LARGE-SCALE RESIDENTIAL DEVELOPMENT FOR ZONES 7, 8 & 9 AT CLONGRIFFIN, DUBLIN 13

ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR) VOLUME 3: APPENDICES

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Built. Environment.

Environmental Assessment **Built Environment**

Client: Land Development Authority

Date: 15 May 2026

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CONTENTS

Appendix 8.1	Bat Survey Report
Appendix 8.2	Bird Survey Reports
Appendix 9.1	NRA/TII Criteria for Rating the Magnitude and Significance of Impacts
Appendix 10.1	NRA/TII Criteria for Rating the Magnitude and Significance of Impacts
Appendix 10.2	Water Framework Directive Assessment
Appendix 12.1	Climate Risk and Vulnerability Assessment
Appendix 16.1	Daylight Results for Dwellings within the Proposed Development
Appendix 16.2	VSC Results for Properties Adjacent to the Proposed Development
Appendix 16.3	APSH and WPSH Analysis Results
Appendix 16.4	APSH Images for the Proposed Development
Appendix 18.1	Traffic Survey Information
Appendix 18.2	Microsimulation Modelling
Appendix 18.3	Trip Rate Information Computer System (TRICS)
Appendix 19.1	Resource Waste Management Plan
Appendix 19.2	Operational Waste Management Plan
Appendix 20.1	Statement of Design Acceptance

Appendix 8.1 Bat Survey Report

Flora, Bats, ground mammals and bird evaluation of development proposed at Clongriffin

Brian Keeley February 28th 2026

1. Flora

Introduction

The principal legislation protecting Irish flora and habitats (in particular) is the Irish implementation (the Wildlife Act (1976), Wildlife (Amendment) Act 2000) of the Habitats Directive (Council Directive 92/43/EEC)) (now Birds and Natural Habitats Regulations 2011) and all Statutory Instruments enforcing this and providing national measures for plant species under the Flora (Protection) Order 2022 (S.I. No. 235 of 2022). Any work that will affect habitats or flora to a significant level (housing being a major source of modification of any site as in this project) must consider the impacts and provide mitigation for any impacts, where possible.

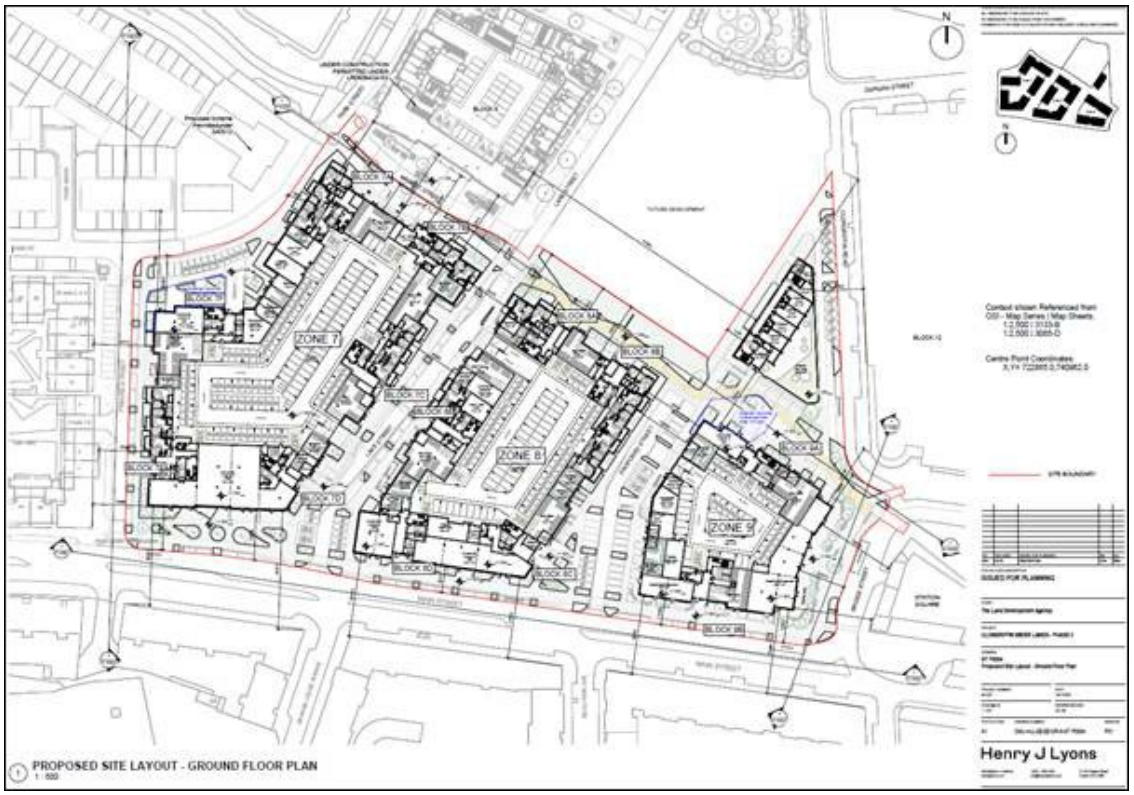
The development for which an LRD application is being made, as set out in the draft description, is as follows:

