48	9	0	16	1	8	336
14:00	68	13	1	1	4	0	4	91
14:15	62	12	5	0	5	0	3	87
14:30	67	8	2	1	3	2	3	86
14:45	78	19	3	0	4	3	2	109
1 Hr	275	52	11	2	16	5	12	373
15:00	75	10	3	1	1	2	2	94
15:15	76	17	4	0	7	0	5	109
15:30	86	14	2	0	1	3	1	107
15:45	66	16	2	0	3	0	1	88
1 Hr	303	57	11	1	12	5	9	398
16:00	78	17	0	0	3	1	5	104
16:15	60	8	0	0	5	3	6	82
16:30	68	17	1	0	2	3	2	93
16:45	78	12	0	0	1	3	1	95
1 Hr	284	54	1	0	11	10	14	374
17:00	58	12	0	0	5	1	5	81
17:15	60	11	2	0	3	2	4	82
17:30	83	13	3	0	4	1	3	107
17:45	77	8	0	0	6	1	8	100
1 Hr	278	44	5	0	18	5	20	370
18:00	80	9	0	0	5	3	8	105
18:15	72	10	1	0	2	2	4	91
18:30	69	4	2	0	6	0	6	87
18:45	54	8	0	0	2	0	3	67
1 Hr	275	31	3	0	15	5	21	350
Total	2897	545	92	11	160	48	121	3874

Dest Totals
429
489
447
474
1839
499
507
470
471
1947
430
405
472
432
1739
384
430
433
388
1635
403
389
438
431
1661
396
397
456
407
1656
435
443
398
436
1712
417
425
433
417
1692
441
445
448
391
1725
435
426
388
400
1649
458
390
414
401
1663
442
397
438
373
1650
20568

TRACSIS

TRAFFIC DATA

Transport Data Collection and Analytics



Max Queue Analysis by Video Observation

Project Number: 3665-IRE

Project Name: Emmet Rd

Client: O' Connor Sutton Cronin Consulting Engineers

Sites: 1-5

Survey Date: Thursday 28 April 2022

Survey Time: 07:00 - 19:00 **Weather:** Dry

Observations: No incidents or observations during the survey period.

Tracsis will retain all personal data relating to this project, including all video images, for a period of three months after receipt of this report and all other data files for one year.

If you would like a copy of the personal data or wish for us to retain for a longer period, please do not hesitate to contact us.

TRAFFIC DATA
Transport Data Collection and Analytics

Client :	O' Connor Sutton Cronin Consulting Engineers	Site plan for 1
Project :	3665-IRE Emmet Rd	Date : 28/04/2022



Client :	O' Connor Sutton Cronin Consulting Engineers	Site plan for 2
Project :	3665-IRE Emmet Rd	Date : 28/04/2022



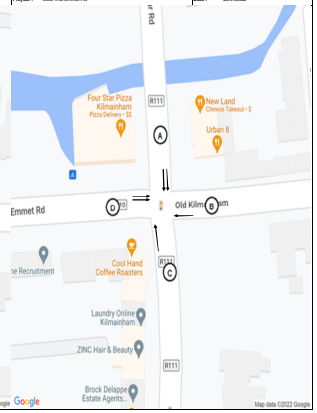
Client :	O' Connor Sutton Cronin Consulting Engineers	Site plan for 3
Project :	3665-IRE Emmet Rd	Date : 28/04/2022



Client :	O' Connor Sutton Cronin Consulting Engineers	Site plan for 4
Project :	3665-IRE Emmet Rd	Date : 28/04/2022



Client :	O' Connor Sutton Cronin Consulting Engineers	Site plan for 5
Project :	3665-IRE Emmet Rd	Date : 28/04/2022

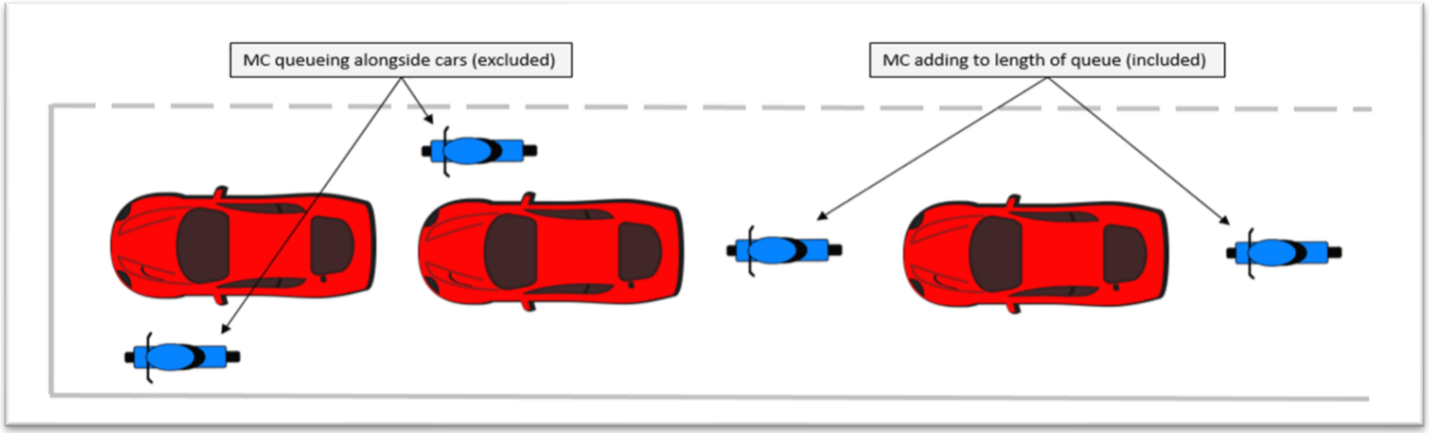


Queue Methodology

A queue is defined as those vehicles at a junction which are stationary or which have slowed down to walking speed or less. Queues are counted according to the weighting system defined below.

Vehicle	Number	Metres
PC, MC	0.5	2.5
LV	1	5
OGV1	2	10
OGV2	3	15
Bus	3	15

Please note that PC or MC are only recorded as queueing when adding to the length of the queue and those that are stopped abreast with another vehicle will not be counted.



Instances in which there are "+" figures in the queue data represent the longest queue that can be accurately seen. These queues were longer than reported but would have to be estimated if any further vehicles exceeding these limits were reported.

On carriageway with more than 1 lane, each lane is identified with numbers, starting with the lane closest to the kerb (inside lane), which is called "Lane 1". The next lane is numbered sequentially, "Lane 2", "Lane 3" and so forth.

TRAFFIC DATA
Transport Data Collection and Analytics

Client : O' Connor Sutton Cronin Consulting Engineers
Project : 3665-IRE Emmet Rd
Site : 1 - R839 Grattan Crescent / R810 Emmet Road / R810 Tyrconnell Road
Date : Thursday 28 April 2022
Queue Method: Max
Queue Lengths: Vehicle Number

Vehicle	Number	Metres
PC, MC *	0.5	2.5
LV	1	5
OGV1	2	10
OGV2	3	15
Bus	3	15

	Arm A				Arm B		Arm C			
	Lane 1(Visible)	Lane 1(Gap Method)	Lane 2(Visible)	Lane 2(Gap Method)	Lane 1	Lane 2	Lane 1(Visible)	Lane 1(Gap Method)	Lane 2(Visible)	Lane 2(Gap Method)
07:00	9		9		5	1	7		12+	21+
07:05	17		14		4	2	5		15+	21+
07:10	19		10		5	5	6		17+	23+
07:15	20		5		8	3	9		14+	25+
07:20	19+	24	5.5		9	6	17		14+	25+
07:25	22+	29	9		8	6	10		13+	27+
07:30	20		10		4	8	6		15+	21+
07:35	16		14		4	5	8		11	
07:40	19+	23	14		9	5	1		12	
07:45	19		10		7	7	2		13.5	
07:50	20+	28	16		8	6	3		12	
07:55	20+	27	14		5	5	4		13	
08:00	19+	28	7		7	4	8		14	
08:05	19+	31+	12		14	8	6		15+	20+
08:10	20+	31+	15		6	12	5		11+	21+
08:15	19+	30+	18+	22	9	9	5		16+	20+
08:20	20+	34+	11		9	7	1		17+	28+
08:25	20+	32+	12.5		11	6	10+	19+	17+	24+
08:30	18+	32+	11		13	11	10+	19+	17+	24+
08:35	19+	30+	7		16	9	12.5+	19.5+	15+	25+
08:40	16		16.5		6	10	11+	18+	17+	27+
08:45	14		7		9	4	6		19+	25+
08:50	18+	23	9		9.5	6	6		13+	24+
08:55	19+	26	14		9	7	8+	11	14+	26+
09:00	20		3		9	7	10		19+	29+
09:05	19+	27	16+	24	6	6	2		16+	22+
09:10	18		9		5	6	9.5		17+	24+
09:15	20+	26	8		5	5	14		13+	17+
09:20	19+	28	13		3	3	5		13+	23+
09:25	20+	29	16		6	5	13		18+	28
09:30	18+	27	7		7.5	5	1		11+	26
09:35	11		9		8	5.5	4		10+	21+
09:40	14		4		3	5	4		16	
09:45	17		4.5		3	12	6		5	
09:50	12		7		8	4	4		10	
09:55	10		13		17	4	4		8	
10:00	11		7		4	8	6		10	
10:05	15		8		4	6	6		11+	20+
10:10	20		6		14	3	3		19+	27+
10:15	10		7		5	11	8		19+	27+
10:20	17		7		3	2.5	7		14+	21+
10:25	7		9		5	4	10		18+	27+
10:30	5		4		8	4	4.5		13+	20
10:35	7		11.5		6	6	8		14	
10:40	11		5		4	7	6		11	
10:45	9		8		5	7	4		11.5	
10:50	6		3		5	4	5		14	
10:55	11		3		5	9	4		13	
11:00	9		8.5		12	4	5		12	
11:05	9		6		6	9	5		14+	21+
11:10	8		5.5		7	5	8		13.5	
11:15	9		11		8	3	8		16	
11:20	6		15		11	7	5		15+	21
11:25	10		3		9	5	3		16+	27+
11:30	6		8		10	4	18		11+	22+
11:35	7		3		6	8	18		14+	23+
11:40	5		6		5	7	8		15	
11:45	6		9		12	6	6		8	
11:50	6		14		4	11	5		12.5	
11:55	12		20		8	5	5		9	
12:00	8		9		14	3	6		8	
12:05	13		8		7	6	7		9	
12:10	13		11		8	7	5		6	
12:15	11		13		10	8	7.5		13	
12:20	9		17		5	5	4		11+	19+
12:25	13		17		10	4	5		16+	28+
12:30	8		9		9	3.5	10		16+	28+
12:35	10		10.5		4.5	10	5		11+	18
12:40	13		16		7	7	6		11	
12:45	4		7		10	4	5		7	
12:50	12		9		9	9	6		11	
12:55	9		11		5	12	8		11+	15

TRAFFIC DATA
Transport Data Collection and Analytics

Client :	O' Connor Sutton Cronin Consulting Engineers
Project :	3665-IRE Emmet Rd
Site :	1 - R839 Grattan Crescent / R810 Emmet Road / R810 Tyrconnell Road
Date :	Thursday 28 April 2022
Queue Method:	Max
Queue Lengths:	Vehicle Number

Vehicle	Number	Metres
PC, MC ^	0.5	2.5
LV	1	5
OGV1	2	10
OGV2	3	15
Bus	3	15

13:00	7		17			5	12		3.5			6							
13:05	9		8			9	7		7			14							
13:10	9		11			12	6		8			7							
13:15	4		9			13	6		7			7							
13:20	8		18			20	8		4			11							
13:25	11		11			13	4		2			12.5+	20.5						
13:30	9		10			6	6		9			10+	21						
13:35	18+	28	12			5	8		3			10+	21						
13:40	14		15			8	6		6.5			9							
13:45	7		12			11	9		14			14							
13:50	12		8			3	7		14			15							
13:55	7		11			14	6		13			11+	24+						
14:00	9		10			23	4.5		13			14+	19+						
14:05	9		6			9	9		5			11							
14:10	8		5			6	3		7			11							
14:15	9		10			18	3.5		7			13							
14:20	8		13			15	12		9			11.5							
14:25	6		15			12	6		15			10							
14:30	11		4			4	5		15			7							
14:35	8		10			6	8		9			12							
14:40	6		10			7	10		7			10							
14:45	8		9			9	6		6			9							
14:50	5		5			8	6		5			9							
14:55	13		5			9	9		6			8							
15:00	20		11			10	8		9			11							
15:05	8.5		7			14	10		6			6							
15:10	8		13			3	8.5		10			6							
15:15	13		12			8	8.5		9			10							
15:20	15		5			14	8.5		7			16+	21						
15:25	9		10			12	5		9			16+	21						
15:30	12		13			17	4		10			14							
15:35	10		8			15	9		10			15+	19						
15:40	3		6			15	12		3			15+	20						
15:45	8		6			9	12		7			15+	20						
15:50	2		11			9	12		8			13							
15:55	17		9			14	10		8			13							
16:00	7		10			7	6		10.5			9							
16:05	11		19			10	5		10.5			9							
16:10	11.5		15			9	9		5			7							
16:15	4		18+		24	17	10		11			5							
16:20	8		19+		30+	17	11		9			9							
16:25	6		13+		28	18	9		9			10							
16:30	13		18			6	9		9			8.5							
16:35	16+	32+	18			21	12		6			15							
16:40	18		13			19	9		11			21+	25+						
16:45	17+	30+	15			6.5	11		12			21							
16:50	19+	32+	16+		32+	7.5	10		12			13+	18						
16:55	11		10.5			11	11		6			11							
17:00	10.5		11			17	12		10			13+	21+						
17:05	8		8			11	7		12			13+	21+						
17:10	10		14			8	6		12			17+	33+						
17:15	6		11			15	8		16+	21		17+	33+						
17:20	7		12			5	13.5		15			14+	23+						
17:25	12		10			10	9		11			16+	24+						
17:30	12		5			21	11		7			16							
17:35	11		15+		32+	19	11		10			5							
17:40	16+	25	11			20	3		9			10							
17:45	14		15+		24	17	9		11			15							
17:50	21+	32+	12			16	6		11			10							
17:55	18+	32+	15			13	9		14			12							
18:00	16+	34+	12.5			7	11		11			11+	24						
18:05	19+	30+	9			6.5	9		8			13+	18						
18:10	18+	31+	15			25	11		11			16							
18:15	16+	27	18.5			20	8.5		11			17+	24						
18:20	18+	32+	15			13	10		17+	22+		15+	26+						
18:25	13		7			4	8		14+	22+		17+	29+						
18:30	14		8			8	6		9			16+	23+						
18:35	8		17			11	7		14			20							
18:40	9		16			7	5		5			15							
18:45	6		4			6	6.5		3			12							
18:50	7		6			11	5		11			10							
18:55	5		10			9	7		7			12+	23+						

TRACSIS | TRAFFIC DATA
Transport Data Collection and Analytics

Client : O' Connor Sutton Cronin Consulting Engineers
Project : 3665-IRE Emmet Rd
Site : 2 - R810 Emmet Road(ENE) / Saint Vincent Street West / R810 Emmet Road(WSW)
Date : Thursday 28 April 2022
Queue Method: Max
Queue Lengths: Vehicle Number

Vehicle	Number	Metres
PC, MC *	0.5	2.5
LV	1	5
OGV1	2	10
OGV2	3	15
Bus	3	15

	Arm A		Arm B		Arm C
	Lane 1	Lane 2	Lane 1	Lane 2	
07:00	0	0	2	0	0
07:05	0	0	2	0	0
07:10	0	0	1	0	0
07:15	0	0	1	0	0
07:20	0	0	1	0	0
07:25	0	0	0	0	12
07:30	0	0	1	0	0
07:35	0	0	0	0	0
07:40	0	0	0.5	0	0
07:45	0	0	0	0	1
07:50	6	0	1	0	3
07:55	3	0	0	0	10
08:00	0	0	0	0	0
08:05	0	0	1	0	0
08:10	5	0	1	0	0
08:15	2	0	2	0	0
08:20	0	0	3	0	21
08:25	2	0	8	0	13
08:30	2	0	8	0	13
08:35	0	0	1	0	8
08:40	0	0	2	0	3
08:45	0	0	2	0	3
08:50	0	0	2	0	14
08:55	2	0	5	0	12
09:00	0	0	5	0	6
09:05	0	0	4	0	6
09:10	2	0	1	0	1
09:15	0	0	1	0	7
09:20	2	0	1	0	4
09:25	13	0	1	0	2
09:30	0	0	2	0	8
09:35	0	0	1	0	1
09:40	0	0	1	0	3
09:45	0	0	1	0	0
09:50	0	0	1	0	0
09:55	4	0	0	0	12
10:00	0	0	0	0	3
10:05	0	0	0	0	10
10:10	0	0	1	0	7
10:15	0	0	1	0	1
10:20	0	0	0	0	0
10:25	0	0	1	0	5
10:30	0	0	1	0	4
10:35	0	0	0	0	1
10:40	0	0	2	0	0
10:45	0	0	2	0	1
10:50	0	0	0	0	1
10:55	6	0	1	0	5
11:00	0	0	0	0	8
11:05	2	0	0	0	0
11:10	0	0	1	0	0
11:15	0	0	0	0	0
11:20	0	0	0	0	3
11:25	2	0	3	0	3
11:30	1	0	3	0	1
11:35	0	0	1	0	0
11:40	0	0	1	0	0
11:45	5	0	5	0	5
11:50	0	0	0	0	5
11:55	1	0	0	0	2
12:00	4	0	1	0	5
12:05	2	0	4	0	2
12:10	0	0	1	0	5
12:15	0	0	1	0	6
12:20	0	0	1	0	0
12:25	4	0	1	0	12
12:30	0	0	1	0	14
12:35	3	0	0	0	0
12:40	5	0	0	0	0
12:45	0	0	2	0	1
12:50	0	0	1	0	4
12:55	0	0	2	0	0

TRACSIS | TRAFFIC DATA
Transport Data Collection and Analytics

Client : O' Connor Sutton Cronin Consulting Engineers
Project : 3665-IRE Emmet Rd
Site : 2 - R810 Emmet Road(ENE) / Saint Vincent Street West / R810 Emmet Road(WSW)
Date : Thursday 28 April 2022
Queue Method: Max
Queue Lengths: Vehicle Number

Vehicle	Number	Metres
PC, MC *	0.5	2.5
LV	1	5
OGV1	2	10
OGV2	3	15
Bus	3	15

13:00	0	0		1	0	0
13:05	1	0		2	0	9
13:10	2	0		0	0	8
13:15	2	0		1	0	3
13:20	9	0		1	0	0
13:25	0	0		1	0	3
13:30	1	0		2	0	0
13:35	0	0		2	0	1
13:40	0	0		3	0	0
13:45	0	0		2	0	1
13:50	0	0		1	0	0
13:55	3	0		3	0	2
14:00	3	0		2	0	5
14:05	0	0		1	0	2
14:10	5	0		2	0	5
14:15	0	0		0	0	4
14:20	3	0		1	0	7
14:25	1	0		1	0	4.5
14:30	0	0		3	0	1
14:35	0	0		5	0	6
14:40	4	0		1	0	5
14:45	0	0		1	0	4
14:50	0	0		1	0	1
14:55	0	0		2	0	1
15:00	2	0		2	0	6
15:05	0	0		2	0	2
15:10	0	0		1	0	6
15:15	1	0		2	0	0
15:20	8	2		2	0	0
15:25	8	0		1	0	9
15:30	0	0		1	0	3
15:35	0	0		4	0	21
15:40	10	0		4	0	6
15:45	5	0		0	0	16
15:50	0	0		1	0	0
15:55	0	0		3	0	6
16:00	5	0		2	0	6
16:05	4	0		4	0	14
16:10	0	0		1	0	1
16:15	4	1		0.5	0	2
16:20	8	0		1	0	7
16:25	5	0		1	0	3
16:30	6	0		1	0	6
16:35	5	0		1	0	8
16:40	13	0		1	0	10
16:45	2	0		3	0	15
16:50	0	0		5	0	8
16:55	0	0		1	0	1
17:00	7	0		1	0	12
17:05	0	0		1	0	3
17:10	0	0		1	0	0
17:15	3	0		1	0	8
17:20	0	0		2	0	17
17:25	0	0		1	0	8
17:30	12	0		2	0	4
17:35	13	0		1	0	2
17:40	9	0		1	0	9
17:45	9	0		2	0	2
17:50	2	0		1	0	8
17:55	0	0		2	0	14
18:00	0	0		2	0	10
18:05	0	0		1	0	20
18:10	7	0		1	0	9
18:15	4	0		1	0	5
18:20	0	0		1	0	5
18:25	0	0		0	0	8
18:30	0	0		0	0	12.5
18:35	0	0		1	0	11
18:40	0	0		1	0	2
18:45	0	0		3	0	0
18:50	3	0		2	0	3
18:55	2	0		1	0	0

TRACSIS | TRAFFIC DATA
Transport Data Collection and Analytics

Client : O' Connor Sutton Cronin Consulting Engineers
Project : 3665-IRE Emmet Rd
Site : 3 - R810 Emmet Road(ENE) / Bulfin Road / R810 Emmet Road(WSW)
Date : Thursday 28 April 2022
Queue Method: Max
Queue Lengths: Vehicle Number

Vehicle	Number	Metres
PC, MC *	0.5	2.5
LV	1	5
OGV1	2	10
OGV2	3	15
Bus	3	15

	Arm A		Arm B		Arm C	
	Lane 1	Lane 2	Lane 1	Lane 2	Lane 1	Lane 2
07:00	0	0	0	0	0	1
07:05	0	0	0	0	0	1
07:10	0	0	1	0	4	4
07:15	0	0	1	0	1	2
07:20	8	0	0	0	8	2
07:25	2	0	0	0	5	1
07:30	0	0	2	0	0	2
07:35	0	0	3	0	0	2
07:40	0	0	1	0	0	3
07:45	0	0	4	0	0	3
07:50	3	0	1	0	0	4
07:55	3	0	4	0	3	2.5
08:00	0	0	2.5	0	0	5
08:05	5	0	4	0	0	8
08:10	1	0	3	0	3	3
08:15	7	0	1	0	3	2
08:20	7	0	4	0	5	4
08:25	0	0	2	0	7	5
08:30	1	0	4	0	2	2
08:35	2	0	3	0	4	1
08:40	0	0	2	0	0	2
08:45	4	0	2	0	3	2
08:50	0	0	1	0	3	2
08:55	7	0	2	0	1	1
09:00	4	0	2	0	1	4
09:05	3	0	1	0	6	0
09:10	1	0	2	0	10	2
09:15	4	0	2	0	7	2
09:20	1	0	2	0	3	0
09:25	2	0	2	0	0	3
09:30	4	0	1	0	3	4
09:35	2	0	3	0	5	1
09:40	0	0	2	0	2	1
09:45	0	0	0	0	0	3
09:50	0	0	0	0	0	4
09:55	10	0	0	0	3	3
10:00	0	0	1	0	0	1
10:05	0	0	1	0	2	3
10:10	0	0	1	0	2	0
10:15	14	0	1	0	0	4
10:20	0	0	1	0	0	2
10:25	0	0	3	0	2	2
10:30	0	0	3	0	6	2
10:35	0	0	2	0	0	0
10:40	0	0	2	0	0	1
10:45	0	0	2	0	1	2
10:50	0	0	4	0	0	0
10:55	0	0	1	0	0	1
11:00	0	0	2	0	0	0
11:05	4	0	2	0	0	3
11:10	0	0	3	0	0	3
11:15	0	0	4	0	0	2
11:20	2	0	1	0	0	3
11:25	1	0	2	0	0	4
11:30	0	0	2	0	0	3
11:35	0	0	1	0	0	1
11:40	0	0	2	0	0	1
11:45	2	0	2	0	0	3
11:50	2	0	1	0	4	0
11:55	3	0	2	0	0	2
12:00	6	0	5	0	8	1
12:05	7	0	2	0	3	2
12:10	9	0	1	0	3	4
12:15	7	0	4	0	4	1
12:20	1	0	1	0	0	2
12:25	0	0	1	0	0	1
12:30	1.5	0	1	0	0	4
12:35	11	0	0	0	5	2
12:40	6	0	1	0	7	1
12:45	0	0	2	0	6	1
12:50	0	0	3	0	0	7
12:55	3	0	4	1	5	2

TRACSIS | **TRAFFIC DATA**
Transport Data Collection and Analytics

Client : O' Connor Sutton Cronin Consulting Engineers
Project : 3665-IRE Emmet Rd
Site : 3 - R810 Emmet Road(ENE) / Bulfin Road / R810 Emmet Road(WSW)
Date : Thursday 28 April 2022
Queue Method: Max
Queue Lengths: Vehicle Number

Vehicle	Number	Metres
PC, MC *	0.5	2.5
LV	1	5
OGV1	2	10
OGV2	3	15
Bus	3	15

13:00	9	0	3	0	6	4
13:05	7.5	0	5	0	4	1
13:10	0	0	3	0	0	1
13:15	3	0	3	0	5	1
13:20	3	0	2	0	9	2
13:25	5	0	3	0	4	1
13:30	0	0	1	0	0	2
13:35	3	0	3	0	7	2
13:40	9	0	3	0	4	2
13:45	5	0	1	0	0	6
13:50	0	0	0	0	2	1
13:55	4	0	2	0	3	1
14:00	0	0	3	0	0	5
14:05	10	0	1	0	4	2
14:10	3	0	2	0	0	2
14:15	5	0	3	0	1	2
14:20	0	0	3	0	0	4
14:25	9	0	1	0	0	3
14:30	0	0	0	0	0	1
14:35	6	0	1	0	4	3
14:40	1	0	1	0	4	3
14:45	2	0	2	0	0	2
14:50	5	0	1	0	0	3
14:55	11	0	2	0	2	2
15:00	0	0	1	0	0	1
15:05	2	0	3	0	2	1
15:10	0	0	3	0	0	1
15:15	9	0	2	0	2	1
15:20	1	0	3	0	5	5
15:25	4	0	2	0	2	6
15:30	0	0	0	0	0	0
15:35	2	0	8	0	3	2
15:40	6	0	11	0	3	2
15:45	0	0	4	0	0	3
15:50	0	0	4	0	0	7
15:55	0	0	5	0	0	6
16:00	10	0	8	1	4	2
16:05	9	0	6	0	1	2
16:10	1	0	5	0	0	4
16:15	0	0	1	0	0	4
16:20	0	0	3	0	0	0
16:25	0	0	2	0	0	0
16:30	5	0	6	0	1	1
16:35	5	0	3	0	0	1
16:40	1	2	5	0	0	4
16:45	0	0	2	0	9	2
16:50	4	0	3	0	1	2
16:55	6	0	3	0	1	3
17:00	9	0	5	0	2	2
17:05	0	0	2.5	0	0	1
17:10	0	0	7	0	0	5
17:15	2	0	1	0	1	1
17:20	10	0	3	0	2	2
17:25	8	0	3	0	4	1
17:30	11	0	3	0	9.5	2
17:35	12	0	2	0	2	2
17:40	10	0	2	0	0	3
17:45	7	0	4	0	5	5
17:50	10	0	3	0	4	3
17:55	7	0	2	0	1	1
18:00	0	0	2	0	7	2
18:05	0	0	7	0	7	2
18:10	10	0	1	0	1	6
18:15	0	0	5	0	0	2
18:20	0	0	4	0	0	1
18:25	0	0	4	0	0	3
18:30	0	0	2	0	0	4
18:35	11	0	2	0	3	2
18:40	0	0	2	0	0	4
18:45	0	0	3	0	0	0
18:50	0	0	5	0	0	2
18:55	0	0	2	0	0	2

TRACSIS | **TRAFFIC DATA**
Transport Data Collection and Analytics

Client :	O' Connor Sutton Cronin Consulting Engineers
Project :	3665-IRE Emmet Rd
Site :	4 - Turvey Avenue / R810 Emmet Road(E) / Luby Road / R810 Emmet Road(W)
Date :	Thursday 28 April 2022
Queue Method:	Max
Queue Lengths:	Vehicle Number

Vehicle	Number	Metres
PC, MC *	0.5	2.5
LV	1	5
OGV1	2	10
OGV2	3	15
Bus	3	15

	Arm A	Arm B	Arm C	Arm D	
				Lane 1	Lane 2
07:00	1	0	0	0	0
07:05	1	0	0	0	0
07:10	0	0	0	0	0
07:15	0	0	1	0	0
07:20	1	0	1	0	7
07:25	1	0	0	0	0
07:30	1	0	0	0	0
07:35	1	0	1	0	6
07:40	0	0	1	0	0
07:45	0	0	2	0	0
07:50	0	0	2	0	0
07:55	1	0	1	0	0
08:00	1	1	2	0	0
08:05	2	0	1	0	0
08:10	1	0	1	0	0
08:15	0	0	2	0	0
08:20	2	0	0	0	3
08:25	1	0	2	0	0
08:30	0	1	1	0	3
08:35	0	0	2	0	9
08:40	1	0	1	0	0
08:45	0	0	1	0	0
08:50	1	0	1	0	0
08:55	1	0	1	0	6
09:00	1	0	1	0	0
09:05	2	0	1	0	3
09:10	1	1	2	0	0
09:15	3	0	0	0	2
09:20	0	0	0	0	4
09:25	1	0	1	0	0
09:30	1	0	1	0	0
09:35	1	0	0	0	0
09:40	1	0	1	0	0
09:45	0	0	1	0	2
09:50	1	0	0	0	0
09:55	0	0	1	1	4
10:00	0	0	1	0	0
10:05	0	0	0	0	0
10:10	0	0	1	0	0
10:15	0	0	0	0	0
10:20	1	0	1	0	2
10:25	0	0	1	0	0
10:30	1	0	1	0	0
10:35	1	0	1	0	0
10:40	0	0	0	0	0
10:45	1	0	0	0	0
10:50	0	0	1	0	0
10:55	1	0	0	0	0
11:00	0	1	0	0	0
11:05	1	1	1	0	2
11:10	0	0	1	1	0
11:15	0	0	0	0	0
11:20	0	0	0	0	0
11:25	1	0	1	0	0
11:30	1	0	0	0	1
11:35	1	1	0	0	0
11:40	0	0	1	0	0
11:45	0	0	1	0	0
11:50	0	0	1	0	0
11:55	0	0	1	0	0
12:00	0	1	2	0	0
12:05	0	0	1	0	0
12:10	1	0	1	0	0
12:15	0	1	1	0	0
12:20	1	0	0	0	0
12:25	0	0	1	0	0
12:30	0	0	1	0	4
12:35	1	0	1	0	0
12:40	1	0	1	0	0
12:45	1	0	0	0	1
12:50	0	4	0	0	1
12:55	1	0	1	0	0

TRACSIS | TRAFFIC DATA
Transport Data Collection and Analytics

Client : O' Connor Sutton Cronin Consulting Engineers
Project : 3665-IRE Emmet Rd
Site : 4 - Turvey Avenue / R810 Emmet Road(E) / Luby Road / R810 Emmet Road(W)
Date : Thursday 28 April 2022
Queue Method: Max
Queue Lengths: Vehicle Number

Vehicle	Number	Metres
PC, MC *	0.5	2.5
LV	1	5
OGV1	2	10
OGV2	3	15
Bus	3	15

13:00	1	1	2	0	0
13:05	0	0	2	0	0
13:10	2	0	1	1	1
13:15	1	0	1	0	0
13:20	0	0	1	0	0
13:25	0	0	1	0	0
13:30	1	0	1	0	0
13:35	0	0	2	0	0
13:40	1	0	1	0	0
13:45	1	0	0	0	0
13:50	1	1	0	0	0
13:55	0	0	1	0	0
14:00	0	0	1	0	1
14:05	0.5	0	2	0	0
14:10	1	0	1	0	0
14:15	0	4	2	0	0
14:20	0	0	1	0	0
14:25	1	0	1	0	0
14:30	0	0	1	0	2
14:35	0	0	0	0	0
14:40	0	0	0	0	0
14:45	1	0	1	0	0
14:50	0	0	1	0	1
14:55	1	0	3	0	0
15:00	0	0	1	0	0
15:05	0	0	1	0	0
15:10	0	0	1	0	0
15:15	0	0	1	0	0
15:20	1	0	1	0	0
15:25	1	0	4	0	0
15:30	1	0	1	0	0
15:35	0	1	1	0	0
15:40	0	0	2	0	0
15:45	0	0	2	0	0
15:50	0	0	1	0	0
15:55	0	0	2	0	0
16:00	0	0	2	0	0
16:05	0	0	1	0	0
16:10	0	0	2	0	0
16:15	1	0	1	0	0
16:20	0	0	2	0	1
16:25	0	0	4	0	0
16:30	0	0	1	0	0
16:35	0	0	2	0	0
16:40	1	0	2	0	0
16:45	0	0	1	0	0
16:50	0	0	1	0	0
16:55	0	0	1	0	0
17:00	0	0	1	0	0
17:05	1	0	1	0	0
17:10	1	0	2	0	4
17:15	1	0	1	0	0
17:20	1	0	1	0	0
17:25	1	0	0	0	0
17:30	0	0	3	0	0
17:35	0	0	4	0	0
17:40	0	0	3	0	0
17:45	0	0	2	0	0
17:50	1	0	1	0	0
17:55	0	0	1	0	0
18:00	1	1	1	1	0
18:05	0	0	2	0	0
18:10	0	0	1	0	0
18:15	1	1	2	0	0
18:20	0	0	1	0	0
18:25	0	1	2	0	0
18:30	0	0	1	0	0
18:35	1	0	1	0	3
18:40	1	0	3	0	9
18:45	1	0	1	0	0
18:50	0.5	1	2	0	0
18:55	0	0	1	0	0

TRACSIS | TRAFFIC DATA
Transport Data Collection and Analytics

Client :	O' Connor Sutton Cronin Consulting Engineers
Project :	3665-IRE Emmet Rd
Site :	5 - R111 South Circular Road(N) / R810 Old Kilmainham / R111 South Circular Road(S) / R810 Emmet Road
Date :	Thursday 28 April 2022
Queue Method:	Max
Queue Lengths:	Vehicle Number

Vehicle	Number	Metres
PC, MC *	0.5	2.5
LV	1	5
OGV1	2	10
OGV2	3	15
Bus	3	15

	Arm A		Arm B		Arm C	Arm D	
	Lane 1	Lane 2	Visible	Gap Method		Lane 1	Lane 2
07:00	17	1	3		6	3	12
07:05	16	1	8		11	2	20
07:10	16	0	9		21	3	14
07:15	17	1	4		19	3	22
07:20	17	1	9		11	3	24
07:25	16	4	9		17.5	10	21
07:30	14	2	6		16.5	7	22
07:35	18	0	8		16.5	3	19
07:40	18	1	11		19	3	23
07:45	18	1	2		17	5	21
07:50	18	1	12		19	5	12.5
07:55	11	1	9		17	2	19
08:00	4	0	7		15	2	25
08:05	4	1	12		19.5	7	22
08:10	12	3	14		17.5	5	24
08:15	7	2	19		17	2	26
08:20	18	0	19+	28+	12	1	28
08:25	14	3	16		14	6	18
08:30	17	2	15		10	7	14
08:35	18	0	7		18	6	22
08:40	12	1	15		19	5	9
08:45	9	2	15		14	3	12
08:50	18	3	8.5		18	3	10
08:55	18	3	16		10	4	16
09:00	5	1	9		11	5	21
09:05	1	0	5		18	6	26
09:10	8	2	6		16	3	25
09:15	12	0.5	4		11	2	26
09:20	18	2	13		10	1	28
09:25	5	2	10		11.5	1	24
09:30	18	1	7		11	3	20
09:35	18.5	1	16.5		13	2	22
09:40	18	1	18		15	0.5	10
09:45	18	1	20+	25+	18	7	18
09:50	13	0	9		14	3	10
09:55	17	1	19+	24	15	1	8
10:00	18	0.5	9		18	6	6
10:05	3	1.5	9		16	2	8
10:10	14	3	19+	25+	18	2	13
10:15	18	1	19+	37+	19.5	3	9
10:20	18	2	21+	33+	16	2	14
10:25	18	1	18		15	2	13
10:30	5	1	20+	29+	11	4	12
10:35	18	0	20+	30+	17	1	13
10:40	18	1	21+	38+	10	2	9
10:45	2	1	20+	28+	9	6	6
10:50	4	0	21+	29+	7	3	7
10:55	5	1	19+	26+	9	3	7
11:00	18	1	22+	33+	9	1	19
11:05	18	4	22+	26+	9	3	14
11:10	10	1	21+	31+	11.5	3	9
11:15	0	1	24+	31+	14	1	5.5
11:20	17	1	23+	33+	10	3	4
11:25	18	0	21+	29+	16	3	5
11:30	17	2	22+	30+	20	4	8
11:35	6	0	23+	36+	21	2	12
11:40	0	2	24+	32+	19	4	10
11:45	18	0	26+	39+	18	5	9
11:50	17	0	22+	34+	17	2.5	13
11:55	6	1	25+	36+	13	3.5	18
12:00	12	0	27+	34+	20	5	5
12:05	0	0	19+	24+	17	2	9
12:10	9	0	17		20	6	9
12:15	11	0	10		17	5	11
12:20	10	0	21+	27+	15	1	7
12:25	13	0	20+	28+	19.5	5	19
12:30	12	0	24.5+	32	16.5	5	10
12:35	1	0	20+	26+	19	5	8
12:40	17	0	15		20	4	12
12:45	18	0	24+	29+	9	3	6.5
12:50	18	0	16		12	4	10
12:55	18	1	17		10	4	8

TRAFFIC DATA
Transport Data Collection and Analytics

Client :	O' Connor Sutton Cronin Consulting Engineers
Project :	3665-IRE Emmet Rd
Site :	5 - R111 South Circular Road(N) / R810 Old Kilmainham / R111 South Circular Road(S) / R810 Emmet Road
Date :	Thursday 28 April 2022
Queue Method:	Max
Queue Lengths:	Vehicle Number

Vehicle	Number	Metres
PC, MC *	0.5	2.5
LV	1	5
OGV1	2	10
OGV2	3	15
Bus	3	15

13:00	8	0	23+	29+	9	3	11
13:05	17	1	23+	30+	14	3	9
13:10	7	2	19		18	6	10
13:15	10	3	14		20	6	9
13:20	17.5	1	16		12	3	6
13:25	4	3	16		20	4	15
13:30	13	1	17		16	2.5	12
13:35	3	0	24+	34+	21	5	14
13:40	18	2	21+	28+	20	6	11
13:45	18	2	13		15	3	9
13:50	18	1	23+	33+	13	3	10
13:55	18	4	24+	31+	19	2	14
14:00	18	1	21+	27+	21	1	13
14:05	18	1	19+	24+	10	3.5	6
14:10	0	1	23+	34+	20	3	4
14:15	18	3	17		19	3	14
14:20	9	0	18+	26+	20	4	15
14:25	18	3	22+	28+	21	5.5	6
14:30	14	3	18+	28+	20	2	16
14:35	13	1	16		21	2	5
14:40	4	1	9		20	3	5
14:45	4	3	14.5		19	5.5	10
14:50	18	1	21+	29+	20	2	8.5
14:55	17	6	17		19	5	9
15:00	13	3	19+	26+	18	6	10
15:05	9	2	24+	36+	21	6	10
15:10	6	2	22+	31+	15	3	8.5
15:15	9	1	26+	34+	19	1	5
15:20	11	1	25+	34+	19	5	13
15:25	16	4	23+	31+	16	4	9
15:30	12	2	22+	29+	20	4	9
15:35	5	1	19.5+	26+	20	7	6
15:40	8	2	24+	33+	20	6	10
15:45	18	3.5	21+	25+	20	9	9
15:50	18	1	23+	29+	19	4	11
15:55	18	1	21+	28+	21	5	11
16:00	13	1	20+	27+	16	5	9
16:05	18	6	24+	29+	21	5	13
16:10	17	1	11		21	5	9
16:15	14	2	19+	24+	21	4	13
16:20	9	2	23+	28+	20	3	8
16:25	4	0	21+	32+	20.5	5	11
16:30	11	1	25+	34+	18	2	4
16:35	6	2	23+	29+	18	2	2.5
16:40	12	2	21+	29+	19	8	9
16:45	18	1	20+	26+	18	5.5	8
16:50	18	3	21+	27+	19	4	8
16:55	18	5	22+	30	18.5	5	8
17:00	12.5	4	9		19	2	5
17:05	10	1	14		19	3	11
17:10	11	7	19+	25+	19.5	6	16
17:15	18	2	20+	26+	18	4	8.5
17:20	18	2	25+	31+	18	6	6
17:25	18	4	25+	31+	17	10	11
17:30	15	1	23+	33+	20	11	8
17:35	14	2	24+	31+	20	4	13
17:40	17	6	22+	26+	18.5	3	5
17:45	18	1	23+	29+	19	6	16
17:50	14	1	21		20	7	5
17:55	18	1	8		17	6	3
18:00	17	1	21+	28+	18	3	11
18:05	18	1	23+	29+	17	7	12
18:10	17	5	22+	33+	19	5	10
18:15	18	1	23+	31+	19	6	13
18:20	17	1	23+	35+	20	7	9
18:25	15	1	19+	27+	19	7	11
18:30	17	3	15		17	3	10.5
18:35	17	3.5	9		18	4	9
18:40	17	1	14		18	10	15
18:45	18	1	18+	25+	17	10	17
18:50	18	0	19		17	5	10
18:55	17	2	22+	29+	15	6	6

TRACSIS

TRAFFIC DATA

Transport Data Collection and Analytics



Pedestrian Analysis by Video Observation

Project Number: 3665-IRE
Project Name: Emmet Rd
Client: O' Connor Sutton Cronin Consulting Engineers

Sites: 1-5
Survey Date: Thursday 28 April 2022

Survey Start: 07:00
Survey End: 19:00

AM Weather: Dry
PM Weather: Dry

Observations: No incidents or observations during the survey period

Tracsis will retain all personal data relating to this project, including all video images, for a period of three months after receipt of this report and all other data files for one year.

If you would like a copy of the personal data or wish for us to retain for a longer period, please do not hesitate to contact us.

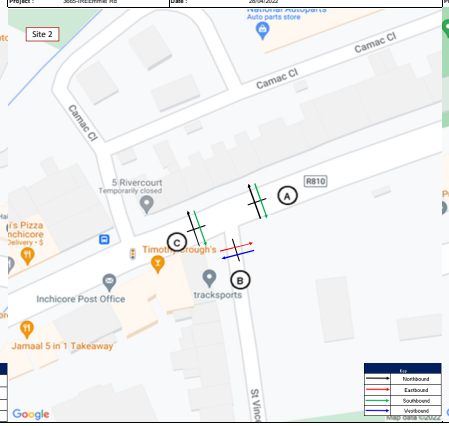
TRAFFIC DATA
Transport Data Collection and Analytics

Client :	O' Connor Sutton Cronin Consulting En	Site plan for :	1
Project :	3665-IREEmmet Rd	Date :	28/04/2022



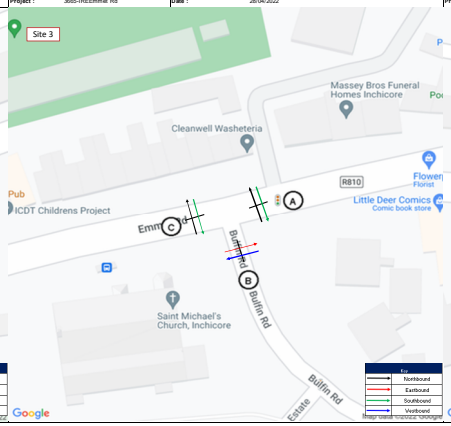
TRAFFIC DATA
Transport Data Collection and Analytics

Client :	O' Connor Sutton Cronin Consulting En	Site plan for :	2
Project :	3665-IREEmmet Rd	Date :	28/04/2022



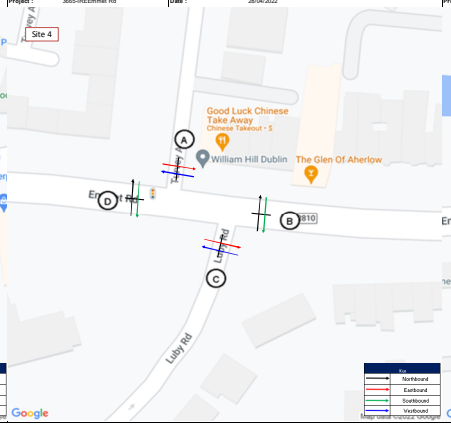
TRAFFIC DATA
Transport Data Collection and Analytics

Client :	O' Connor Sutton Cronin Consulting En	Site plan for :	3
Project :	3665-IREEmmet Rd	Date :	28/04/2022



TRAFFIC DATA
Transport Data Collection and Analytics

Client :	O' Connor Sutton Cronin Consulting En	Site plan for :	4
Project :	3665-IREEmmet Rd	Date :	28/04/2022



TRAFFIC DATA
Transport Data Collection and Analytics

Client :	O' Connor Sutton Cronin Consulting En	Site plan for :	5
Project :	3665-IREEmmet Rd	Date :	28/04/2022



TRACSIS

TRAFFIC DATA

Transport Data Collection and Analytics

Client: O' Connor Sutton Cronin Consulting Engineers
Project: 3665-IRE Emmet Rd
Site: 1
Date: 28/04/2022

	Arm A			
	Eastbound		Westbound	
	Ped	PC	Ped	PC
07:00	1	0	1	0
07:15	0	0	0	0
07:30	0	0	1	0
07:45	2	0	1	0
1 Hr	3	0	3	0
08:00	0	0	3	0
08:15	2	0	2	0
08:30	3	0	23	0
08:45	5	0	13	0
1 Hr	10	0	41	0
09:00	4	0	3	0
09:15	0	0	4	0
09:30	7	0	6	0
09:45	7	0	5	0
1 Hr	18	0	18	0
10:00	1	0	7	0
10:15	3	0	4	0
10:30	6	0	4	0
10:45	2	0	8	1
1 Hr	12	0	23	1
11:00	0	0	3	0
11:15	2	0	2	0
11:30	0	0	6	0
11:45	6	0	3	0
1 Hr	8	0	14	0
12:00	7	0	6	0
12:15	11	0	3	0
12:30	42	1	7	0
12:45	12	0	15	0
1 Hr	72	1	31	0
13:00	20	0	10	0
13:15	5	0	39	0
13:30	5	0	14	0
13:45	3	0	16	0
1 Hr	33	0	79	0
14:00	8	0	1	0
14:15	10	0	13	0
14:30	10	0	7	0
14:45	5	0	10	0
1 Hr	33	0	31	0
15:00	5	0	10	0
15:15	4	0	8	0
15:30	8	0	8	0
15:45	2	0	5	1
1 Hr	19	0	31	1
16:00	8	0	12	0
16:15	4	0	7	0
16:30	4	0	8	0
16:45	8	0	6	0
1 Hr	24	0	33	0
17:00	6	0	3	0
17:15	2	0	3	0
17:30	5	0	4	0
17:45	6	0	3	0
1 Hr	19	0	13	0
18:00	8	0	11	0
18:15	6	0	2	0
18:30	1	0	3	0
18:45	1	0	2	1
1 Hr	16	0	18	1
Total	267	1	335	3

	Arm B			
	Northbound		Southbound	
	Ped	PC	Ped	PC
07:00	2	0	1	0
07:15	0	0	0	0
07:30	3	1	5	0
07:45	4	0	5	0
1 Hr	9	1	11	0
08:00	3	0	4	0
08:15	5	2	14	0
08:30	8	0	13	0
08:45	6	1	18	0
1 Hr	22	3	49	0
09:00	9	0	8	0
09:15	12	0	13	0
09:30	6	0	4	0
09:45	6	0	7	0
1 Hr	33	0	32	0
10:00	5	2	3	0
10:15	6	1	3	0
10:30	4	0	13	0
10:45	10	0	12	0
1 Hr	25	3	31	0
11:00	7	0	13	0
11:15	14	1	5	0
11:30	3	0	4	0
11:45	10	0	9	0
1 Hr	34	1	31	0
12:00	10	0	10	0
12:15	10	0	21	0
12:30	14	0	16	0
12:45	10	1	12	0
1 Hr	44	1	59	0
13:00	19	0	19	0
13:15	13	0	12	0
13:30	13	0	20	0
13:45	27	0	4	1
1 Hr	72	0	55	1
14:00	7	0	12	1
14:15	5	0	10	1
14:30	11	0	14	0
14:45	13	0	9	1
1 Hr	36	0	45	3
15:00	6	0	22	0
15:15	11	0	10	0
15:30	11	1	7	0
15:45	25	1	14	0
1 Hr	53	2	53	0
16:00	21	0	12	0
16:15	8	0	20	0
16:30	20	0	10	0
16:45	17	0	14	0
1 Hr	66	0	56	0
17:00	8	0	21	1
17:15	10	0	22	0
17:30	13	0	22	0
17:45	32	0	20	1
1 Hr	63	0	85	2
18:00	12	0	16	0
18:15	18	0	27	0
18:30	9	0	16	0
18:45	7	0	4	0
1 Hr	46	0	63	0
Total	503	11	570	6

	Arm C			
	Eastbound		Westbound	
	Ped	PC	Ped	PC
07:00	1	0	1	0
07:15	3	0	0	0
07:30	9	0	3	0
07:45	2	2	3	0
1 Hr	15	2	7	0
08:00	9	1	3	1
08:15	12	0	3	0
08:30	22	0	16	1
08:45	12	0	2	0
1 Hr	55	1	24	2
09:00	10	0	11	0
09:15	5	0	9	0
09:30	10	0	2	0
09:45	7	0	10	0
1 Hr	32	0	32	0
10:00	12	0	9	0
10:15	11	0	7	0
10:30	4	0	18	0
10:45	7	0	10	0
1 Hr	34	0	44	0
11:00	11	0	9	0
11:15	8	0	6	0
11:30	5	0	6	0
11:45	6	0	8	0
1 Hr	30	0	29	0
12:00	8	0	7	0
12:15	5	0	10	0
12:30	11	0	8	0
12:45	14	0	13	0
1 Hr	38	0	38	0
13:00	13	0	9	0
13:15	15	0	15	0
13:30	7	0	11	0
13:45	12	0	25	0
1 Hr	47	0	60	0
14:00	10	0	12	0
14:15	7	0	8	0
14:30	32	0	19	0
14:45	26	0	13	0
1 Hr	75	0	52	0
15:00	13	0	12	0
15:15	9	0	12	0
15:30	22	1	22	0
15:45	11	0	11	0
1 Hr	55	1	57	0
16:00	14	2	5	0
16:15	21	0	17	0
16:30	16	0	18	0
16:45	9	0	9	0
1 Hr	60	2	49	0
17:00	7	0	12	3
17:15	7	0	10	0
17:30	7	1	7	0
17:45	18	0	12	0
1 Hr	39	1	41	3
18:00	9	0	17	0
18:15	9	0	9	0
18:30	7	0	6	0
18:45	10	0	8	0
1 Hr	35	0	40	0
Total	515	7	473	5

TRACSIS | TRAFFIC DATA
Transport Data Collection and Analytics

Client: O' Connor Sutton Cronin Consulting Engineers
Project: 3665-IRE Emmet Rd
Site: 2
Date: 28/04/2022

	Arm A			
	Northbound		Southbound	
	Ped	PC	Ped	PC
07:00	0	0	1	0
07:15	0	0	0	0
07:30	0	0	0	0
07:45	0	0	1	0
1 Hr	0	0	2	0
08:00	0	0	0	0
08:15	0	0	0	0
08:30	0	0	0	0
08:45	0	0	1	0
1 Hr	0	0	1	0
09:00	0	0	1	0
09:15	0	0	0	0
09:30	0	0	0	0
09:45	1	0	2	0
1 Hr	1	0	3	0
10:00	0	0	1	0
10:15	0	0	0	0
10:30	0	0	0	0
10:45	1	0	0	0
1 Hr	1	0	1	0
11:00	0	0	1	0
11:15	0	0	0	0
11:30	0	0	0	0
11:45	0	0	0	0
1 Hr	0	0	1	0
12:00	1	0	0	0
12:15	2	0	1	0
12:30	0	0	1	0
12:45	0	0	2	0
1 Hr	3	0	4	0
13:00	0	0	0	0
13:15	0	0	1	0
13:30	0	0	0	0
13:45	0	0	0	0
1 Hr	0	0	1	0
14:00	0	0	0	0
14:15	0	0	1	0
14:30	0	0	1	0
14:45	0	0	0	0
1 Hr	0	0	2	0
15:00	2	0	1	0
15:15	0	0	1	0
15:30	0	0	1	0
15:45	2	0	2	0
1 Hr	4	0	5	0
16:00	0	0	0	0
16:15	1	0	0	0
16:30	0	0	2	0
16:45	1	0	0	0
1 Hr	2	0	2	0
17:00	1	0	0	0
17:15	0	0	1	0
17:30	0	0	0	0
17:45	3	0	1	0
1 Hr	4	0	2	0
18:00	2	0	0	0
18:15	0	0	2	0
18:30	2	0	0	0
18:45	1	0	0	0
1 Hr	5	0	2	0
Total	20	0	26	0

	Arm B			
	Eastbound		Westbound	
	Ped	PC	Ped	PC
07:00	1	0	2	0
07:15	8	0	4	1
07:30	4	1	4	0
07:45	11	0	3	0
1 Hr	24	1	13	1
08:00	14	0	9	0
08:15	4	0	12	0
08:30	13	0	17	1
08:45	12	0	15	0
1 Hr	43	0	53	1
09:00	11	0	13	0
09:15	18	0	11	0
09:30	10	0	11	0
09:45	11	1	7	0
1 Hr	50	1	42	0
10:00	8	0	15	0
10:15	5	0	8	0
10:30	16	0	12	0
10:45	15	0	9	0
1 Hr	44	0	44	0
11:00	15	0	13	0
11:15	4	0	17	0
11:30	14	0	9	0
11:45	11	0	15	0
1 Hr	44	0	54	0
12:00	11	0	25	1
12:15	17	0	13	0
12:30	8	0	16	0
12:45	14	0	12	0
1 Hr	50	0	66	1
13:00	11	0	21	0
13:15	14	0	20	0
13:30	13	0	8	0
13:45	12	0	19	0
1 Hr	50	0	68	0
14:00	11	0	8	0
14:15	14	0	17	0
14:30	24	0	16	0
14:45	14	0	11	1
1 Hr	63	0	52	1
15:00	5	1	14	0
15:15	16	1	17	0
15:30	15	2	11	0
15:45	10	0	9	1
1 Hr	46	4	51	1
16:00	7	0	21	0
16:15	20	0	29	1
16:30	19	0	19	0
16:45	8	0	16	1
1 Hr	54	0	85	2
17:00	12	0	18	0
17:15	19	0	21	0
17:30	17	0	26	0
17:45	22	1	26	0
1 Hr	70	1	91	0
18:00	15	0	20	0
18:15	13	0	27	0
18:30	7	0	28	0
18:45	7	0	14	0
1 Hr	42	0	89	0
Total	580	7	708	7

	Arm C			
	Northbound		Southbound	
	Ped	PC	Ped	PC
07:00	1	0	0	0
07:15	0	0	1	0
07:30	1	0	1	0
07:45	1	0	0	0
1 Hr	3	0	2	0
08:00	2	0	0	0
08:15	1	0	3	0
08:30	4	0	2	0
08:45	1	0	2	0
1 Hr	8	0	7	0
09:00	1	0	0	0
09:15	0	0	0	0
09:30	1	0	1	0
09:45	2	0	2	0
1 Hr	4	0	3	0
10:00	2	0	0	0
10:15	2	0	3	0
10:30	1	0	0	0
10:45	1	0	3	0
1 Hr	6	0	6	0
11:00	3	0	1	0
11:15	5	0	3	0
11:30	3	0	4	0
11:45	1	0	0	0
1 Hr	12	0	8	0
12:00	1	0	2	0
12:15	3	0	0	0
12:30	1	0	2	0
12:45	0	0	2	0
1 Hr	5	0	6	0
13:00	0	0	0	0
13:15	0	0	2	0
13:30	4	0	2	0
13:45	2	0	8	0
1 Hr	6	0	12	0
14:00	2	0	1	0
14:15	3	0	1	0
14:30	6	0	1	0
14:45	2	0	2	0
1 Hr	13	0	5	0
15:00	3	0	2	0
15:15	5	0	3	0
15:30	0	0	3	0
15:45	1	0	1	0
1 Hr	9	0	9	0
16:00	2	0	0	0
16:15	3	1	2	0
16:30	5	0	3	0
16:45	2	0	2	0
1 Hr	12	1	7	0
17:00	1	0	0	0
17:15	2	0	1	0
17:30	5	0	4	0
17:45	3	0	2	0
1 Hr	11	0	7	0
18:00	8	0	4	0
18:15	5	0	1	0
18:30	3	0	4	0
18:45	5	0	3	0
1 Hr	21	0	12	0
Total	110	1	84	0

TRACSIS

TRAFFIC DATA

Transport Data Collection and Analytics

Client: O' Connor Sutton Cronin Consulting Engineers
Project: 3665-IRE Emmet Rd
Site: 3
Date: 28/04/2022

	Arm A			
	Northbound		Southbound	
	Ped	PC	Ped	PC
07:00	1	0	2	0
07:15	2	0	2	0
07:30	5	0	3	0
07:45	4	1	4	0
1 Hr	12	1	11	0
08:00	7	0	3	0
08:15	4	0	2	0
08:30	5	0	5	0
08:45	4	0	11	0
1 Hr	20	0	21	0
09:00	5	0	8	0
09:15	6	0	7	0
09:30	7	0	3	0
09:45	6	0	4	0
1 Hr	24	0	22	0
10:00	6	0	3	0
10:15	5	0	3	0
10:30	3	0	5	0
10:45	3	0	2	0
1 Hr	17	0	13	0
11:00	7	0	0	0
11:15	4	0	3	1
11:30	0	1	0	0
11:45	3	0	5	0
1 Hr	14	1	8	1
12:00	8	0	6	0
12:15	4	0	1	0
12:30	5	0	5	0
12:45	2	0	6	1
1 Hr	19	0	18	1
13:00	4	0	8	0
13:15	4	0	9	0
13:30	7	0	4	0
13:45	12	0	5	0
1 Hr	27	0	26	0
14:00	7	0	4	0
14:15	5	0	10	0
14:30	6	0	7	0
14:45	11	0	4	0
1 Hr	29	0	25	0
15:00	5	0	2	0
15:15	4	0	7	0
15:30	5	0	2	0
15:45	4	0	4	0
1 Hr	18	0	15	0
16:00	8	0	10	0
16:15	4	0	3	0
16:30	3	0	3	0
16:45	7	0	1	0
1 Hr	22	0	17	0
17:00	3	1	3	0
17:15	12	0	4	0
17:30	5	0	2	0
17:45	15	0	8	0
1 Hr	35	1	17	0
18:00	3	0	3	0
18:15	6	0	4	0
18:30	7	0	1	0
18:45	5	0	0	0
1 Hr	21	0	8	0
Total	258	3	201	2

	Arm B			
	Eastbound		Westbound	
	Ped	PC	Ped	PC
07:00	0	0	0	0
07:15	2	0	1	0
07:30	5	0	6	0
07:45	5	1	4	0
1 Hr	12	1	11	0
08:00	9	0	2	0
08:15	3	0	1	0
08:30	8	0	7	1
08:45	3	0	7	0
1 Hr	23	0	17	1
09:00	7	0	3	0
09:15	3	0	4	0
09:30	8	0	4	0
09:45	2	0	3	0
1 Hr	20	0	14	0
10:00	3	0	6	0
10:15	7	0	1	0
10:30	9	0	6	0
10:45	6	0	5	0
1 Hr	25	0	18	0
11:00	8	0	2	0
11:15	6	0	2	0
11:30	6	0	1	0
11:45	1	0	3	0
1 Hr	21	0	8	0
12:00	5	0	5	0
12:15	5	0	3	0
12:30	6	0	3	0
12:45	2	0	3	0
1 Hr	18	0	14	0
13:00	13	0	10	0
13:15	3	0	4	0
13:30	5	0	3	0
13:45	2	1	5	0
1 Hr	23	1	22	0
14:00	4	0	7	0
14:15	1	0	3	0
14:30	7	0	5	0
14:45	9	0	3	0
1 Hr	21	0	18	0
15:00	6	0	3	0
15:15	4	0	5	0
15:30	6	1	0	0
15:45	1	1	4	0
1 Hr	17	2	12	0
16:00	7	0	7	0
16:15	1	0	14	0
16:30	4	0	6	0
16:45	11	0	3	0
1 Hr	23	0	30	0
17:00	4	0	7	0
17:15	8	0	6	0
17:30	9	0	6	0
17:45	5	0	5	0
1 Hr	26	0	24	0
18:00	10	0	11	0
18:15	13	0	1	1
18:30	5	0	7	0
18:45	4	0	7	0
1 Hr	32	0	26	1
Total	261	4	214	2

	Arm C			
	Northbound		Southbound	
	Ped	PC	Ped	PC
07:00	0	0	1	0
07:15	0	0	0	0
07:30	1	0	0	0
07:45	0	0	0	0
1 Hr	1	0	1	0
08:00	0	0	0	0
08:15	0	0	0	0
08:30	1	0	0	0
08:45	0	0	0	0
1 Hr	1	0	0	0
09:00	0	0	0	0
09:15	0	0	1	0
09:30	0	0	0	0
09:45	0	0	0	0
1 Hr	0	0	1	0
10:00	1	0	0	0
10:15	1	0	1	0
10:30	0	0	0	0
10:45	4	0	2	0
1 Hr	6	0	3	0
11:00	2	0	0	0
11:15	1	0	1	0
11:30	1	0	0	0
11:45	1	0	1	0
1 Hr	5	0	2	0
12:00	1	0	1	0
12:15	0	0	0	0
12:30	1	0	0	0
12:45	0	0	1	0
1 Hr	2	0	2	0
13:00	2	0	1	0
13:15	0	0	0	0
13:30	2	0	2	0
13:45	0	0	1	0
1 Hr	4	0	4	0
14:00	1	0	0	0
14:15	2	0	0	0
14:30	3	0	0	0
14:45	0	0	2	0
1 Hr	6	0	2	0
15:00	2	0	2	0
15:15	1	0	0	0
15:30	1	0	0	0
15:45	0	1	1	0
1 Hr	4	1	3	0
16:00	1	0	1	0
16:15	0	0	0	0
16:30	0	0	0	0
16:45	0	0	0	0
1 Hr	1	0	1	0
17:00	0	0	1	0
17:15	1	0	2	0
17:30	0	0	0	0
17:45	0	0	2	0
1 Hr	1	0	5	0
18:00	0	0	0	0
18:15	0	0	2	0
18:30	0	0	0	0
18:45	0	0	2	0
1 Hr	0	0	4	0
Total	31	1	28	0

TRACSIS **TRAFFIC DATA**
Transport Data Collection and Analytics

Client: O' Connor Sutton Cronin Consulting Engineers
Project: 3665-IRE Emmet Rd
Site: 4
Date: 28/04/2022

	Arm A			
	Eastbound		Westbound	
	Ped	PC	Ped	PC
07:00	4	0	1	0
07:15	4	0	0	0
07:30	2	0	1	0
07:45	3	1	1	0
1 Hr	13	1	3	0
08:00	7	0	2	0
08:15	10	0	4	1
08:30	9	0	2	0
08:45	6	0	8	1
1 Hr	32	0	16	2
09:00	8	0	3	0
09:15	2	0	3	0
09:30	5	0	2	0
09:45	3	0	2	0
1 Hr	18	0	10	0
10:00	3	0	2	0
10:15	6	0	4	0
10:30	4	0	4	0
10:45	0	0	1	0
1 Hr	13	0	11	0
11:00	3	0	2	0
11:15	6	0	4	0
11:30	5	0	4	0
11:45	1	0	4	0
1 Hr	15	0	14	0
12:00	4	0	8	0
12:15	2	0	4	0
12:30	11	1	4	0
12:45	4	0	4	0
1 Hr	21	1	20	0
13:00	3	0	4	0
13:15	1	0	4	0
13:30	6	0	6	0
13:45	6	0	8	0
1 Hr	16	0	22	0
14:00	7	0	7	0
14:15	2	0	7	0
14:30	12	0	6	0
14:45	3	0	4	0
1 Hr	24	0	24	0
15:00	5	1	8	0
15:15	10	0	9	0
15:30	7	0	3	0
15:45	4	0	4	0
1 Hr	26	1	24	0
16:00	3	0	7	1
16:15	10	1	5	0
16:30	5	0	9	1
16:45	7	0	3	0
1 Hr	25	1	24	2
17:00	6	0	11	0
17:15	8	0	6	1
17:30	3	0	12	2
17:45	6	0	14	0
1 Hr	23	0	43	3
18:00	5	0	12	0
18:15	17	1	16	0
18:30	1	0	14	0
18:45	3	0	9	0
1 Hr	26	1	51	0
Total	252	5	262	7

	Arm B			
	Northbound		Southbound	
	Ped	PC	Ped	PC
07:00	1	0	0	0
07:15	2	0	1	0
07:30	2	0	1	0
07:45	1	0	0	0
1 Hr	6	0	2	0
08:00	1	0	2	0
08:15	2	0	1	0
08:30	5	0	0	0
08:45	8	0	0	0
1 Hr	16	0	3	0
09:00	1	0	0	0
09:15	2	0	0	0
09:30	2	0	0	0
09:45	0	0	2	0
1 Hr	5	0	2	0
10:00	2	0	1	0
10:15	1	0	0	0
10:30	1	0	0	0
10:45	1	0	1	0
1 Hr	5	0	2	0
11:00	0	0	0	0
11:15	1	0	0	0
11:30	1	0	1	0
11:45	1	0	0	0
1 Hr	3	0	1	0
12:00	1	0	1	0
12:15	1	0	0	0
12:30	2	0	4	0
12:45	2	0	2	0
1 Hr	6	0	7	0
13:00	2	0	0	0
13:15	1	0	1	0
13:30	1	0	0	0
13:45	1	0	0	0
1 Hr	5	0	1	0
14:00	0	0	0	0
14:15	3	0	1	0
14:30	5	0	0	0
14:45	2	0	0	0
1 Hr	10	0	1	0
15:00	3	0	0	0
15:15	2	0	1	0
15:30	1	0	0	0
15:45	3	0	0	0
1 Hr	9	0	1	0
16:00	4	0	0	0
16:15	0	0	0	0
16:30	0	0	3	0
16:45	1	0	3	0
1 Hr	5	0	6	0
17:00	2	0	0	0
17:15	7	0	0	0
17:30	2	0	6	0
17:45	5	0	1	0
1 Hr	16	0	7	0
18:00	0	0	0	0
18:15	2	0	5	0
18:30	2	0	3	0
18:45	2	0	1	0
1 Hr	6	0	9	0
Total	92	0	42	0

	Arm C			
	Eastbound		Westbound	
	Ped	PC	Ped	PC
07:00	3	0	1	0
07:15	3	0	1	0
07:30	2	0	4	0
07:45	8	0	0	0
1 Hr	16	0	6	0
08:00	4	0	1	0
08:15	2	0	1	0
08:30	8	0	10	0
08:45	5	0	2	0
1 Hr	19	0	14	0
09:00	4	0	2	0
09:15	1	0	1	0
09:30	4	0	4	0
09:45	2	0	2	0
1 Hr	11	0	9	0
10:00	0	0	4	0
10:15	0	0	1	0
10:30	5	0	4	0
10:45	3	0	4	0
1 Hr	8	0	13	0
11:00	3	0	3	0
11:15	3	0	5	0
11:30	2	0	1	0
11:45	1	0	2	0
1 Hr	9	0	11	0
12:00	1	0	2	0
12:15	4	0	3	0
12:30	10	0	1	0
12:45	4	0	1	0
1 Hr	19	0	7	0
13:00	6	0	3	0
13:15	6	0	3	0
13:30	2	0	3	0
13:45	3	0	1	0
1 Hr	17	0	10	0
14:00	4	0	8	0
14:15	0	0	5	0
14:30	3	0	3	0
14:45	6	0	4	0
1 Hr	13	0	20	0
15:00	5	0	5	0
15:15	5	0	0	0
15:30	1	0	2	0
15:45	2	0	2	0
1 Hr	13	0	9	0
16:00	4	1	6	0
16:15	2	0	4	1
16:30	3	0	5	0
16:45	5	0	2	0
1 Hr	14	1	17	1
17:00	3	0	6	0
17:15	3	0	5	0
17:30	4	0	6	0
17:45	1	0	5	0
1 Hr	11	0	22	0
18:00	5	0	2	0
18:15	4	0	4	0
18:30	4	0	10	0
18:45	8	0	5	0
1 Hr	21	0	21	0
Total	171	1	159	1

	Arm D			
	Northbound		Southbound	
	Ped	PC	Ped	PC
07:00	0	0	1	0
07:15	0	0	0	0
07:30	0	0	1	0
07:45	0	0	1	0
1 Hr	0	0	3	0
08:00	1	0	2	0
08:15	0	0	5	0
08:30	0	0	9	0
08:45	2	0	3	0
1 Hr	3	0	19	0
09:00	3	0	0	0
09:15	0	0	0	0
09:30	0	0	1	0
09:45	1	0	1	0
1 Hr	4	0	2	0
10:00	1	0	1	0
10:15	3	0	1	0
10:30	0	0	0	0
10:45	0	0	1	0
1 Hr	4	0	3	0
11:00	0	0	1	0
11:15	0	0	1	0
11:30	1	0	3	0
11:45	0	0	2	0
1 Hr	1	0	7	0
12:00	0	0	1	0
12:15	3	0	2	0
12:30	4	0	3	0
12:45	3	0	1	0
1 Hr	10	0	7	0
13:00	1	0	4	0
13:15	1	0	1	0
13:30	1	0	1	0
13:45	2	0	2	0
1 Hr	5	0	8	0
14:00	2	0	2	0
14:15	3	0	7	0
14:30	2	0	1	0
14:45	5	0	0	0
1 Hr	12	0	10	0
15:00	4	0	0	0
15:15	6	0	0	0
15:30	0	0	1	0
15:45	1	0	2	0
1 Hr	11	0	3	0
16:00	0	1	3	1
16:15	4	1	2	0
16:30	3	0	0	0
16:45	1	0	0	0
1 Hr	8	2	5	1
17:00	1	0	3	0
17:15	1	0	0	0
17:30	1	0	0	0
17:45	1	0	1	0
1 Hr	4	0	4	0
18:00	2	0	5	0
18:15	3	0	2	0
18:30	4	0	2	0
18:45	0	0	9	0
1 Hr	9	0	18	0
Total	71	2	89	1

TRACSIS **TRAFFIC DATA**
Transport Data Collection and Analytics

Client: O' Connor Sutton Cronin Consulting Engineers
Project: 3665-IRE Emmet Rd
Site: 5
Date: 28/04/2022

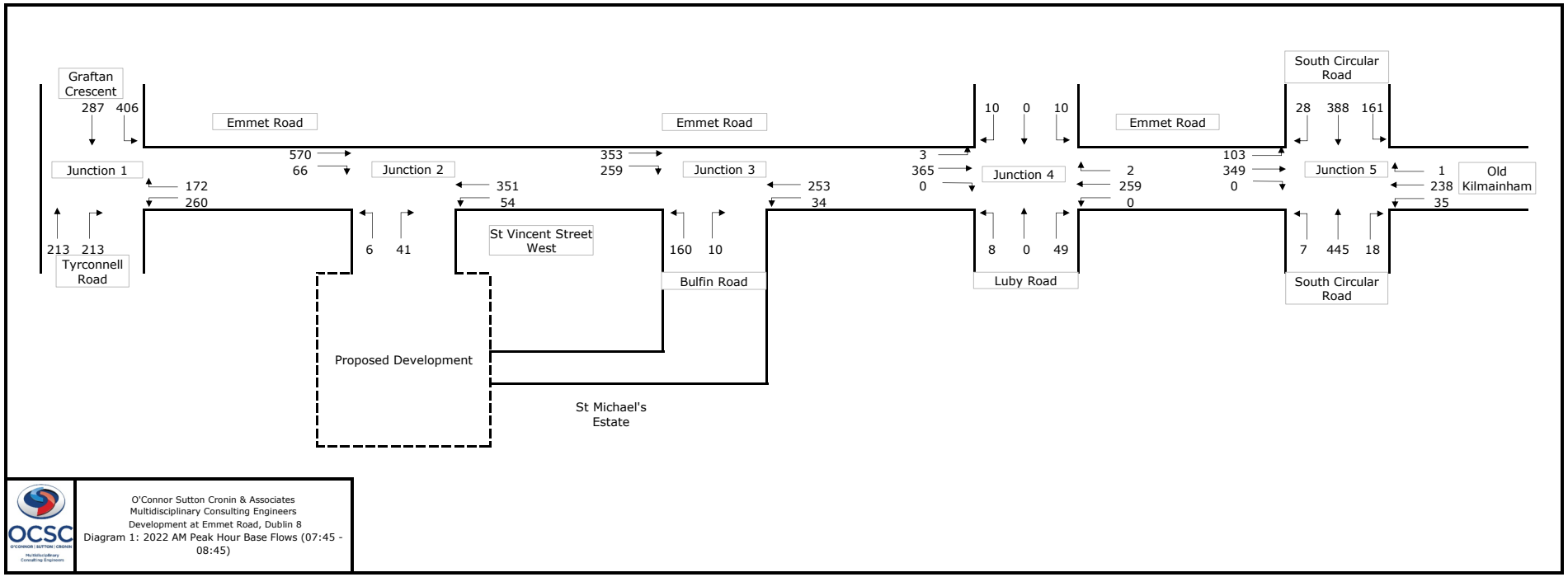
	Arm A			
	Eastbound		Westbound	
	Ped	PC	Ped	PC
07:00	2	0	0	0
07:15	3	0	1	0
07:30	0	0	1	0
07:45	4	0	3	0
1 Hr	9	0	5	0
08:00	6	0	5	0
08:15	8	0	4	1
08:30	4	0	2	0
08:45	4	0	3	0
1 Hr	22	0	14	1
09:00	6	0	2	0
09:15	2	0	2	0
09:30	4	0	2	0
09:45	4	0	5	0
1 Hr	16	0	11	0
10:00	4	0	3	0
10:15	4	0	5	0
10:30	1	0	3	0
10:45	4	0	1	0
1 Hr	13	0	12	0
11:00	2	0	3	0
11:15	2	0	1	0
11:30	1	0	5	0
11:45	5	0	4	1
1 Hr	10	0	13	1
12:00	7	0	2	0
12:15	2	0	1	0
12:30	5	0	1	0
12:45	7	1	3	0
1 Hr	21	1	7	0
13:00	3	0	4	0
13:15	3	0	7	0
13:30	5	0	1	1
13:45	7	0	2	0
1 Hr	18	0	14	1
14:00	7	0	2	0
14:15	5	0	5	1
14:30	6	0	0	1
14:45	0	0	1	2
1 Hr	18	0	8	4
15:00	5	0	8	0
15:15	4	0	3	0
15:30	10	0	3	0
15:45	3	1	1	1
1 Hr	22	1	15	1
16:00	33	0	7	2
16:15	6	0	2	4
16:30	4	0	4	1
16:45	7	0	12	1
1 Hr	50	0	25	8
17:00	2	0	11	0
17:15	7	0	9	0
17:30	9	1	11	3
17:45	5	0	10	2
1 Hr	23	1	41	5
18:00	5	0	7	2
18:15	9	0	13	2
18:30	4	0	4	2
18:45	9	0	4	0
1 Hr	27	0	28	6
Total	249	3	193	27

	Arm B			
	Northbound		Southbound	
	Ped	PC	Ped	PC
07:00	2	0	2	0
07:15	4	0	3	0
07:30	3	0	3	0
07:45	10	0	4	0
1 Hr	19	0	12	0
08:00	2	0	3	0
08:15	9	0	6	0
08:30	2	0	8	0
08:45	6	0	3	0
1 Hr	19	0	20	0
09:00	5	0	4	0
09:15	3	0	3	0
09:30	5	0	3	0
09:45	7	0	3	0
1 Hr	20	0	13	0
10:00	5	0	0	0
10:15	3	0	2	0
10:30	1	0	1	0
10:45	1	0	2	0
1 Hr	10	0	5	0
11:00	3	0	5	0
11:15	8	0	5	0
11:30	7	0	2	0
11:45	3	0	2	0
1 Hr	21	0	14	0
12:00	7	0	4	0
12:15	6	0	3	0
12:30	4	0	7	0
12:45	9	0	9	0
1 Hr	26	0	23	0
13:00	9	0	6	0
13:15	17	0	10	0
13:30	5	0	11	0
13:45	5	1	13	0
1 Hr	36	1	40	0
14:00	5	0	12	0
14:15	1	0	7	0
14:30	8	0	7	0
14:45	10	0	6	0
1 Hr	24	0	32	0
15:00	7	0	1	0
15:15	8	1	9	0
15:30	8	0	11	0
15:45	16	0	1	0
1 Hr	39	1	22	0
16:00	9	0	3	0
16:15	11	1	6	0
16:30	13	1	11	0
16:45	8	0	8	0
1 Hr	41	2	28	0
17:00	15	0	8	0
17:15	13	0	8	0
17:30	12	0	7	0
17:45	7	0	12	0
1 Hr	47	0	35	0
18:00	12	0	15	0
18:15	26	1	15	0
18:30	11	0	8	0
18:45	21	0	14	0
1 Hr	70	1	52	0
Total	372	5	296	0

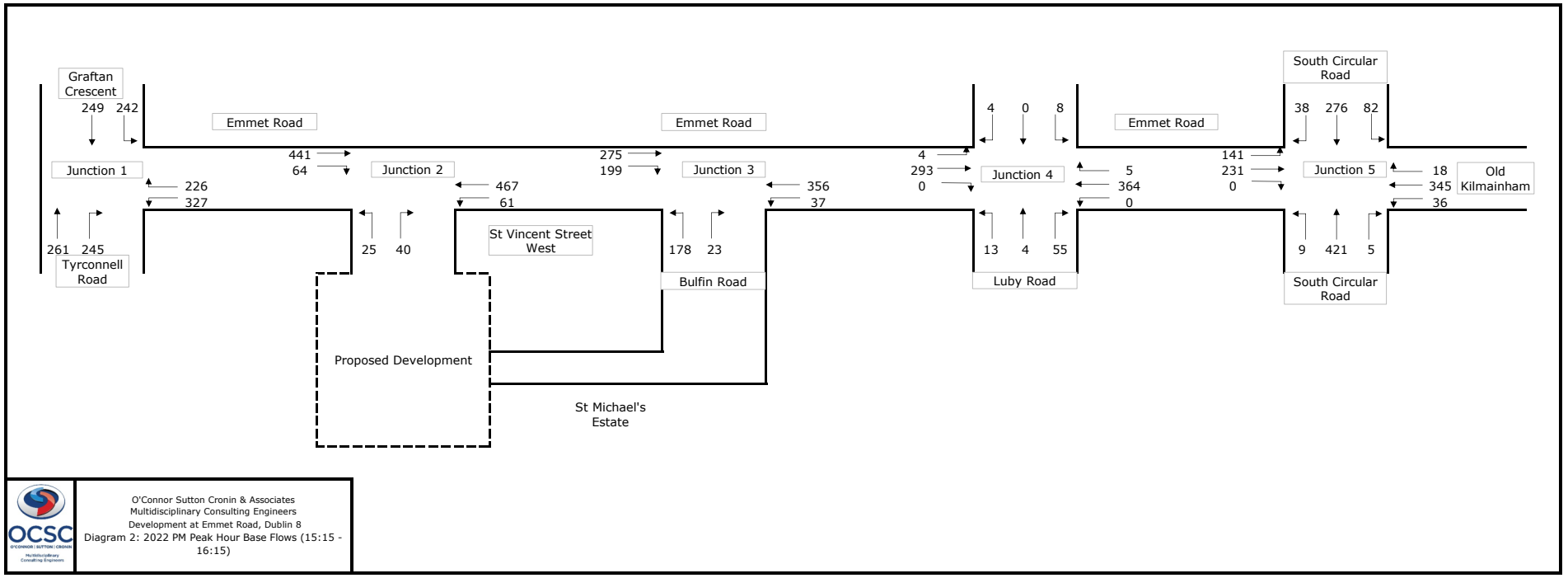
	Arm C			
	Eastbound		Westbound	
	Ped	PC	Ped	PC
07:00	3	0	3	0
07:15	8	1	4	0
07:30	7	0	5	0
07:45	11	2	2	0
1 Hr	29	3	14	0
08:00	14	2	2	0
08:15	8	1	5	1
08:30	4	2	8	0
08:45	10	1	12	0
1 Hr	36	6	27	1
09:00	11	0	3	0
09:15	5	0	4	0
09:30	6	0	2	0
09:45	4	0	4	0
1 Hr	26	0	13	0
10:00	1	0	4	0
10:15	3	0	3	1
10:30	4	0	7	0
10:45	3	0	6	0
1 Hr	11	0	20	1
11:00	10	0	7	0
11:15	8	0	7	0
11:30	8	0	5	0
11:45	4	1	4	0
1 Hr	30	1	23	0
12:00	2	0	3	0
12:15	7	0	5	0
12:30	3	0	6	0
12:45	7	1	16	3
1 Hr	19	1	30	3
13:00	7	0	4	0
13:15	4	1	0	0
13:30	2	0	2	0
13:45	2	0	1	0
1 Hr	15	1	7	0
14:00	7	0	6	0
14:15	4	0	7	0
14:30	5	0	10	0
14:45	8	0	11	0
1 Hr	24	0	34	0
15:00	2	0	9	0
15:15	7	0	3	0
15:30	6	0	4	0
15:45	4	0	4	0
1 Hr	19	0	20	0
16:00	3	0	10	0
16:15	6	0	6	0
16:30	4	0	6	0
16:45	13	0	8	0
1 Hr	26	0	30	0
17:00	9	0	5	0
17:15	7	0	6	0
17:30	9	0	13	1
17:45	3	0	17	0
1 Hr	28	0	41	1
18:00	6	0	7	0
18:15	8	0	19	0
18:30	4	0	8	2
18:45	7	0	10	0
1 Hr	25	0	44	2
Total	288	12	303	8

	Arm D			
	Northbound		Southbound	
	Ped	PC	Ped	PC
07:00	7	0	6	0
07:15	5	0	16	2
07:30	9	0	24	1
07:45	9	0	17	1
1 Hr	30	0	63	4
08:00	7	0	37	1
08:15	24	2	10	3
08:30	43	6	24	1
08:45	32	1	21	0
1 Hr	106	9	92	5
09:00	19	0	24	0
09:15	16	0	17	0
09:30	26	0	12	1
09:45	11	0	9	0
1 Hr	72	0	62	1
10:00	9	0	19	0
10:15	10	0	17	0
10:30	13	0	19	0
10:45	22	0	19	0
1 Hr	54	0	74	0
11:00	16	0	25	0
11:15	27	0	14	0
11:30	13	1	20	0
11:45	19	0	27	0
1 Hr	75	1	86	0
12:00	15	0	29	0
12:15	34	0	22	0
12:30	22	0	13	0
12:45	17	2	12	0
1 Hr	88	2	76	0
13:00	23	0	28	0
13:15	52	0	24	0
13:30	25	0	19	0
13:45	18	0	16	1
1 Hr	118	0	87	1
14:00	23	1	12	0
14:15	23	0	13	1
14:30	25	2	17	6
14:45	20	0	23	2
1 Hr	91	3	65	9
15:00	30	0	17	1
15:15	19	0	16	0
15:30	24	0	27	0
15:45	18	0	14	0
1 Hr	91	0	74	1
16:00	22	0	39	4
16:15	19	0	19	0
16:30	18	0	22	0
16:45	19	1	32	0
1 Hr	78	1	112	4
17:00	13	0	26	0
17:15	24	0	38	0
17:30	30	1	27	2
17:45	31	1	34	0
1 Hr	98	2	125	2
18:00	18	1	19	0
18:15	32	0	27	0
18:30	26	0	11	0
18:45	29	2	14	2
1 Hr	105	3	71	2
Total	1006	21	987	29

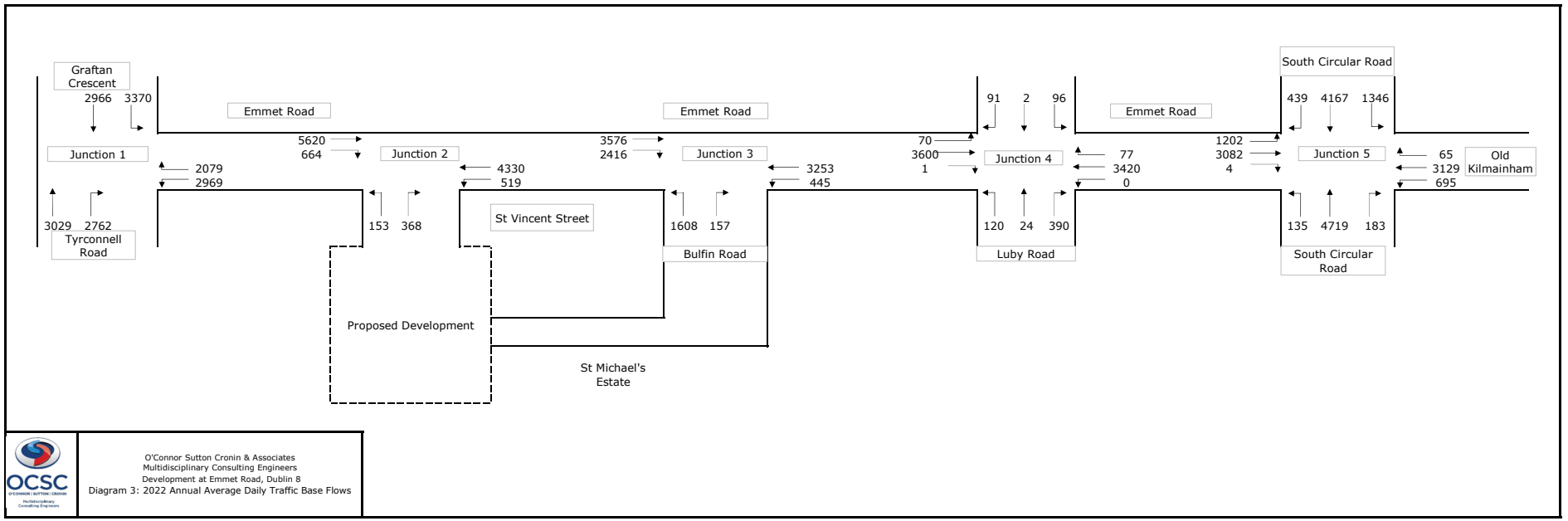
Appendix G10.2- Traffic Flows Diagram



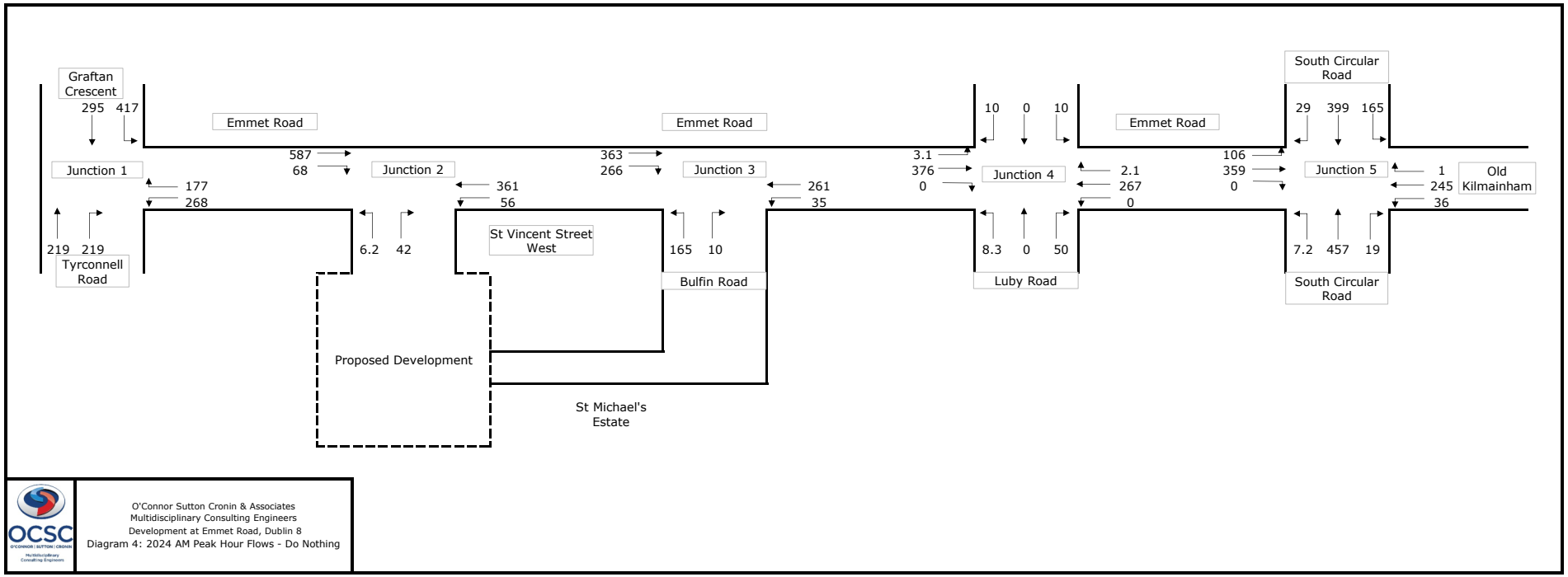
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 1: 2022 AM Peak Hour Base Flows (07:45 - 08:45)



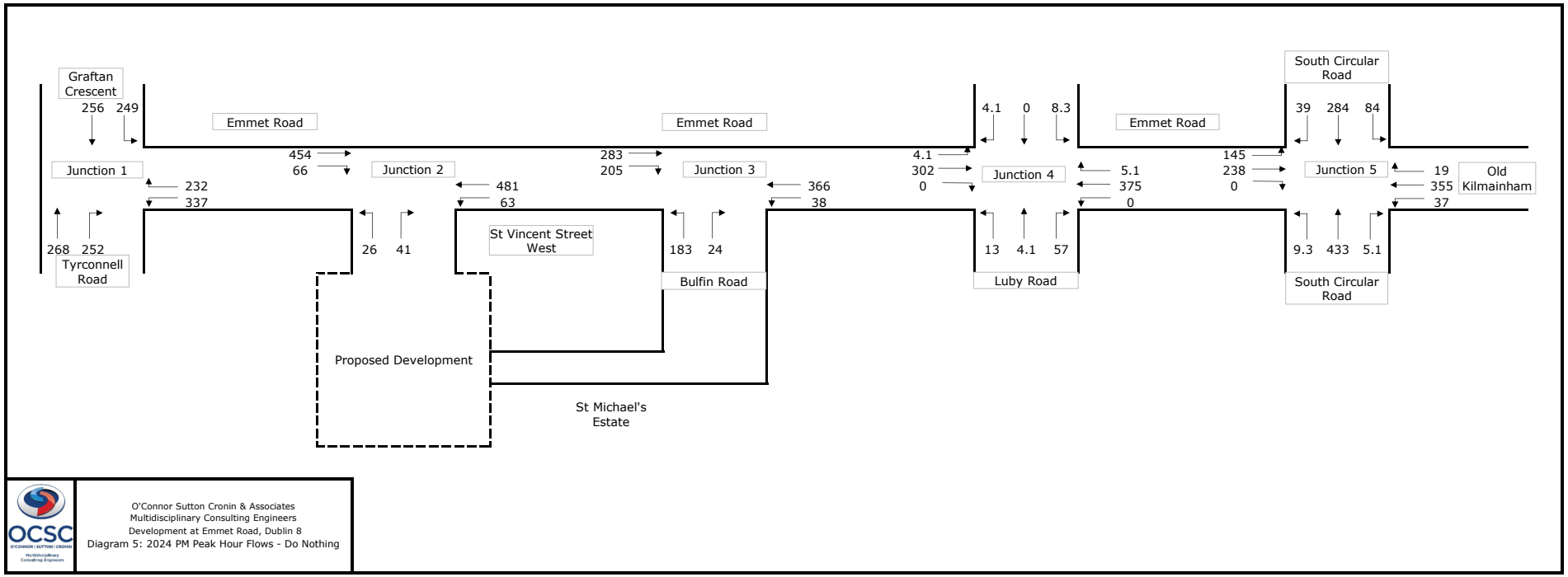
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 2: 2022 PM Peak Hour Base Flows (15:15 - 16:15)



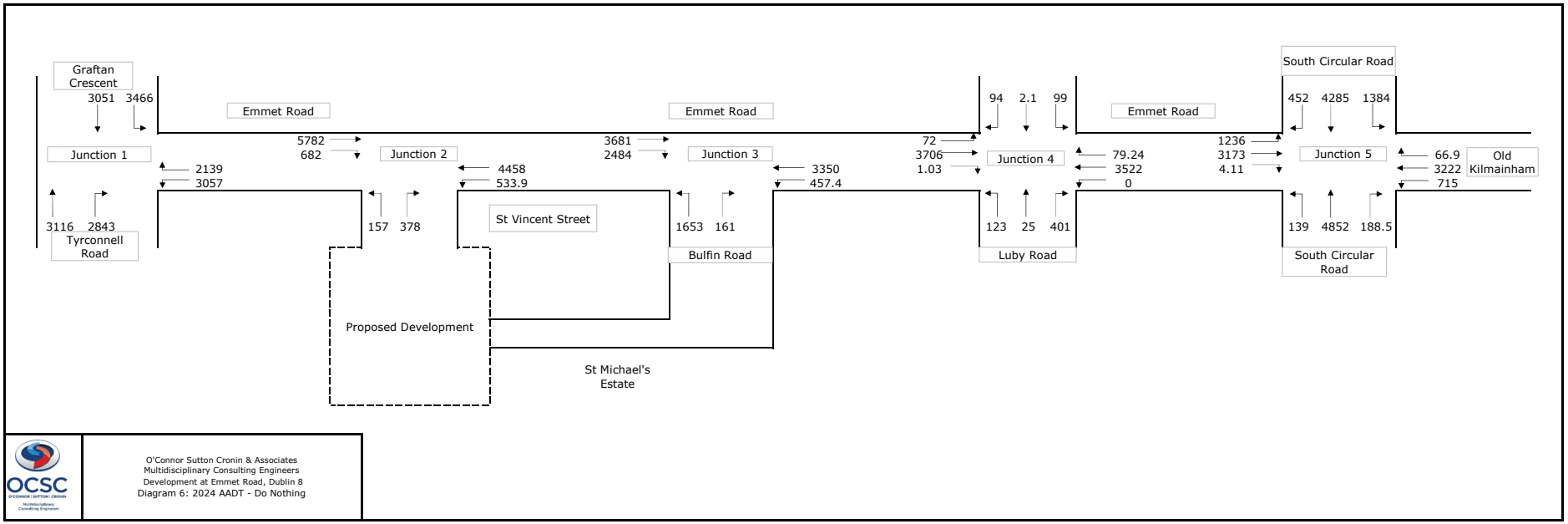
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 3: 2022 Annual Average Daily Traffic Base Flows



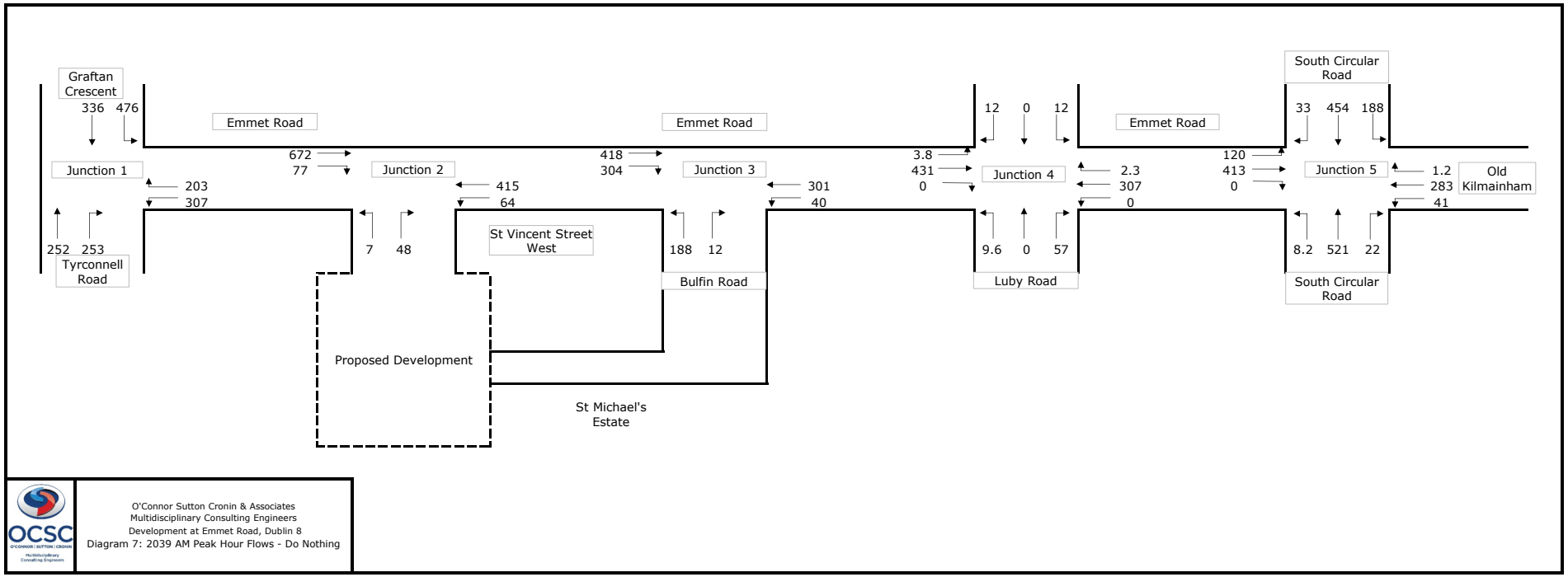
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 4: 2024 AM Peak Hour Flows - Do Nothing



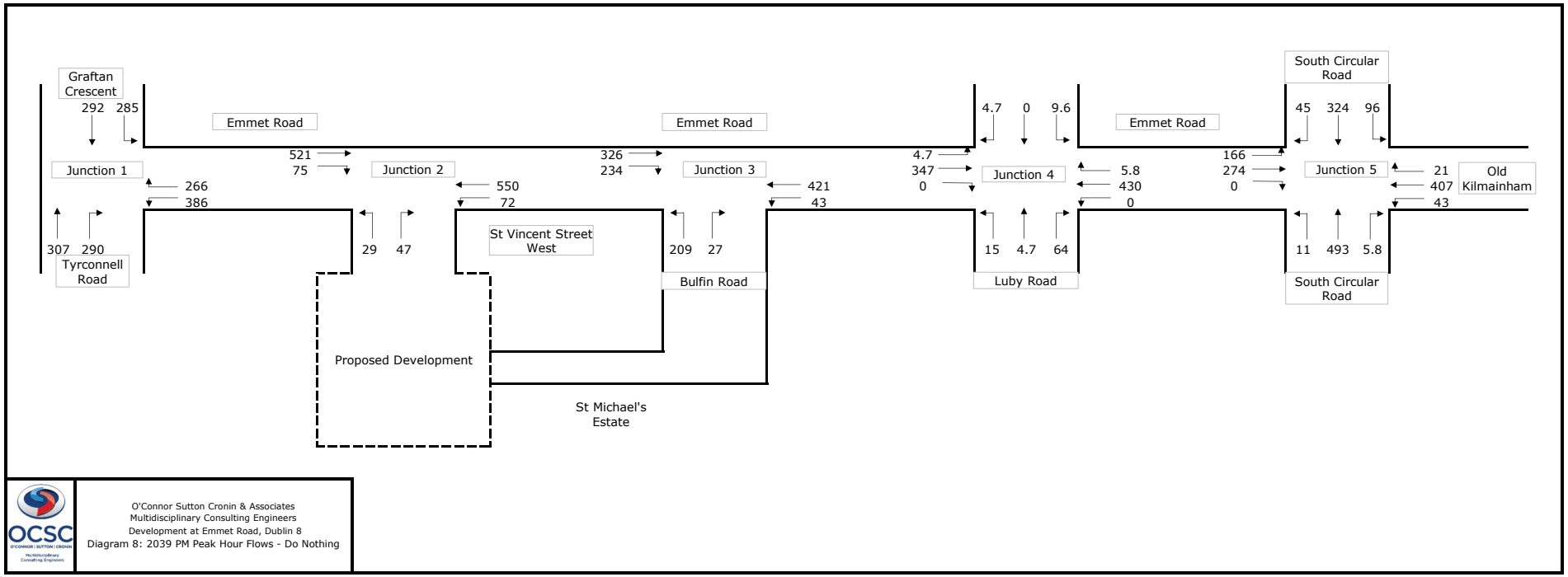
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 5: 2024 PM Peak Hour Flows - Do Nothing



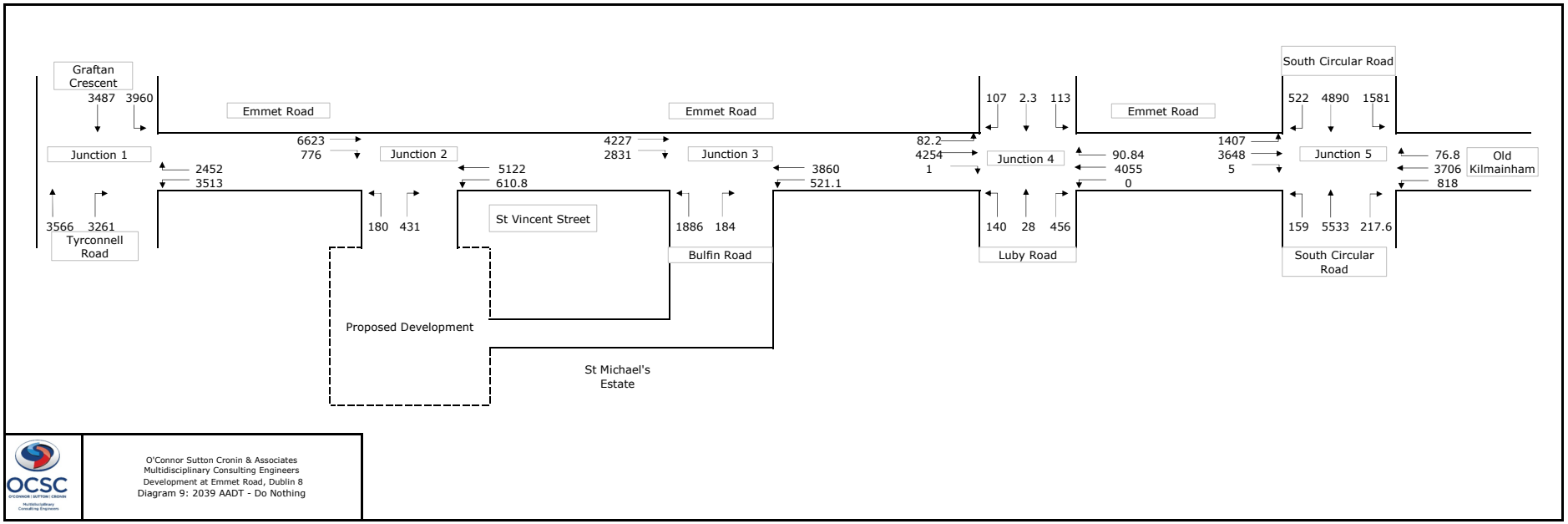
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 6: 2024 AADT - Do Nothing



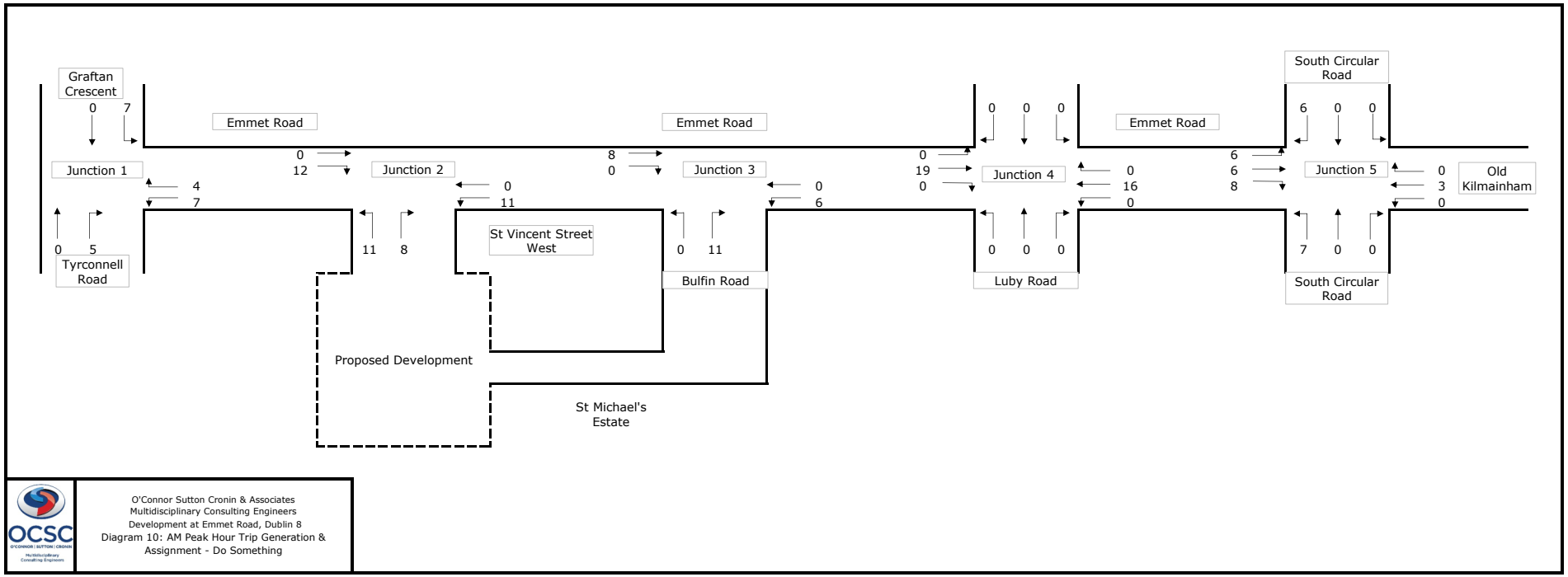
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 7: 2039 AM Peak Hour Flows - Do Nothing



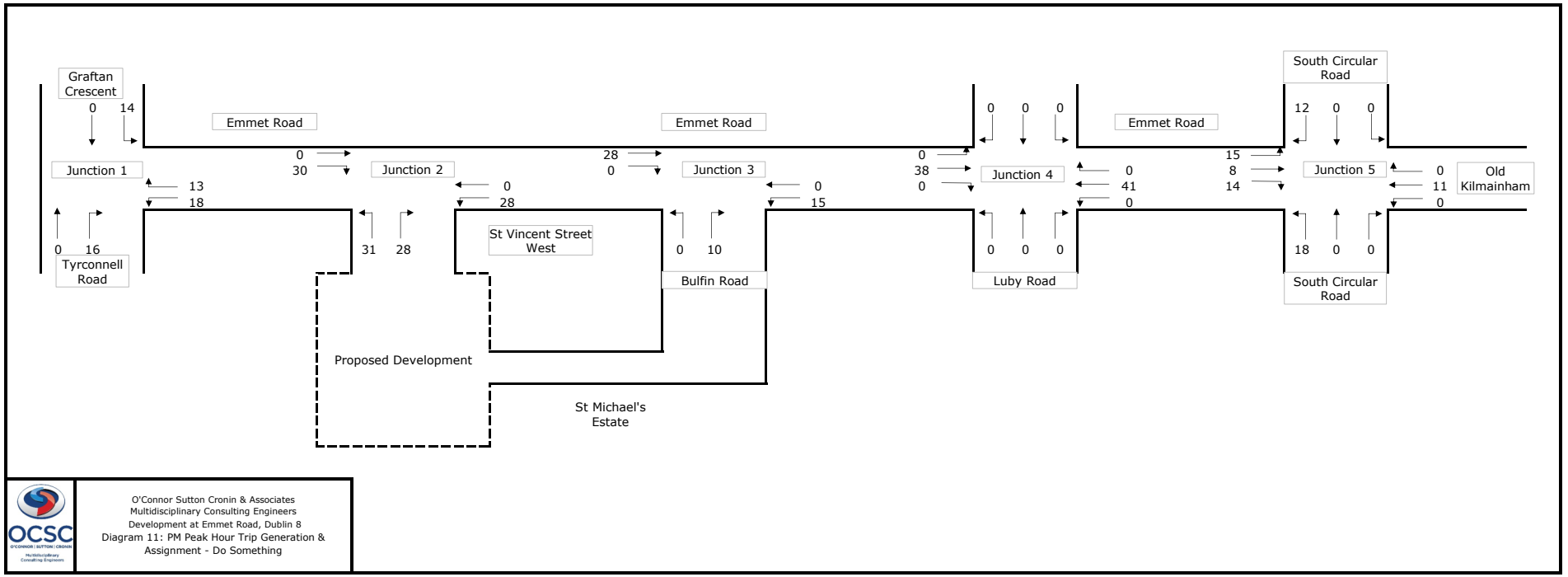
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 8: 2039 PM Peak Hour Flows - Do Nothing



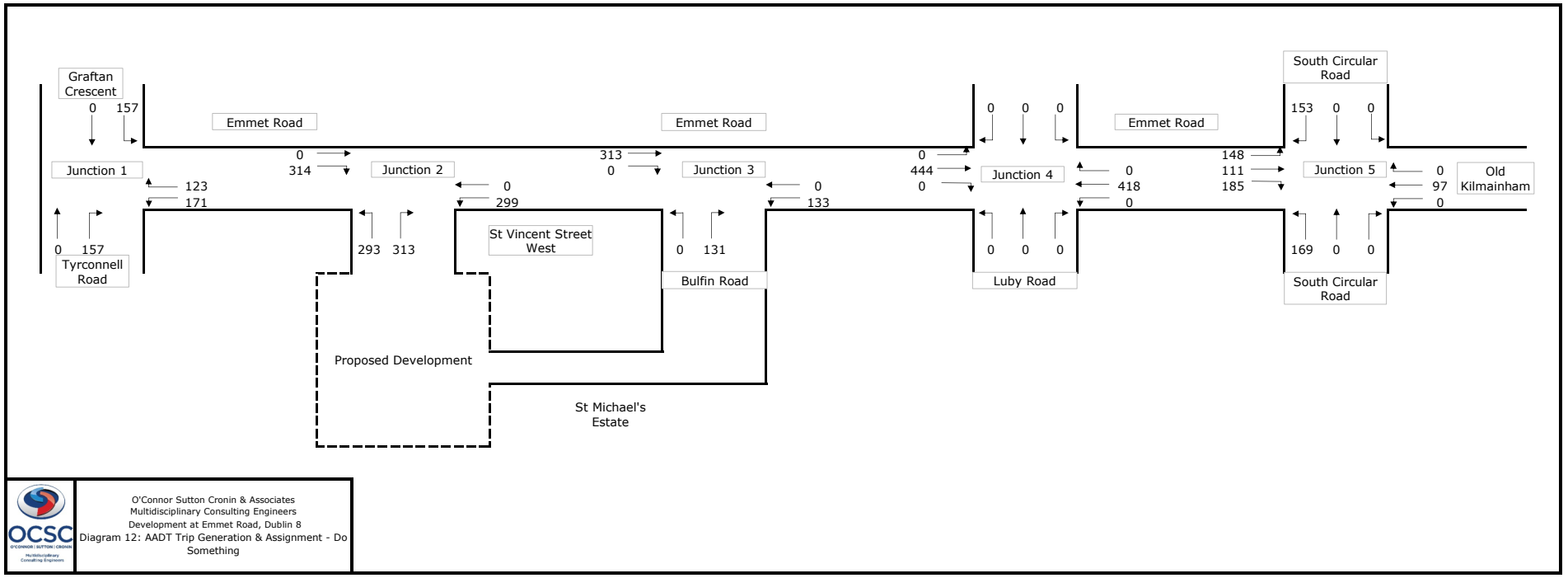
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 9: 2039 AADT - Do Nothing



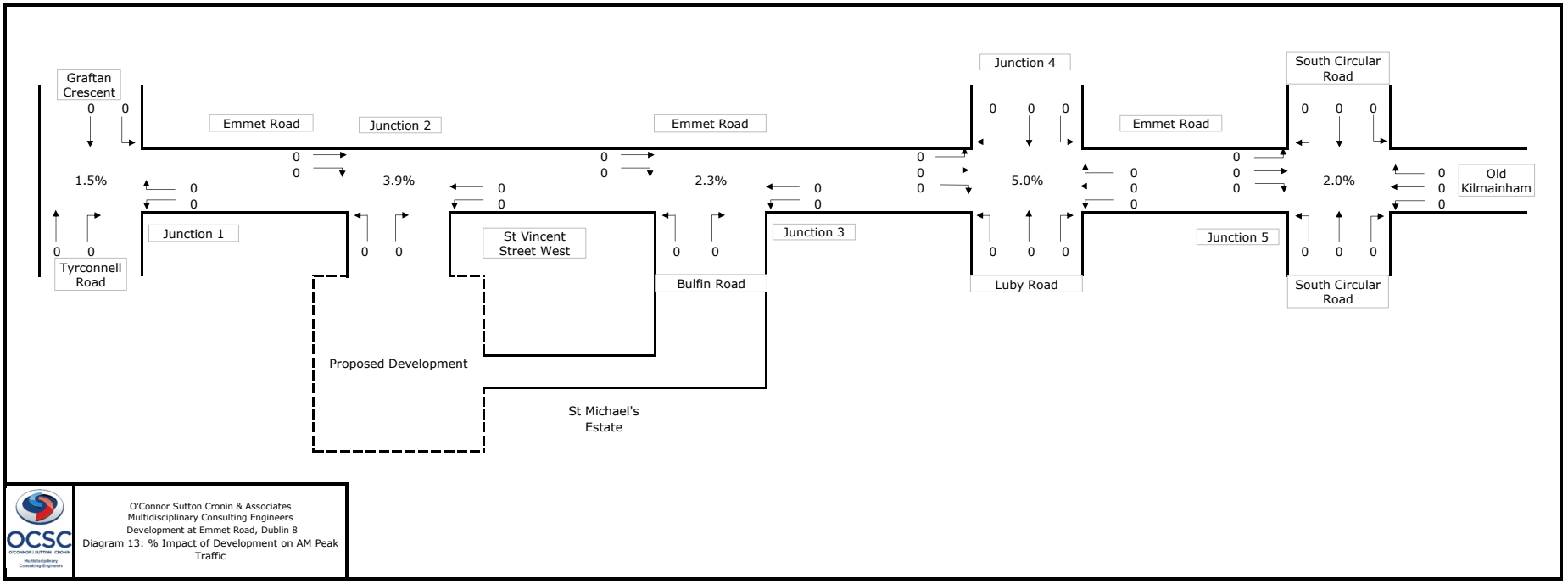
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 10: AM Peak Hour Trip Generation & Assignment - Do Something



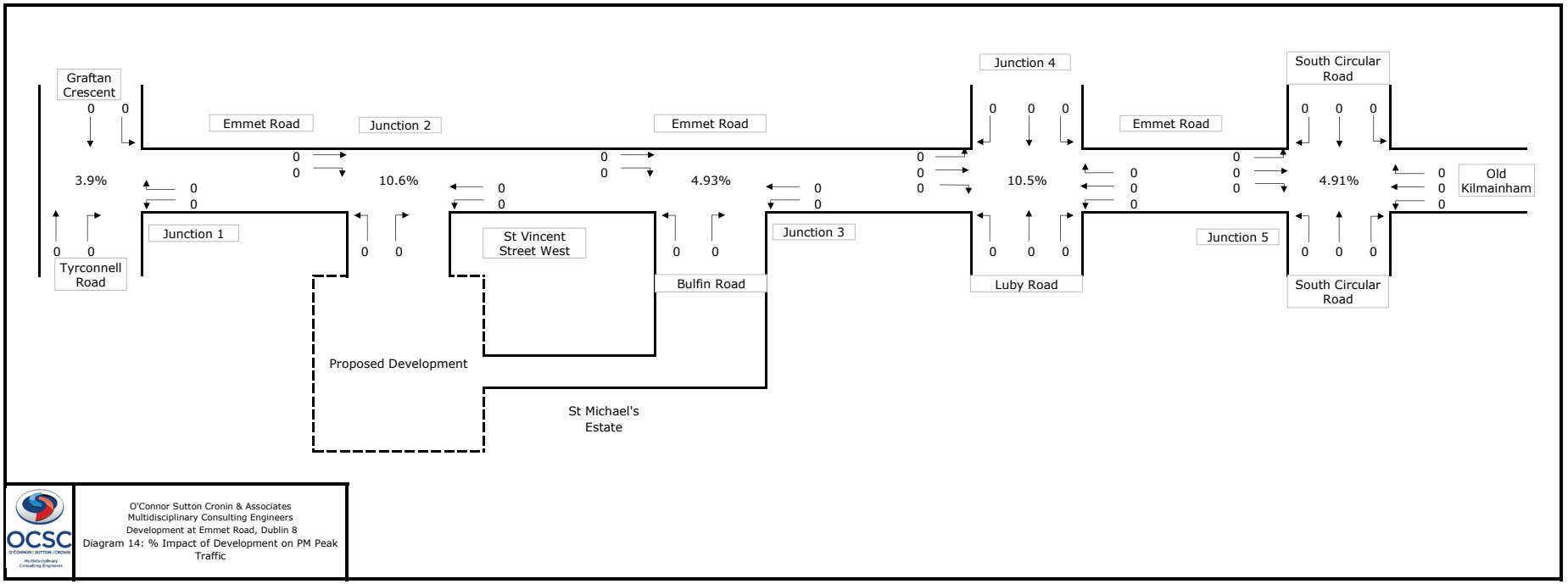
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 11: PM Peak Hour Trip Generation & Assignment - Do Something



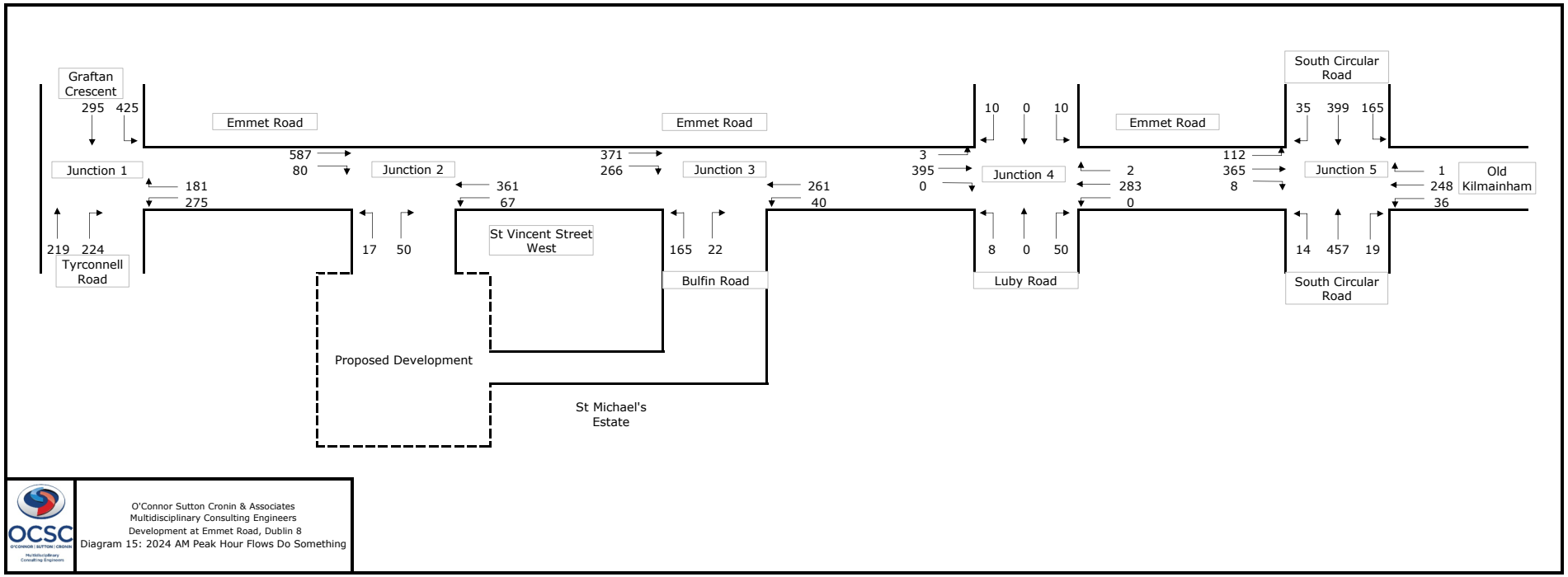
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 12: AADT Trip Generation & Assignment - Do Something



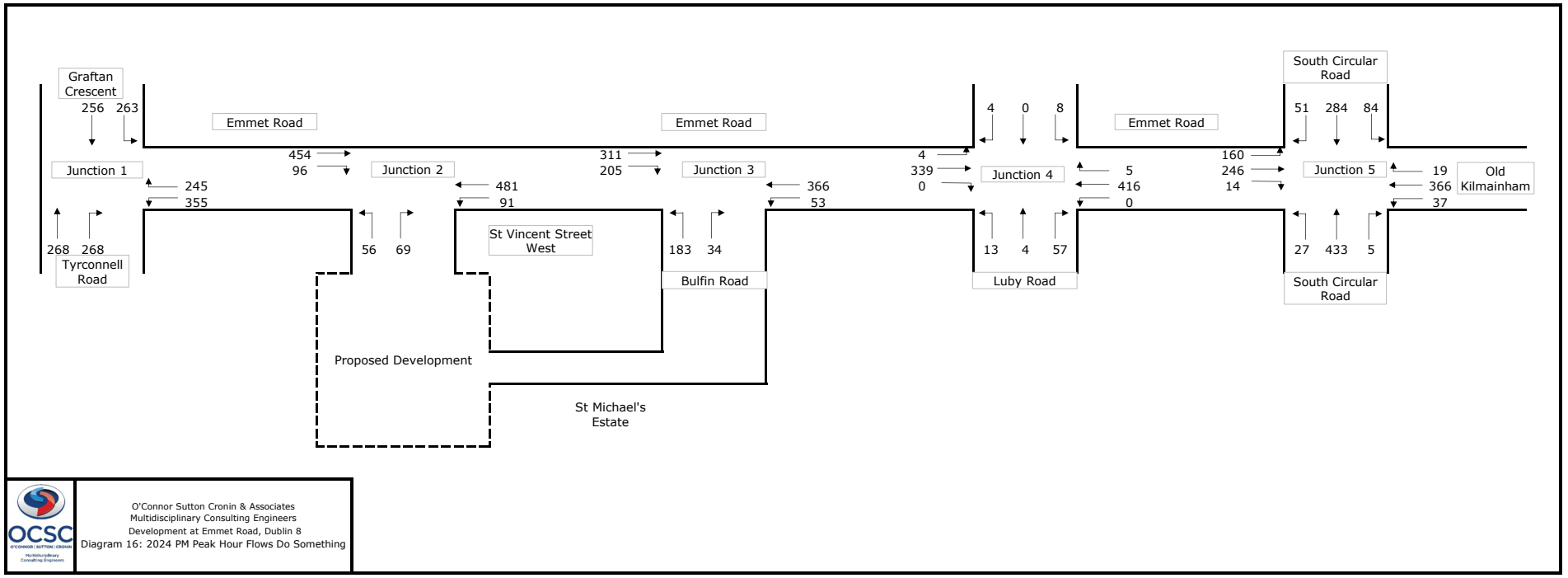
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 13: % Impact of Development on AM Peak Traffic



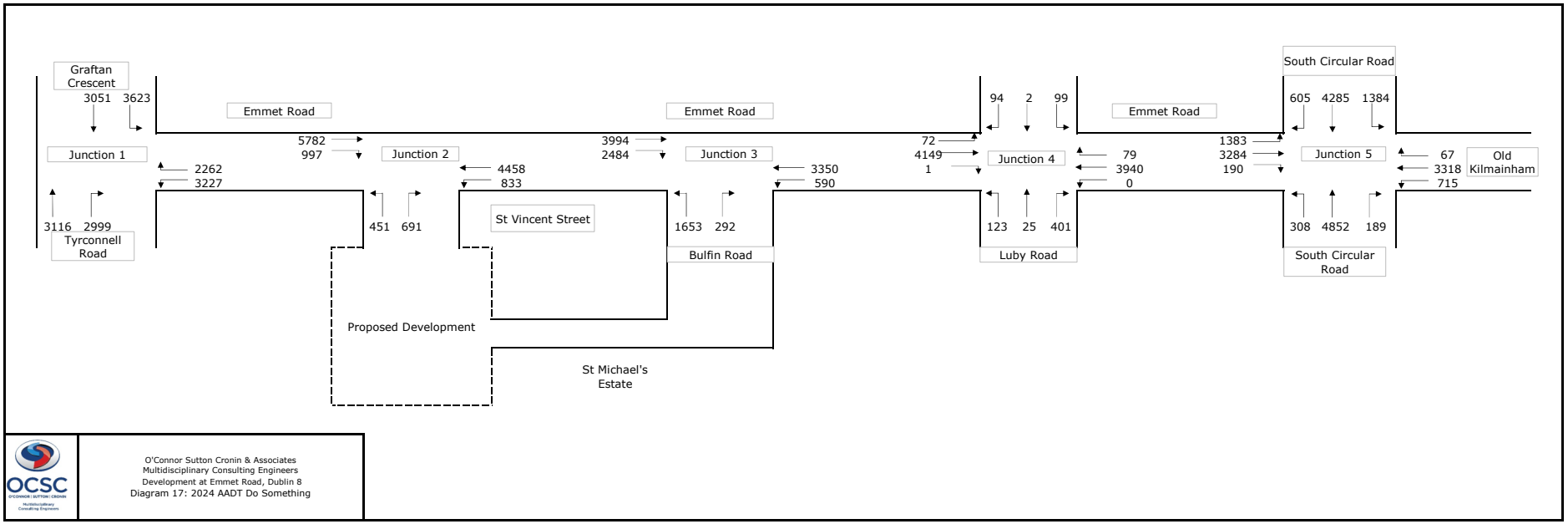
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 14: % Impact of Development on PM Peak Traffic



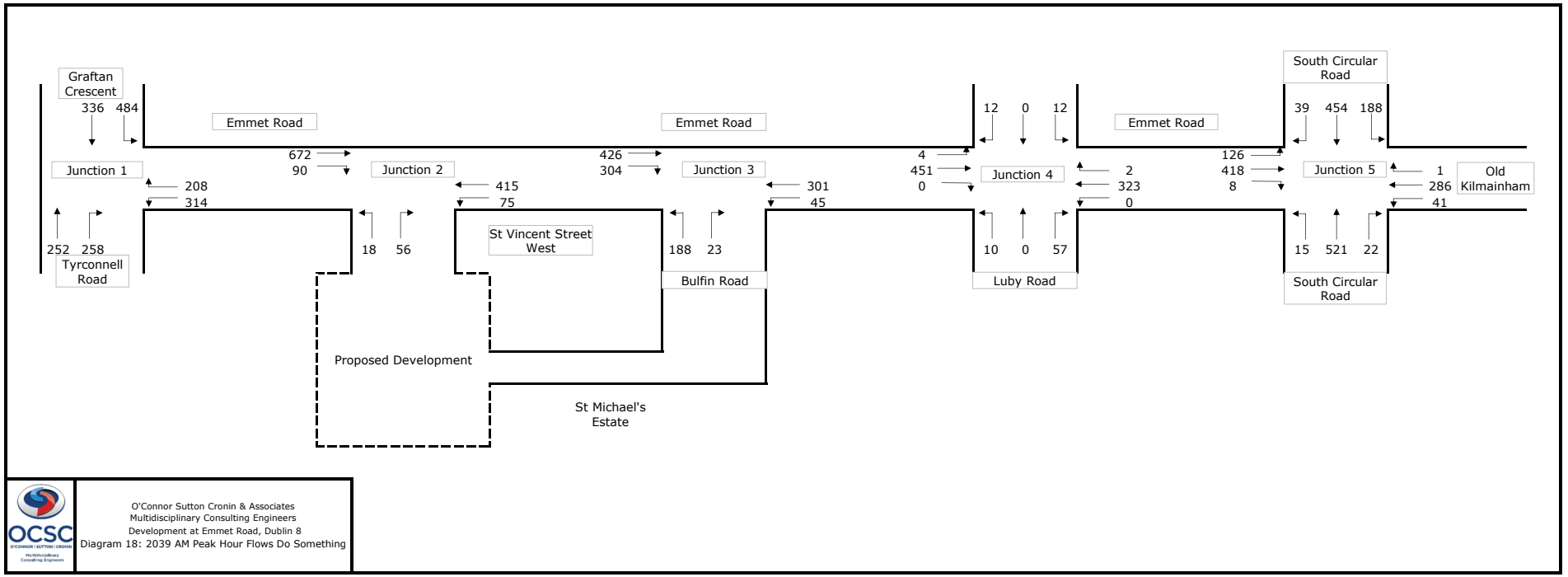
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 15: 2024 AM Peak Hour Flows Do Something



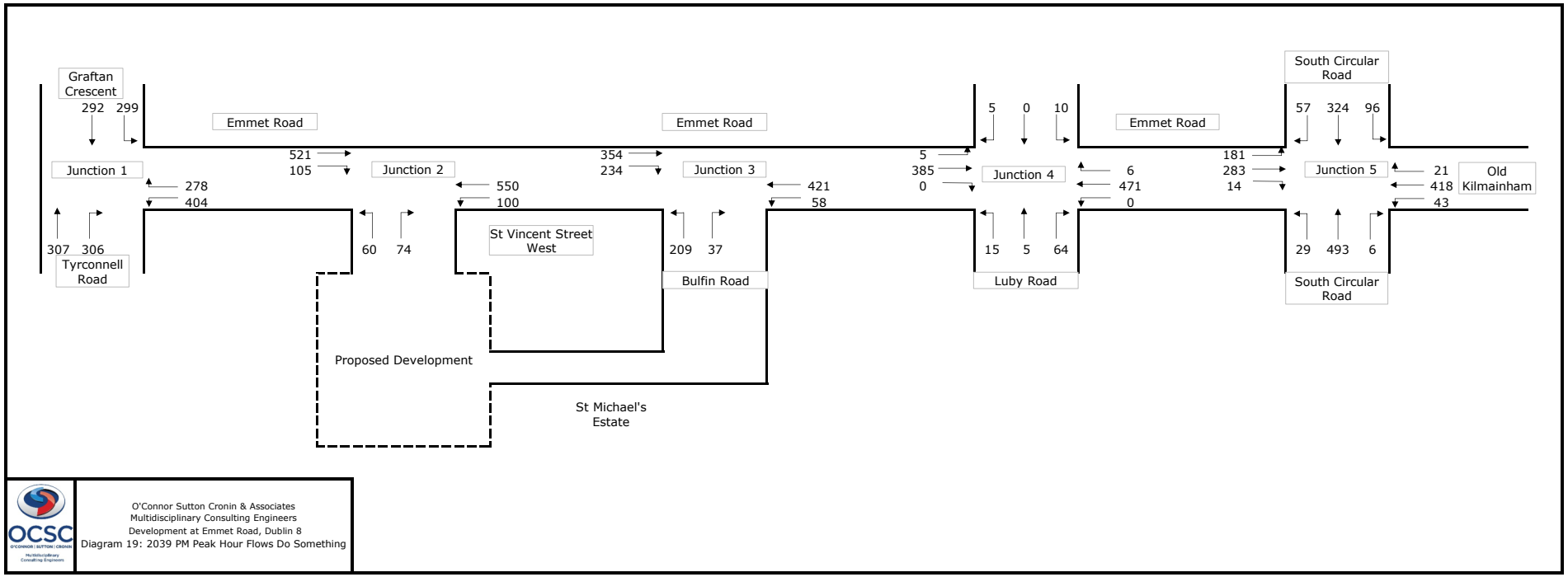
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 16: 2024 PM Peak Hour Flows Do Something



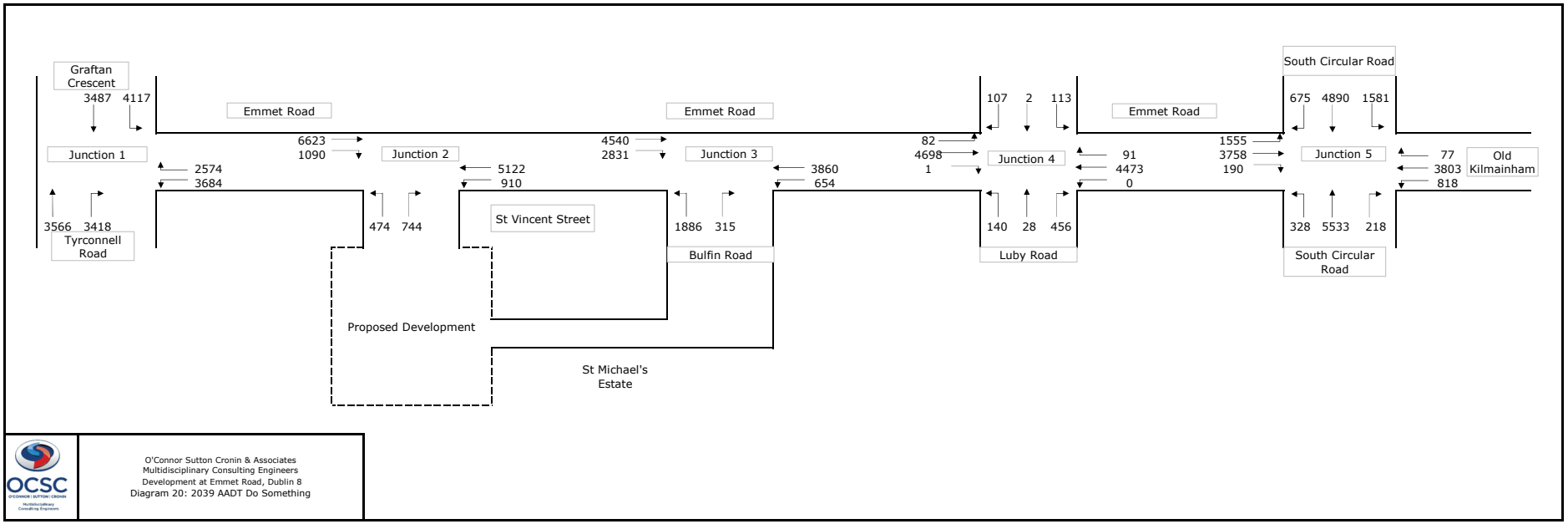
O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 17: 2024 AADT Do Something



O'Connor Sutton Cronin & Associates
Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 18: 2039 AM Peak Hour Flows Do Something



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Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 19: 2039 PM Peak Hour Flows Do Something



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Multidisciplinary Consulting Engineers
Development at Emmet Road, Dublin 8
Diagram 20: 2039 AADT Do Something

Appendix G10.3 - TRICS

Calculation Reference: AUDIT-322901-220704-0749

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	HM	HAMMERSMITH AND FULHAM	1 days
	SK	SOUTHWARK	1 days
	WF	WALTHAM FOREST	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: No of Dwellings
Actual Range: 29 to 194 (units:)
Range Selected by User: 6 to 493 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 15/10/21

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	2 days
Thursday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centre	1
Edge of Town Centre	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	1
Built-Up Zone	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

50,001 to 100,000	2 days
100,001 or More	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

500,001 or More	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	2 days
0.6 to 1.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	2 days
No	1 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

5 Very Good	1 days
6b (High) Excellent	2 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 HM-03-C-02 BLOCKS OF FLATS HAMMERSMITH AND FULHAM
GLENTHORNE ROAD
HAMMERSMITH

Town Centre
Built-Up Zone
Total No of Dwellings: 194
Survey date: TUESDAY *30/04/19* *Survey Type: MANUAL*

2 SK-03-C-02 BLOCK OF FLATS SOUTHWARK
LAMB WALK
BERMONDSEY

Edge of Town Centre
Built-Up Zone
Total No of Dwellings: 29
Survey date: THURSDAY *23/04/15* *Survey Type: MANUAL*

3 WF-03-C-01 BLOCKS OF FLATS WALTHAM FOREST
ERSKINE ROAD
WALTHAMSTOW

Edge of Town Centre
Residential Zone
Total No of Dwellings: 97
Survey date: TUESDAY *05/11/19* *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BD-03-C-01	high parking level
BD-03-C-02	high parking level
BK-03-C-01	high parking level
CB-03-C-01	high parking level
CO-03-C-01	high parking level
DV-03-C-01	high parking level
HF-03-C-03	high parking level
HM-03-C-01	high parking level
HO-03-C-02	high parking level
HO-03-C-03	high parking level
IS-03-C-05	information not clear
IS-03-C-06	information not clear
KI-03-C-03	high parking level
MS-03-C-04	high parking level
NF-03-C-01	high parking level
SA-03-C-01	high parking level
SF-03-C-01	high parking level
SF-03-C-05	high parking level
SK-03-C-01	high parking level
SR-03-C-01	high parking level
SR-03-C-02	high parking level
WF-03-C-02	high parking level
WF-03-C-04	high parking level
WF-03-C-05	high parking level
WM-03-C-04	high parking level

MANUALLY DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
BM-03-C-01	12/11/18	high parking level
HC-03-C-01	05/06/18	high parking level
IS-03-C-07	06/06/19	high parking level
SY-03-C-01	08/09/20	Covid Restriction

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	107	0.019	3	107	0.031	3	107	0.050
08:00 - 09:00	3	107	0.016	3	107	0.031	3	107	0.047
09:00 - 10:00	3	107	0.034	3	107	0.025	3	107	0.059
10:00 - 11:00	3	107	0.034	3	107	0.022	3	107	0.056
11:00 - 12:00	3	107	0.025	3	107	0.037	3	107	0.062
12:00 - 13:00	3	107	0.016	3	107	0.022	3	107	0.038
13:00 - 14:00	3	107	0.019	3	107	0.019	3	107	0.038
14:00 - 15:00	3	107	0.013	3	107	0.022	3	107	0.035
15:00 - 16:00	3	107	0.028	3	107	0.025	3	107	0.053
16:00 - 17:00	3	107	0.050	3	107	0.034	3	107	0.084
17:00 - 18:00	3	107	0.037	3	107	0.022	3	107	0.059
18:00 - 19:00	3	107	0.047	3	107	0.037	3	107	0.084
19:00 - 20:00	3	107	0.047	3	107	0.037	3	107	0.084
20:00 - 21:00	3	107	0.013	3	107	0.013	3	107	0.026
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.398			0.377			0.775

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter summary

Trip rate parameter range selected:	29 - 194 (units:)
Survey date date range:	01/01/14 - 15/10/21
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	8
Surveys manually removed from selection:	25

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-322901-220705-0749

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : C - DISCOUNT FOOD STORES
TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	LW	LEWISHAM	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
06	WEST MIDLANDS		
	WO	WORCESTERSHIRE	2 days
08	NORTH WEST		
	CH	CHESHIRE	1 days
09	NORTH		
	NB	NORTHUMBERLAND	1 days
11	SCOTLAND		
	PK	PERTH & KINROSS	1 days
	SR	STIRLING	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Parking spaces
Actual Range: 53 to 189 (units:)
Range Selected by User: 17 to 230 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 23/09/21

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	3 days
Tuesday	3 days
Thursday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	8 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Town Centre	1
Edge of Town Centre	7

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	2
Retail Zone	1
Built-Up Zone	4
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

E(a)	8 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

10,001 to 15,000	3 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days
25,001 to 50,000	1 days
50,001 to 100,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

25,001 to 50,000	1 days
50,001 to 75,000	2 days
75,001 to 100,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	2 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	4 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	8 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

Yes	1 days
No	7 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	7 days
6a Excellent	1 days

This data displays the number of selected surveys with PTAL Ratings.

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1 CH-01-C-03 LIDL CHESHIRE
FENNEL STREET
WARRINGTON

Edge of Town Centre
Retail Zone
Total Parking spaces: 92
Survey date: THURSDAY *15/04/21* *Survey Type: MANUAL*

2 LN-01-C-01 LIDL LINCOLNSHIRE
RICHMOND DRIVE
SKEGNESS

Edge of Town Centre
Built-Up Zone
Total Parking spaces: 106
Survey date: TUESDAY *19/07/16* *Survey Type: MANUAL*

3 LW-01-C-01 ALDI LEWISHAM
RUSHEY GREEN
CATFORD

Edge of Town Centre
Residential Zone
Total Parking spaces: 74
Survey date: MONDAY *16/11/15* *Survey Type: MANUAL*

4 NB-01-C-01 LIDL NORTHUMBERLAND
SCHALKSMUHLE ROAD
BEDLINGTON

Edge of Town Centre
No Sub Category
Total Parking spaces: 136
Survey date: MONDAY *12/06/17* *Survey Type: MANUAL*

5 PK-01-C-02 ALDI PERTH & KINROSS
GLASGOW ROAD
PERTH

Edge of Town Centre
Built-Up Zone
Total Parking spaces: 71
Survey date: TUESDAY *17/06/14* *Survey Type: MANUAL*

6 SR-01-C-01 LIDL STIRLING
PLAYERS ROAD
STIRLING

Edge of Town Centre
Built-Up Zone
Total Parking spaces: 128
Survey date: THURSDAY *01/06/17* *Survey Type: MANUAL*

7 WO-01-C-02 LIDL WORCESTERSHIRE
WORCESTER ROAD
MALVERN

Edge of Town Centre
Residential Zone
Total Parking spaces: 53
Survey date: TUESDAY *26/06/18* *Survey Type: MANUAL*

8 WO-01-C-03 ALDI WORCESTERSHIRE
GREEN STREET
KIDDERMINSTER

Town Centre
Built-Up Zone
Total Parking spaces: 189
Survey date: MONDAY *12/10/20* *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
AN-01-C-03	public transport
DN-01-C-01	public transport
IS-01-C-01	public transport
MG-01-C-01	public transport
NR-01-C-02	public transport
TY-01-C-02	public transport

MANUALLY DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
HI-01-C-02	17/06/14	public transport

TRIP RATE for Land Use 01 - RETAIL/C - DISCOUNT FOOD STORES
TOTAL VEHICLES
Calculation factor: 1 PARKING SPACES
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PARKING	Trip Rate	No. Days	Ave. PARKING	Trip Rate	No. Days	Ave. PARKING	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	106	0.047	1	106	0.019	1	106	0.066
07:00 - 08:00	8	106	0.099	8	106	0.039	8	106	0.138
08:00 - 09:00	8	106	0.445	8	106	0.300	8	106	0.745
09:00 - 10:00	8	106	0.727	8	106	0.591	8	106	1.318
10:00 - 11:00	8	106	0.815	8	106	0.680	8	106	1.495
11:00 - 12:00	8	106	0.845	8	106	0.834	8	106	1.679
12:00 - 13:00	8	106	0.779	8	106	0.808	8	106	1.587
13:00 - 14:00	8	106	0.808	8	106	0.866	8	106	1.674
14:00 - 15:00	8	106	0.903	8	106	0.845	8	106	1.748
15:00 - 16:00	8	106	0.863	8	106	0.853	8	106	1.716
16:00 - 17:00	8	106	0.886	8	106	0.949	8	106	1.835
17:00 - 18:00	8	106	0.786	8	106	0.890	8	106	1.676
18:00 - 19:00	8	106	0.642	8	106	0.731	8	106	1.373
19:00 - 20:00	8	106	0.470	8	106	0.511	8	106	0.981
20:00 - 21:00	8	106	0.286	8	106	0.402	8	106	0.688
21:00 - 22:00	8	106	0.145	8	106	0.194	8	106	0.339
22:00 - 23:00	5	107	0.017	5	107	0.047	5	107	0.064
23:00 - 24:00	1	74	0.000	1	74	0.068	1	74	0.068
Total Rates:			9.563			9.627			19.190

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

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Parameter summary

Trip rate parameter range selected:	53 - 189 (units:)
Survey date date range:	01/01/14 - 23/09/21
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	6

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix G10.4 - Model Output File

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: (new file)
Path:
Report generation date: 20/07/2022 09:55:59

»J2 - 2039 DS, AM
»J2 - 2039 DS, PM
»J2 - 2039 DN, AM
»J2 - 2039 DN, PM
»J2 - 2024 DS, AM
»J2 - 2024 DS, PM
»J2 - 2024 DN, AM
»J2 - 2024 DN, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	J2 - 2039 DS									
Stream B-C	D1	0.1	10.56	0.05	B	D2	0.2	12.73	0.18	B
Stream B-A		0.4	20.03	0.25	C		0.7	30.41	0.39	D
Stream C-AB		1.3	5.74	0.35	A		1.4	6.97	0.38	A
	J2 - 2039 DN									
Stream B-C	D3	0.0	10.93	0.02	B	D4	0.1	10.64	0.08	B
Stream B-A		0.3	20.14	0.22	C		0.3	21.54	0.23	C
Stream C-AB		1.1	5.30	0.30	A		0.9	5.84	0.27	A
	J2 - 2024 DS									
Stream B-C	D5	0.1	9.77	0.05	A	D6	0.2	11.05	0.15	B
Stream B-A		0.3	16.36	0.19	C		0.5	22.77	0.31	C
Stream C-AB		0.9	5.42	0.27	A		0.9	6.54	0.31	A
	J2 - 2024 DN									
Stream B-C	D7	0.0	10.29	0.02	B	D8	0.1	9.77	0.07	A
Stream B-A		0.2	16.36	0.17	C		0.2	17.30	0.17	C
Stream C-AB		0.7	5.09	0.23	A		0.6	5.68	0.21	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

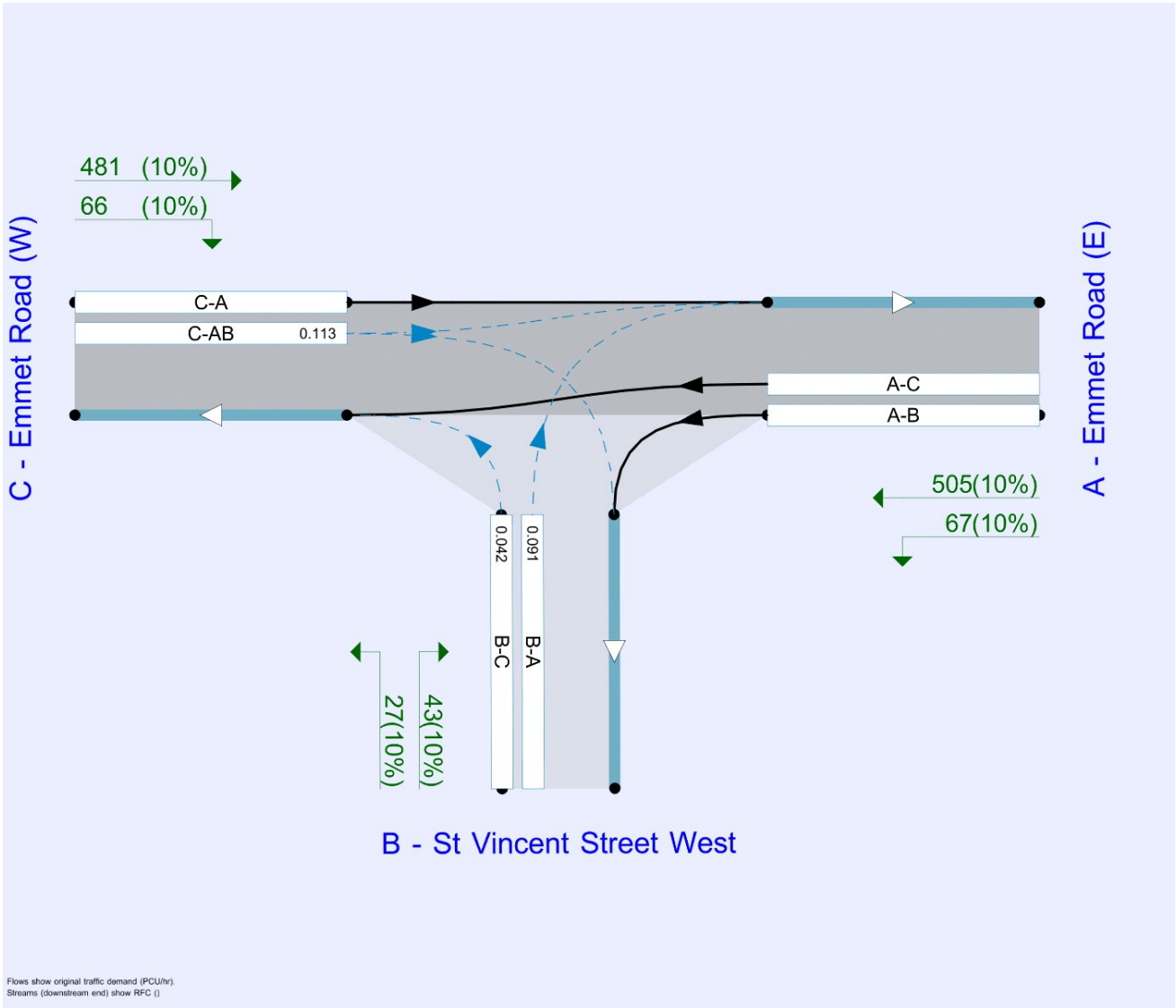
File summary

File Description

Title	
Location	
Site number	
Date	18/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC\joshua.tai
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039 DS	AM	ONE HOUR	08:00	09:30	15
D2	2039 DS	PM	ONE HOUR	08:00	09:30	15
D3	2039 DN	AM	ONE HOUR	08:00	09:30	15
D4	2039 DN	PM	ONE HOUR	08:00	09:30	15
D5	2024 DS	AM	ONE HOUR	08:00	09:30	15
D6	2024 DS	PM	ONE HOUR	08:00	09:30	15
D7	2024 DN	AM	ONE HOUR	08:00	09:30	15
D8	2024 DN	PM	ONE HOUR	08:00	09:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J2	100.000

J2 - 2039 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - St Vincent Street West - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Emmet Road (E)		Major
B	St Vincent Street West		Minor
C	Emmet Road (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Emmet Road (W)	6.00			150.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - St Vincent Street West	One lane plus flare	5.50	4.30	4.10	2.20	2.20	✓	1.00	20	40

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	565	0.103	0.260	0.164	0.372
B-C	538	0.082	0.208	-	-
C-B	661	0.256	0.256	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2039 DS	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Emmet Road (E)		✓	523	100.000
B - St Vincent Street West		✓	77	100.000
C - Emmet Road (W)		✓	801	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	0	80	443
	B - St Vincent Street West	59	0	18
	C - Emmet Road (W)	709	92	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	10	10	10
	B - St Vincent Street West	10	10	10
	C - Emmet Road (W)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.05	10.56	0.1	B
B-A	0.25	20.03	0.4	C
C-AB	0.35	5.74	1.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	448	0.030	13	0.0	9.109	A
B-A	44	359	0.124	44	0.2	12.545	B
C-AB	163	928	0.176	161	0.5	5.166	A
C-A	440			440			
A-B	60			60			
A-C	334			334			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16	428	0.038	16	0.0	9.625	A
B-A	53	318	0.167	53	0.2	14.893	B
C-AB	235	987	0.238	234	0.7	5.272	A
C-A	485			485			
A-B	72			72			
A-C	398			398			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	395	0.050	20	0.1	10.542	B
B-A	65	263	0.247	64	0.4	19.897	C
C-AB	376	1073	0.351	374	1.3	5.695	A
C-A	505			505			
A-B	88			88			
A-C	488			488			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	395	0.050	20	0.1	10.563	B
B-A	65	263	0.247	65	0.4	20.032	C
C-AB	378	1074	0.352	378	1.3	5.737	A
C-A	504			504			
A-B	88			88			
A-C	488			488			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16	427	0.038	16	0.0	9.648	A
B-A	53	318	0.167	54	0.2	15.006	C
C-AB	237	989	0.239	239	0.8	5.318	A
C-A	483			483			
A-B	72			72			
A-C	398			398			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	447	0.030	14	0.0	9.133	A
B-A	44	358	0.124	45	0.2	12.633	B
C-AB	165	929	0.177	166	0.5	5.209	A
C-A	438			438			
A-B	60			60			
A-C	334			334			

J2 - 2039 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - St Vincent Street West - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2039 DS	PM	ONE HOUR	08:00	09:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Emmet Road (E)		✓	688	100.000
B - St Vincent Street West		✓	138	100.000
C - Emmet Road (W)		✓	663	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	0	105	583
	B - St Vincent Street West	76	0	62
	C - Emmet Road (W)	558	105	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	10	10	10
	B - St Vincent Street West	10	10	10
	C - Emmet Road (W)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.18	12.73	0.2	B
B-A	0.39	30.41	0.7	D
C-AB	0.38	6.97	1.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	47	476	0.098	46	0.1	9.203	A
B-A	57	307	0.186	56	0.2	15.704	C
C-AB	161	825	0.195	159	0.5	5.944	A
C-A	338			338			
A-B	79			79			
A-C	439			439			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	56	442	0.126	56	0.2	10.252	B
B-A	68	268	0.255	68	0.4	19.700	C
C-AB	226	865	0.262	225	0.7	6.209	A
C-A	370			370			
A-B	94			94			
A-C	524			524			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	68	381	0.179	68	0.2	12.617	B
B-A	84	214	0.391	82	0.7	29.845	D
C-AB	349	923	0.378	347	1.3	6.906	A
C-A	381			381			
A-B	116			116			
A-C	642			642			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	68	379	0.180	68	0.2	12.734	B
B-A	84	214	0.392	84	0.7	30.411	D
C-AB	351	925	0.379	351	1.4	6.967	A
C-A	379			379			
A-B	116			116			
A-C	642			642			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	56	439	0.127	56	0.2	10.344	B
B-A	68	268	0.255	70	0.4	20.044	C
C-AB	228	867	0.263	230	0.8	6.276	A
C-A	368			368			
A-B	94			94			
A-C	524			524			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	47	474	0.098	47	0.1	9.270	A
B-A	57	307	0.186	58	0.3	15.904	C
C-AB	162	826	0.197	164	0.5	6.000	A
C-A	337			337			
A-B	79			79			
A-C	439			439			

J2 - 2039 DN, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - St Vincent Street West - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2039 DN	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Emmet Road (E)		✓	512	100.000
B - St Vincent Street West		✓	58	100.000
C - Emmet Road (W)		✓	788	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	0	69	443
	B - St Vincent Street West	51	0	7
	C - Emmet Road (W)	709	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	10	10	10
	B - St Vincent Street West	10	10	10
	C - Emmet Road (W)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	10.93	0.0	B
B-A	0.22	20.14	0.3	C
C-AB	0.30	5.30	1.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	416	0.013	5	0.0	9.631	A
B-A	38	341	0.113	38	0.1	13.034	B
C-AB	140	929	0.150	138	0.4	5.007	A
C-A	453			453			
A-B	52			52			
A-C	334			334			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	398	0.016	6	0.0	10.101	B
B-A	46	304	0.151	46	0.2	15.313	C
C-AB	201	989	0.204	201	0.6	5.035	A
C-A	507			507			
A-B	62			62			
A-C	398			398			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	370	0.021	8	0.0	10.915	B
B-A	56	253	0.222	56	0.3	20.015	C
C-AB	322	1074	0.300	320	1.1	5.269	A
C-A	546			546			
A-B	76			76			
A-C	488			488			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	370	0.021	8	0.0	10.929	B
B-A	56	253	0.222	56	0.3	20.136	C
C-AB	323	1075	0.300	323	1.1	5.298	A
C-A	545			545			
A-B	76			76			
A-C	488			488			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	398	0.016	6	0.0	10.119	B
B-A	46	304	0.151	46	0.2	15.419	C
C-AB	203	990	0.205	204	0.6	5.069	A
C-A	506			506			
A-B	62			62			
A-C	398			398			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	416	0.013	5	0.0	9.648	A
B-A	38	341	0.113	39	0.1	13.124	B
C-AB	141	930	0.152	142	0.4	5.040	A
C-A	452			452			
A-B	52			52			
A-C	334			334			

J2 - 2039 DN, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - St Vincent Street West - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2039 DN	PM	ONE HOUR	08:00	09:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Emmet Road (E)		✓	660	100.000
B - St Vincent Street West		✓	80	100.000
C - Emmet Road (W)		✓	633	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	0	77	583
	B - St Vincent Street West	49	0	31
	C - Emmet Road (W)	558	75	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	10	10	10
	B - St Vincent Street West	10	10	10
	C - Emmet Road (W)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.08	10.64	0.1	B
B-A	0.23	21.54	0.3	C
C-AB	0.27	5.84	0.9	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	472	0.049	23	0.1	8.813	A
B-A	37	328	0.112	36	0.1	13.545	B
C-AB	114	829	0.138	113	0.3	5.531	A
C-A	362			362			
A-B	58			58			
A-C	439			439			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	446	0.062	28	0.1	9.466	A
B-A	44	290	0.152	44	0.2	16.053	C
C-AB	161	869	0.185	160	0.5	5.594	A
C-A	409			409			
A-B	69			69			
A-C	524			524			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	34	407	0.084	34	0.1	10.615	B
B-A	54	238	0.227	53	0.3	21.418	C
C-AB	247	928	0.266	245	0.9	5.818	A
C-A	450			450			
A-B	85			85			
A-C	642			642			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	34	406	0.084	34	0.1	10.641	B
B-A	54	238	0.227	54	0.3	21.542	C
C-AB	247	929	0.266	247	0.9	5.844	A
C-A	450			450			
A-B	85			85			
A-C	642			642			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	445	0.063	28	0.1	9.497	A
B-A	44	290	0.152	45	0.2	16.150	C
C-AB	161	870	0.185	163	0.5	5.623	A
C-A	408			408			
A-B	69			69			
A-C	524			524			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	471	0.050	23	0.1	8.845	A
B-A	37	328	0.112	37	0.1	13.621	B
C-AB	115	830	0.139	116	0.3	5.561	A
C-A	361			361			
A-B	58			58			
A-C	439			439			

J2 - 2024 DS, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - St Vincent Street West - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2024 DS	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Emmet Road (E)		✓	452	100.000
B - St Vincent Street West		✓	70	100.000
C - Emmet Road (W)		✓	696	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	0	70	382
	B - St Vincent Street West	52	0	18
	C - Emmet Road (W)	614	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	10	10	10
	B - St Vincent Street West	10	10	10
	C - Emmet Road (W)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.05	9.77	0.1	A
B-A	0.19	16.36	0.3	C
C-AB	0.27	5.42	0.9	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	468	0.029	13	0.0	8.711	A
B-A	39	382	0.103	39	0.1	11.529	B
C-AB	129	889	0.145	127	0.4	5.202	A
C-A	395			395			
A-B	53			53			
A-C	288			288			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16	451	0.036	16	0.0	9.110	A
B-A	47	347	0.135	47	0.2	13.170	B
C-AB	180	939	0.192	179	0.5	5.226	A
C-A	446			446			
A-B	63			63			
A-C	343			343			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	425	0.047	20	0.1	9.760	A
B-A	57	299	0.191	57	0.3	16.306	C
C-AB	275	1010	0.273	274	0.9	5.399	A
C-A	491			491			
A-B	77			77			
A-C	421			421			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	425	0.047	20	0.1	9.772	A
B-A	57	299	0.191	57	0.3	16.364	C
C-AB	276	1011	0.273	276	0.9	5.417	A
C-A	490			490			
A-B	77			77			
A-C	421			421			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	16	450	0.036	16	0.0	9.124	A
B-A	47	347	0.135	47	0.2	13.226	B
C-AB	181	940	0.193	182	0.5	5.254	A
C-A	445			445			
A-B	63			63			
A-C	343			343			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	467	0.029	14	0.0	8.729	A
B-A	39	381	0.103	39	0.1	11.587	B
C-AB	130	889	0.146	130	0.4	5.232	A
C-A	394			394			
A-B	53			53			
A-C	288			288			

J2 - 2024 DS, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - St Vincent Street West - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2024 DS	PM	ONE HOUR	08:00	09:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Emmet Road (E)		✓	599	100.000
B - St Vincent Street West		✓	128	100.000
C - Emmet Road (W)		✓	577	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	0	94	505
	B - St Vincent Street West	70	0	58
	C - Emmet Road (W)	481	96	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	10	10	10
	B - St Vincent Street West	10	10	10
	C - Emmet Road (W)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.15	11.05	0.2	B
B-A	0.31	22.77	0.5	C
C-AB	0.31	6.54	0.9	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	496	0.088	43	0.1	8.740	A
B-A	53	332	0.159	52	0.2	14.094	B
C-AB	132	798	0.166	131	0.4	5.936	A
C-A	302			302			
A-B	71			71			
A-C	380			380			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	52	468	0.111	52	0.1	9.520	A
B-A	63	298	0.211	63	0.3	16.784	C
C-AB	181	830	0.218	180	0.5	6.107	A
C-A	338			338			
A-B	85			85			
A-C	454			454			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	64	423	0.151	64	0.2	11.005	B
B-A	77	251	0.307	76	0.5	22.574	C
C-AB	269	878	0.306	267	0.9	6.509	A
C-A	367			367			
A-B	103			103			
A-C	556			556			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	64	422	0.151	64	0.2	11.051	B
B-A	77	251	0.307	77	0.5	22.766	C
C-AB	269	878	0.307	269	0.9	6.540	A
C-A	366			366			
A-B	103			103			
A-C	556			556			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	52	466	0.112	52	0.1	9.570	A
B-A	63	298	0.211	64	0.3	16.941	C
C-AB	182	831	0.219	183	0.6	6.146	A
C-A	337			337			
A-B	85			85			
A-C	454			454			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	44	495	0.088	44	0.1	8.788	A
B-A	53	332	0.159	53	0.2	14.217	B
C-AB	133	799	0.167	134	0.4	5.978	A
C-A	301			301			
A-B	71			71			
A-C	380			380			

J2 - 2024 DN, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - St Vincent Street West - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2024 DN	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Emmet Road (E)		✓	441	100.000
B - St Vincent Street West		✓	50	100.000
C - Emmet Road (W)		✓	683	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	0	59	382
	B - St Vincent Street West	44	0	6
	C - Emmet Road (W)	614	69	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	10	10	10
	B - St Vincent Street West	10	10	10
	C - Emmet Road (W)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	10.29	0.0	B
B-A	0.17	16.36	0.2	C
C-AB	0.23	5.09	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	428	0.011	4	0.0	9.348	A
B-A	33	367	0.090	33	0.1	11.840	B
C-AB	108	890	0.121	107	0.3	5.056	A
C-A	406			406			
A-B	44			44			
A-C	288			288			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	413	0.013	5	0.0	9.708	A
B-A	40	335	0.118	39	0.1	13.405	B
C-AB	151	940	0.161	151	0.4	5.022	A
C-A	463			463			
A-B	53			53			
A-C	343			343			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	392	0.017	7	0.0	10.285	B
B-A	48	291	0.167	48	0.2	16.313	C
C-AB	231	1012	0.228	230	0.7	5.076	A
C-A	521			521			
A-B	65			65			
A-C	421			421			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	391	0.017	7	0.0	10.291	B
B-A	48	290	0.167	48	0.2	16.364	C
C-AB	231	1012	0.229	231	0.7	5.090	A
C-A	521			521			
A-B	65			65			
A-C	421			421			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	413	0.013	5	0.0	9.718	A
B-A	40	334	0.118	40	0.2	13.460	B
C-AB	152	941	0.161	153	0.5	5.042	A
C-A	462			462			
A-B	53			53			
A-C	343			343			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	428	0.011	5	0.0	9.360	A
B-A	33	366	0.090	33	0.1	11.898	B
C-AB	109	891	0.122	109	0.3	5.078	A
C-A	405			405			
A-B	44			44			
A-C	288			288			

J2 - 2024 DN, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - St Vincent Street West - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2024 DN	PM	ONE HOUR	08:00	09:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Emmet Road (E)		✓	572	100.000
B - St Vincent Street West		✓	70	100.000
C - Emmet Road (W)		✓	547	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	0	67	505
	B - St Vincent Street West	43	0	27
	C - Emmet Road (W)	481	66	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Emmet Road (E)	B - St Vincent Street West	C - Emmet Road (W)
From	A - Emmet Road (E)	10	10	10
	B - St Vincent Street West	10	10	10
	C - Emmet Road (W)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.07	9.77	0.1	A
B-A	0.17	17.30	0.2	C
C-AB	0.21	5.68	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	488	0.042	20	0.0	8.450	A
B-A	32	354	0.091	32	0.1	12.261	B
C-AB	91	802	0.113	90	0.3	5.563	A
C-A	321			321			
A-B	50			50			
A-C	380			380			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	467	0.052	24	0.1	8.950	A
B-A	39	322	0.120	39	0.1	13.977	B
C-AB	124	835	0.148	123	0.4	5.572	A
C-A	368			368			
A-B	60			60			
A-C	454			454			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	435	0.068	30	0.1	9.760	A
B-A	47	276	0.171	47	0.2	17.249	C
C-AB	183	883	0.207	182	0.6	5.665	A
C-A	419			419			
A-B	74			74			
A-C	556			556			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	435	0.068	30	0.1	9.774	A
B-A	47	276	0.171	47	0.2	17.297	C
C-AB	183	883	0.208	183	0.6	5.678	A
C-A	419			419			
A-B	74			74			
A-C	556			556			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	466	0.052	24	0.1	8.969	A
B-A	39	322	0.120	39	0.2	14.021	B
C-AB	124	835	0.149	125	0.4	5.594	A
C-A	368			368			
A-B	60			60			
A-C	454			454			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	488	0.042	20	0.0	8.474	A
B-A	32	354	0.091	33	0.1	12.310	B
C-AB	91	802	0.114	92	0.3	5.583	A
C-A	321			321			
A-B	50			50			
A-C	380			380			

TRANSYT 15

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Filename: (new file)
Path:
Report generation date: 20/07/2022 09:57:58

«A1 - Junction 4 2039 : D1 - AM DS* :
»Summary
»Network Options
»Arms and Traffic Streams
»Signal Timings
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	18/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A1 - Junction 4 2039
D1 - AM DS*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
1	20/07/2022 09:57:45	20/07/2022 09:57:45	08:00	60	37.61	2.20	39.18	1/1	0	0	1/1	8/1	1/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
Junction 4 2039		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM DS				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
60		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				90.00	✓	Sum of lanes	2051			✓		Normal	
2	1				90.00	✓	Sum of lanes	1915			✓		Bus	
3	1			✓	47.78								Normal	
4	1				90.00								Normal	
5	1			✓	151.56								Normal	
6	1				20.00	✓	Sum of lanes	1532				✓	Normal	
7	1				50.00	✓	Sum of lanes	1532				✓	Normal	
8	1				20.00	✓	Sum of lanes	1912	✓	1800		✓	Normal	
9	1				30.00	✓	Sum of lanes	1915			✓		Normal	
10	1				165.00								Bus	
11	1			✓	102.79	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	8.19		2051
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											
6	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	9.83	✓	1912
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
10	1	1	(untitled)											
11	1	1	(untitled)											1800

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
(ALL)	1	1	A	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic	✓	0	✓	6.00	
7	1	AllTraffic	✓	0	✓	6.00	
8	1	AllTraffic	✓	0	✓	9.83	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	2/1			100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStreamMovement		1/1	5/1	100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	2/1			100		0	0

Signal Timings

Network Default: 60s cycle time; 60 steps

Interstage Matrix for Controller Stream 1

		To	
		1	2
From	1	0	5
	2	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	52	24	32	1	7
	2	✓	2	B	29	47	18	1	18

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D wei mu
1	1			1	A	442	2051	32	0.00	39	130	19.58	8.78	55.67	4.30	
2	1 B			1	A	43	1915	32	32.00	4	2104	27.97	6.37	44.24	0.32	
3	1					6	Unrestricted	60	60.00	0	Unrestricted	5.73	0.00	0.00	0.00	
4	1					372	Unrestricted	60	21.00	0	Unrestricted	10.80	0.00	0.00	0.00	
5	1					509	Unrestricted	60	0.00	0	Unrestricted	18.19	0.00	0.00	0.00	
6	1					25	617	60	48.00	4	2121	3.64	1.24	17.51	0.08	
7	1					69	619	60	0.00	11	708	7.59	1.59	19.70	0.26	
8	1					351	1337	60	0.00	26	243	3.60	1.20	12.62	1.50	
9	1			1	A	372	1915	32	4.00	35	155	12.02	8.42	51.58	3.27	
10	1 B					43	Unrestricted	60	46.00	0	Unrestricted	39.60	0.00	0.00	0.00	
11	1					351	1800	60	0.00	20	362	12.58	0.24	0.00	0.02	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	208.90	9.09	22.98	2.13	30.20	6.27	0.00	36.47
Bus	10.97	0.81	13.59	0.08	1.08	0.06	0.00	1.14
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	219.87	9.90	22.21	2.20	31.28	6.33	0.00	37.61

- *N = at least one source for this link/traffic stream carries normal traffic*
- *B = at least one source for this link/traffic stream carries Bus traffic*
- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

TRANSYT 15

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Filename: (new file)
Path:
Report generation date: 20/07/2022 09:58:34

«A2 - Junction 4 2039 : D2 - PM DS* :
»Summary
»Network Options
»Arms and Traffic Streams
»Signal Timings
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	18/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A2 - Junction 4 2039
D2 - PM DS*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
2	20/07/2022 09:57:45	20/07/2022 09:57:45	08:00	60	44.56	2.64	49.56	9/1	0	0	9/1	8/1	9/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
Junction 4 2039		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM DS				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
60		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				90.00	✓	Sum of lanes	2051			✓		Normal	
2	1				90.00	✓	Sum of lanes	1915			✓		Bus	
3	1			✓	47.78								Normal	
4	1				90.00								Normal	
5	1			✓	151.56								Normal	
6	1				20.00	✓	Sum of lanes	1532				✓	Normal	
7	1				50.00	✓	Sum of lanes	1551				✓	Normal	
8	1				20.00	✓	Sum of lanes	1912	✓	1800		✓	Normal	
9	1				30.00	✓	Sum of lanes	1915			✓		Normal	
10	1				165.00								Bus	
11	1			✓	102.79	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	8.19		2051
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											
6	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	94	6.00	✓	1551
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	9.83	✓	1912
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
10	1	1	(untitled)											
11	1	1	(untitled)											1800

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
(ALL)	1	1	A	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic	✓	0	✓	6.00	
7	1	AllTraffic	✓	0	✓	6.00	
8	1	AllTraffic	✓	0	✓	9.83	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	2/1			100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStreamMovement		1/1	5/1	100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	2/1			100		0	0

Signal Timings

Network Default: 60s cycle time; 60 steps

Interstage Matrix for Controller Stream 1

		To	
		1	2
From	1	0	5
	2	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	52	24	32	1	7
	2	✓	2	B	29	47	18	1	18

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D wei mu
1	1			1	A	377	2051	32	0.00	33	169	19.05	8.25	52.88	3.54	
2	1 B			1	A	43	1915	32	32.00	4	2104	27.97	6.37	44.24	0.32	
3	1					16	Unrestricted	60	60.00	0	Unrestricted	5.73	0.00	0.00	0.00	
4	1					522	Unrestricted	60	20.00	0	Unrestricted	10.80	0.00	0.00	0.00	
5	1					446	Unrestricted	60	0.00	0	Unrestricted	18.19	0.00	0.00	0.00	
6	1					15	480	60	48.00	3	2777	3.49	1.09	16.29	0.05	
7	1					84	488	60	0.00	17	423	7.97	1.97	20.46	0.32	
8	1					508	1418	60	0.00	36	151	3.65	1.25	11.18	1.55	
9	1			1	A	522	1915	32	0.00	50	82	13.39	9.79	54.00	4.73	
10	1 B					43	Unrestricted	60	46.00	0	Unrestricted	39.60	0.00	0.00	0.00	
11	1					508	1800	60	0.00	28	219	12.73	0.39	0.00	0.06	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	231.81	10.29	22.52	2.57	36.42	6.99	0.00	43.42
Bus	10.97	0.81	13.59	0.08	1.08	0.06	0.00	1.14
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	242.77	11.10	21.87	2.64	37.50	7.05	0.00	44.56

- *N = at least one source for this link/traffic stream carries normal traffic*
- *B = at least one source for this link/traffic stream carries Bus traffic*
- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

TRANSYT 15

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Filename: (new file)
Path:
Report generation date: 20/07/2022 09:59:00

«A3 - Junction 4 2039 : D3 - AM DN* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	18/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A3 - Junction 4 2039
D3 - AM DN*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
3	20/07/2022 09:57:45	20/07/2022 09:57:45	08:00	60	35.20	2.06	37.59	1/1	0	0	1/1	8/1	1/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
Junction 4 2039		D3	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM DN				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
60		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				90.00	✓	Sum of lanes	2051			✓		Normal	
2	1				90.00	✓	Sum of lanes	1915			✓		Bus	
3	1			✓	47.78								Normal	
4	1				90.00								Normal	
5	1			✓	151.56								Normal	
6	1				20.00	✓	Sum of lanes	1532				✓	Normal	
7	1				50.00	✓	Sum of lanes	1532				✓	Normal	
8	1				20.00	✓	Sum of lanes	1912	✓	1800		✓	Normal	
9	1				30.00	✓	Sum of lanes	1915			✓		Normal	
10	1				165.00								Bus	
11	1			✓	102.79	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	8.19		2051
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											
6	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	9.83	✓	1912
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
10	1	1	(untitled)											
11	1	1	(untitled)											1800

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
(ALL)	1	1	A	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic	✓	0	✓	6.00	
7	1	AllTraffic	✓	0	✓	6.00	
8	1	AllTraffic	✓	0	✓	9.83	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	2/1			100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStreamMovement		1/1	5/1	100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	2/1			100		0	0

Signal Timings

Network Default: 60s cycle time; 60 steps

Interstage Matrix for Controller Stream 1

		To	
		1	2
From	1	0	5
	2	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	52	24	32	1	7
	2	✓	2	B	29	47	18	1	18

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D wei mu
1	1			1	A	424	2051	32	0.00	38	139	19.42	8.62	54.53	4.12	
2	1 B			1	A	43	1915	32	32.00	4	2104	27.97	6.37	44.24	0.32	
3	1					7	Unrestricted	60	60.00	0	Unrestricted	5.73	0.00	0.00	0.00	
4	1					356	Unrestricted	60	21.00	0	Unrestricted	10.80	0.00	0.00	0.00	
5	1					490	Unrestricted	60	0.00	0	Unrestricted	18.19	0.00	0.00	0.00	
6	1					25	658	60	49.00	4	2268	3.42	1.02	14.88	0.07	
7	1					69	661	60	0.00	10	762	7.25	1.25	16.45	0.22	
8	1					335	1363	60	0.00	25	266	3.42	1.02	12.38	1.49	
9	1			1	A	356	1915	32	4.00	34	166	11.90	8.30	51.42	3.13	
10	1 B					43	Unrestricted	60	46.00	0	Unrestricted	39.60	0.00	0.00	0.00	
11	1					335	1800	60	0.00	19	384	12.56	0.23	0.00	0.02	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	200.56	8.67	23.14	1.98	28.15	5.90	0.00	34.06
Bus	10.97	0.81	13.59	0.08	1.08	0.06	0.00	1.14
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	211.53	9.48	22.32	2.06	29.24	5.96	0.00	35.20

- *N = at least one source for this link/traffic stream carries normal traffic*
- *B = at least one source for this link/traffic stream carries Bus traffic*
- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

TRANSYT 15

Version: 15.5.2.7994
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Filename: (new file)
Path:
Report generation date: 20/07/2022 09:59:44

«A4 - Junction 4 2039 : D4 - PM DN* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	18/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A4 - Junction 4 2039
D4 - PM DN*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
4	20/07/2022 09:57:45	20/07/2022 09:57:45	08:00	60	38.77	2.29	45.67	9/1	0	0	9/1	8/1	9/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
Junction 4 2039		D4	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM DN				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
60		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				90.00	✓	Sum of lanes	2051			✓		Normal	
2	1				90.00	✓	Sum of lanes	1915			✓		Bus	
3	1			✓	47.78								Normal	
4	1				90.00								Normal	
5	1			✓	151.56								Normal	
6	1				20.00	✓	Sum of lanes	1532				✓	Normal	
7	1				50.00	✓	Sum of lanes	1551				✓	Normal	
8	1				20.00	✓	Sum of lanes	1912	✓	1800		✓	Normal	
9	1				30.00	✓	Sum of lanes	1915			✓		Normal	
10	1				165.00								Bus	
11	1			✓	102.79	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	8.19		2051
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											
6	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	94	6.00	✓	1551
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	9.83	✓	1912
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
10	1	1	(untitled)											
11	1	1	(untitled)											1800

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
(ALL)	1	1	A	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic	✓	0	✓	6.00	
7	1	AllTraffic	✓	0	✓	6.00	
8	1	AllTraffic	✓	0	✓	9.83	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	2/1			100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStreamMovement		1/1	5/1	100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	2/1			100		0	0

Signal Timings

Network Default: 60s cycle time; 60 steps

Interstage Matrix for Controller Stream 1

		To	
		1	2
From	1	0	5
	2	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	52	24	32	1	7
	2	✓	2	B	29	47	18	1	18

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D wei mu
1	1			1	A	340	2051	32	0.00	30	199	18.78	7.98	51.95	3.09	
2	1 B			1	A	43	1915	32	32.00	4	2104	27.97	6.37	44.24	0.32	
3	1					16	Unrestricted	60	60.00	0	Unrestricted	5.73	0.00	0.00	0.00	
4	1					481	Unrestricted	60	20.00	0	Unrestricted	10.80	0.00	0.00	0.00	
5	1					409	Unrestricted	60	0.00	0	Unrestricted	18.19	0.00	0.00	0.00	
6	1					15	555	60	50.00	3	3229	3.20	0.80	13.14	0.04	
7	1					84	565	60	0.00	15	505	7.33	1.33	15.23	0.25	
8	1					467	1460	60	0.00	32	181	3.39	0.99	9.43	1.52	
9	1			1	A	481	1915	32	0.00	46	97	12.98	9.38	53.38	4.33	
10	1 B					43	Unrestricted	60	46.00	0	Unrestricted	39.60	0.00	0.00	0.00	
11	1					467	1800	60	0.00	26	247	12.69	0.35	0.00	0.05	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	212.92	9.31	22.86	2.22	31.45	6.17	0.00	37.63
Bus	10.97	0.81	13.59	0.08	1.08	0.06	0.00	1.14
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	223.88	10.12	22.12	2.29	32.54	6.23	0.00	38.77

- *N = at least one source for this link/traffic stream carries normal traffic*
- *B = at least one source for this link/traffic stream carries Bus traffic*
- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

TRANSYT 15

Version: 15.5.2.7994
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Filename: (new file)
Path:
Report generation date: 20/07/2022 10:00:55

«A1 - Junction 4 2024 : D1 - AM DS* :
»Summary
»Network Options
»Arms and Traffic Streams
»Signal Timings
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	18/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A1 - Junction 4 2024
D1 - AM DS*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
1	20/07/2022 10:00:50	20/07/2022 10:00:50	08:00	60	30.66	1.79	34.57	1/1	0	0	1/1	8/1	1/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
Junction 4 2024		D1	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM DS				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
60		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				90.00	✓	Sum of lanes	2051			✓		Normal	
2	1				90.00	✓	Sum of lanes	1915			✓		Bus	
3	1			✓	47.78								Normal	
4	1				90.00								Normal	
5	1			✓	151.56								Normal	
6	1				20.00	✓	Sum of lanes	1532				✓	Normal	
7	1				50.00	✓	Sum of lanes	1532				✓	Normal	
8	1				20.00	✓	Sum of lanes	1912	✓	1800		✓	Normal	
9	1				30.00	✓	Sum of lanes	1915			✓		Normal	
10	1				165.00								Bus	
11	1			✓	102.79	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	8.19		2051
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											
6	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	9.83	✓	1912
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
10	1	1	(untitled)											
11	1	1	(untitled)											1800

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
(ALL)	1	1	A	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic	✓	0	✓	6.00	
7	1	AllTraffic	✓	0	✓	6.00	
8	1	AllTraffic	✓	0	✓	9.83	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	2/1			100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStreamMovement		1/1	5/1	100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	2/1			100		0	0

Signal Timings

Network Default: 60s cycle time; 60 steps

Interstage Matrix for Controller Stream 1

		To	
		1	2
From	1	0	5
	2	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	52	24	32	1	7
	2	✓	2	B	29	47	18	1	18

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D wei mu
1	1			1	A	390	2051	32	0.00	35	160	19.15	8.35	53.71	3.67	
2	1 B			1	A	32	1915	32	32.00	3	2862	27.95	6.35	44.21	0.24	
3	1					6	Unrestricted	60	60.00	0	Unrestricted	5.73	0.00	0.00	0.00	
4	1					322	Unrestricted	60	22.00	0	Unrestricted	10.80	0.00	0.00	0.00	
5	1					448	Unrestricted	60	0.00	0	Unrestricted	18.19	0.00	0.00	0.00	
6	1					21	729	60	50.00	3	3025	3.20	0.80	13.13	0.05	
7	1					61	732	60	0.00	8	979	6.93	0.93	13.23	0.16	
8	1					304	1400	60	0.00	22	314	3.24	0.84	10.59	1.48	
9	1			1	A	322	1915	32	3.00	31	194	11.64	8.04	50.88	2.82	
10	1 B					32	Unrestricted	60	51.00	0	Unrestricted	39.60	0.00	0.00	0.00	
11	1					304	1800	60	0.00	17	433	12.54	0.20	0.00	0.02	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	182.72	7.82	23.36	1.73	24.60	5.22	0.00	29.82
Bus	8.16	0.60	13.59	0.06	0.80	0.04	0.00	0.85
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	190.88	8.42	22.66	1.79	25.40	5.26	0.00	30.66

- *N = at least one source for this link/traffic stream carries normal traffic*
- *B = at least one source for this link/traffic stream carries Bus traffic*
- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

TRANSYT 15

Version: 15.5.2.7994
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Filename: (new file)
Path:
Report generation date: 20/07/2022 10:01:27

«A2 - Junction 4 2024 : D2 - PM DS* :
»Summary
»Network Options
»Arms and Traffic Streams
»Signal Timings
»Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	18/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A2 - Junction 4 2024
D2 - PM DS*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
2	20/07/2022 10:00:50	20/07/2022 10:00:51	08:00	60	36.35	2.14	43.20	9/1	0	0	9/1	8/1	9/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
Junction 4 2024		D2	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM DS				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
60		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				90.00	✓	Sum of lanes	2051			✓		Normal	
2	1				90.00	✓	Sum of lanes	1915			✓		Bus	
3	1			✓	47.78								Normal	
4	1				90.00								Normal	
5	1			✓	151.56								Normal	
6	1				20.00	✓	Sum of lanes	1532				✓	Normal	
7	1				50.00	✓	Sum of lanes	1547				✓	Normal	
8	1				20.00	✓	Sum of lanes	1912	✓	1800		✓	Normal	
9	1				30.00	✓	Sum of lanes	1915			✓		Normal	
10	1				165.00								Bus	
11	1			✓	102.79	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	8.19		2051
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											
6	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	95	6.00	✓	1547
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	9.83	✓	1912
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
10	1	1	(untitled)											
11	1	1	(untitled)											1800

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
(ALL)	1	1	A	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic	✓	0	✓	6.00	
7	1	AllTraffic	✓	0	✓	6.00	
8	1	AllTraffic	✓	0	✓	9.83	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	2/1			100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStreamMovement		1/1	5/1	100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	2/1			100		0	0

Signal Timings

Network Default: 60s cycle time; 60 steps

Interstage Matrix for Controller Stream 1

		To	
		1	2
From	1	0	5
	2	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	52	24	32	1	7
	2	✓	2	B	29	47	18	1	18

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D wei mu
1	1			1	A	334	2051	32	0.00	30	204	18.74	7.94	51.75	3.03	
2	1 B			1	A	43	1915	32	32.00	4	2104	27.97	6.37	44.24	0.32	
3	1					13	Unrestricted	60	60.00	0	Unrestricted	5.73	0.00	0.00	0.00	
4	1					455	Unrestricted	60	20.00	0	Unrestricted	10.80	0.00	0.00	0.00	
5	1					396	Unrestricted	60	0.00	0	Unrestricted	18.19	0.00	0.00	0.00	
6	1					13	590	60	51.00	2	3981	3.07	0.67	11.48	0.03	
7	1					74	598	60	0.00	12	628	7.10	1.10	13.49	0.19	
8	1					443	1468	60	0.00	30	198	3.31	0.91	9.21	1.51	
9	1			1	A	455	1915	32	0.00	43	108	12.73	9.13	53.05	4.08	
10	1 B					43	Unrestricted	60	46.00	0	Unrestricted	39.60	0.00	0.00	0.00	
11	1					443	1800	60	0.00	25	266	12.66	0.33	0.00	0.04	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	203.66	8.86	23.00	2.07	29.36	5.85	0.00	35.21
Bus	10.97	0.81	13.59	0.08	1.08	0.06	0.00	1.14
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	214.62	9.66	22.21	2.14	30.44	5.91	0.00	36.35

- *N = at least one source for this link/traffic stream carries normal traffic*
- *B = at least one source for this link/traffic stream carries Bus traffic*
- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

TRANSYT 15

Version: 15.5.2.7994
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Filename: (new file)
Path:
Report generation date: 20/07/2022 10:01:54

«A3 - Junction 4 2024 : D3 - AM DN* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	18/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A3 - Junction 4 2024
D3 - AM DN*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
3	20/07/2022 10:00:51	20/07/2022 10:00:51	08:00	60	28.18	1.64	31.82	1/1	0	0	1/1	8/1	1/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
Junction 4 2024		D3	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
AM DN				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
60		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				90.00	✓	Sum of lanes	2051			✓		Normal	
2	1				90.00	✓	Sum of lanes	1915			✓		Bus	
3	1			✓	47.78								Normal	
4	1				90.00								Normal	
5	1			✓	151.56								Normal	
6	1				20.00	✓	Sum of lanes	1532				✓	Normal	
7	1				50.00	✓	Sum of lanes	1532				✓	Normal	
8	1				20.00	✓	Sum of lanes	1912	✓	1800		✓	Normal	
9	1				30.00	✓	Sum of lanes	1915			✓		Normal	
10	1				165.00								Bus	
11	1			✓	102.79	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	8.19		2051
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											
6	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	9.83	✓	1912
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
10	1	1	(untitled)											
11	1	1	(untitled)											1800

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
(ALL)	1	1	A	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic	✓	0	✓	6.00	
7	1	AllTraffic	✓	0	✓	6.00	
8	1	AllTraffic	✓	0	✓	9.83	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	2/1			100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStreamMovement		1/1	5/1	100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	2/1			100		0	0

Signal Timings

Network Default: 60s cycle time; 60 steps

Interstage Matrix for Controller Stream 1

		To	
		1	2
From	1	0	5
	2	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	52	24	32	1	7
	2	✓	2	B	29	47	18	1	18

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D wei mu
1	1			1	A	359	2051	32	0.00	32	183	18.92	8.12	52.33	3.27	
2	1 B			1	A	43	1915	32	32.00	4	2104	27.97	6.37	44.24	0.32	
3	1					6	Unrestricted	60	60.00	0	Unrestricted	5.73	0.00	0.00	0.00	
4	1					306	Unrestricted	60	22.00	0	Unrestricted	10.80	0.00	0.00	0.00	
5	1					417	Unrestricted	60	0.00	0	Unrestricted	18.19	0.00	0.00	0.00	
6	1					21	781	60	51.00	3	3249	2.99	0.59	11.24	0.05	
7	1					61	785	60	0.00	8	1058	6.74	0.74	11.47	0.14	
8	1					288	1439	60	0.00	20	350	3.09	0.69	9.93	1.47	
9	1			1	A	306	1915	32	4.00	29	210	11.51	7.91	50.34	2.65	
10	1 B					43	Unrestricted	60	46.00	0	Unrestricted	39.60	0.00	0.00	0.00	
11	1					288	1800	60	0.00	16	463	12.53	0.19	0.00	0.02	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	171.35	7.28	23.54	1.57	22.28	4.76	0.00	27.04
Bus	10.97	0.81	13.59	0.08	1.08	0.06	0.00	1.14
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	182.32	8.09	22.54	1.64	23.36	4.82	0.00	28.18

- *N = at least one source for this link/traffic stream carries normal traffic*
- *B = at least one source for this link/traffic stream carries Bus traffic*
- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

TRANSYT 15

Version: 15.5.2.7994
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Filename: (new file)
Path:
Report generation date: 20/07/2022 10:02:14

«A4 - Junction 4 2024 : D4 - PM DN* :

- »Summary
- »Network Options
- »Arms and Traffic Streams
- »Signal Timings
- »Final Prediction Table

File summary

File description

File title	(untitled)
Location	
Site number	
UTCRegion	
Driving side	Left
Date	18/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	OCSC\joshua.tai
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
£	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

A4 - Junction 4 2024
D4 - PM DN*

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (£ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Ite wit wor over PR
4	20/07/2022 10:00:51	20/07/2022 10:00:51	08:00	60	31.53	1.85	39.50	9/1	0	0	9/1	8/1	9/

Analysis Set Details

Name	Description	Demand set	Include in report	Locked
Junction 4 2024		D4	✓	

Demand Set Details

Name	Description	Composite	Demand sets	Start time (HH:mm)	Locked
PM DN				08:00	

Network Options

Network timings

Network cycle time (s)	Restrict to SCOOT cycle times	Time segment length (min)	Number of time segments	Modelled time period (min)
60		60	1	60

Signals options

Start displacement (s)	End displacement (s)
2	3

Advanced

Phase minimum broken penalty (£)	Phase maximum broken penalty (£)	Intergreen broken penalty (£)	Starting Red-with-Amber (s)
10000.00	10000.00	10000.00	2

Traffic options

Traffic model	Vehicle flow scaling factor (%)	Pedestrian flow scaling factor (%)	Cruise times or speeds
Platoon Dispersion (PDM)	100	100	Cruise Speeds

Advanced

Resolution	DOS Threshold (%)	Cruise scaling factor (%)	Use link stop weightings	Use link delay weightings	Exclude pedestrians from results calculation	Random delay mode	Type of Vehicle-in-Service	Type of random parameter	PCU Length (m)	Calculate results for Path Segments	Generate PDM Profile Data
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75		✓

Normal Traffic parameters

Dispersion type	Dispersion coefficient	Travel time coefficient
Default	35	80

Normal Traffic Types

Name	PCU Factor
Normal	1.00

Bus parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Bus	1.00	Default	0.94	30	85

Tram parameters

Name	PCU Factor	Dispersion type	Acceleration (ms^[-2])	Stationary time coefficient	Cruise time coefficient
Tram	1.00	Default	0.94	100	100

Pedestrian parameters

Dispersion type
Default

Optimisation options

Enable optimisation	Auto redistribute	Optimisation level	Enable OUT Profile accuracy
✓	✓	Extended - Offsets And Green Splits	✓

Advanced

Optimisation type	Hill climb increments	OUTProfile accuracy	Use enhanced optimisation	Auto optimisation order	Optimisation order	Master controller	Offsets relative to master controller	Master controller offset after each run
Hill Climb (Fast)	15, 40, -1, 15, 40, 1, -1, 1, -15, -5, -1, 15, 1	50, 50, 5, 5, 0.5, 0.5, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05, 0.05		✓	1			Do nothing

Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian monetary value of delay (£ per Ped-hr)
14.20	2.60	14.20

Arms and Traffic Streams

Arms

Arm	Name	Description	Traffic node
(ALL)			

Traffic Streams

Arm	Traffic Stream	Name	Description	Auto length	Length (m)	Has Saturation Flow	Saturation flow source	Saturation flow (PCU/hr)	Auto-calculate cell saturation flow	Cell saturation flow (PCU/hr)	Is signal controlled	Is give way	Traffic type	Allow Nearside Turn On Red
1	1				90.00	✓	Sum of lanes	2048			✓		Normal	
2	1				90.00	✓	Sum of lanes	1915			✓		Bus	
3	1			✓	47.78								Normal	
4	1				90.00								Normal	
5	1			✓	151.56								Normal	
6	1				20.00	✓	Sum of lanes	1532				✓	Normal	
7	1				50.00	✓	Sum of lanes	1547				✓	Normal	
8	1				20.00	✓	Sum of lanes	1912	✓	1800		✓	Normal	
9	1				30.00	✓	Sum of lanes	1915			✓		Normal	
10	1				165.00								Bus	
11	1			✓	102.79	✓	Sum of lanes	1800					Normal	

Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR67	Surface condition	Site quality factor	Gradient (%)	Width (m)	Use connector turning radius	Proportion that turn (%)	Turning radius (m)	Nearside lane	Saturation flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	2	8.19		2048
2	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
3	1	1	(untitled)											
4	1	1	(untitled)											
5	1	1	(untitled)											
6	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	100	6.00	✓	1532
7	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	95	6.00	✓	1547
8	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	1	9.83	✓	1912
9	1	1	(untitled)		✓	N/A	N/A	0	3.00	✓	0	99999.00	✓	1915
10	1	1	(untitled)											
11	1	1	(untitled)											1800

Signals

Arm	Traffic Stream	Controller stream	Phase	Second phase enabled
(ALL)	1	1	A	

Give Way Data

Arm	Traffic Stream	Opposed traffic	Use Step-wise Opposed Turn Model	Number of storage spaces	Use connector turning radius	Radius of turn (m)	Visibility restricted
6	1	AllTraffic	✓	0	✓	6.00	
7	1	AllTraffic	✓	0	✓	6.00	
8	1	AllTraffic	✓	0	✓	9.83	

Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling type	Controlling traffic stream	Controlling from traffic stream	Controlling to traffic stream	Percentage opposing (%)	Upstream signals visible	Conflict shift	Conflict duration
1		TrafficStream	2/1			100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStream	8/1			100		0	0
		TrafficStreamMovement		1/1	5/1	100		0	0
		TrafficStream	1/1			100		0	0
		TrafficStream	2/1			100		0	0

Signal Timings

Network Default: 60s cycle time; 60 steps

Interstage Matrix for Controller Stream 1

		To	
		1	2
From	1	0	5
	2	5	0

Resultant Stages

Controller stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
1	1	✓	1	A	52	24	32	1	7
	2	✓	2	B	29	47	18	1	18

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES	
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	D wei mu
1	1			1	A	297	2048	32	0.00	26	241	18.49	7.69	50.38	2.60	
2	1 B			1	A	43	1915	32	32.00	4	2104	27.97	6.37	44.24	0.32	
3	1					14	Unrestricted	60	60.00	0	Unrestricted	5.73	0.00	0.00	0.00	
4	1					416	Unrestricted	60	21.00	0	Unrestricted	10.80	0.00	0.00	0.00	
5	1					359	Unrestricted	60	0.00	0	Unrestricted	18.19	0.00	0.00	0.00	
6	1					15	677	60	52.00	2	3959	2.89	0.49	9.70	0.03	
7	1					74	687	60	0.00	11	736	6.75	0.75	10.01	0.15	
8	1					403	1514	60	0.00	27	238	3.11	0.71	8.20	1.50	
9	1			1	A	416	1915	32	0.00	39	128	12.39	8.79	52.42	3.70	
10	1 B					43	Unrestricted	60	46.00	0	Unrestricted	39.60	0.00	0.00	0.00	
11	1					403	1800	60	0.00	22	302	12.62	0.29	0.00	0.03	

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Total delay (PCU-hr/hr)	Weighted cost of delay (£ per hr)	Weighted cost of stops (£ per hr)	Excess queue penalty (£ per hr)	Performance Index (£ per hr)
Normal traffic	185.21	7.95	23.29	1.78	25.26	5.14	0.00	30.39
Bus	10.97	0.81	13.59	0.08	1.08	0.06	0.00	1.14
Tram	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pedestrians								
TOTAL	196.18	8.76	22.40	1.85	26.34	5.20	0.00	31.53

- *N = at least one source for this link/traffic stream carries normal traffic*
- *B = at least one source for this link/traffic stream carries Bus traffic*
- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***