The development will consist of the construction of a residential development set out in 3 no. blocks (identified as Zone 7, 8 & 9), ranging in height from 5 to 10 storeys, to accommodate 707 no. apartments including café/restaurant/retail units, community/cultural spaces, a standalone creche building and the completion of the southern side of Market St.

The 3 no. residential buildings are arranged around podium courtyards accommodating communal amenity spaces for future residents. Zone 7 is a 5 to 7 storey block onto Main St, Friar's St, Park St and Market St containing 278 apartments. Zone 8 is a 6 to 8 storey block between Main St and Market Street containing 263 apartments. Zone 9 is a 6 to 10 storey block located on Main St, Station Square and Market Street containing 166 units.

Car and cycle parking for both residents and visitors is provided below podium and at surface level throughout the scheme. The proposed development includes all site landscaping works, open space, green roofs, lighting, servicing and utilities, signage, and associated and ancillary works, including site development works above and below ground.

The proposed development sits as part of a Masterplan for a wider Clongriffin landbank which includes the under-construction Block 5 & 6 to the north of Market Street.



Methodology

This assessment was undertaken in July 2025 and February 2026. The site was examined in a complete walkover of the site to determine the flora and habitats present within the site. Classification of habitats encountered follow Fossitt, 2000 (ISSN 1393 – 68 08). Surveying was undertaken on July 7th and 8th and again on February 25th 2026.

Results

Habitat:

The site is one of a number of separate plots and is best considered as spoil and bare ground (ED2), re-colonising bare ground (ED3) and scrub. It is flanked by the Main Street of Clongriffin to the south, by Friar's Street and housing to the west, by Bridge Street and Clongriffin Road to the east and by construction operations to the north. The site is heavily disturbed by the proximity of construction and by traffic.

Flora

Red fescue	*Festuca rubra*	Cocksfoot	*Dactylis glomerata*
Ragwort	*Jacobaea vulgaris*	Bramble	*Rubus fruticosus*
Buddleja	*Buddleja davidii*	Dandelion	*Taraxacum officinale*
Coltsfoot	*Tusilago farfar*	Spear thistle	*Cirsium vulgare*
Gorse	*Ulex europaeus*	Hoary ragwort	*Jacobaea erucifolia*
Lady's bedstraw	*Gallium verum*	Red clover	*Trifolium pratense*
Rosebay willowherb	*Chamaenerion angustifolium*	Red valerian	*Centranthus ruber*

Impacts and Mitigation

Impacts

All vegetation within the site would be removed for construction. This will have an insignificant impact upon the status of any of the species of plant present as all species are very common and widespread.

Mitigation

Planting within the site will include a variety of native plant species. There is no requirement to mitigate for any plant species removed from the site.

2. Bats

Introduction

Protection of the fauna present is provided by the Irish enactment of European Communities (Birds and Natural Habitats) Regulations 2011. the former Habitats Directive ((Council Directive 92/43/EEC)) and Birds Directive (Directive 2009/147/EC on the conservation of wild birds) under the Wildlife Act (1976), Wildlife (Amendment) Act 2000 and all subsequent Statutory Instruments and the recognition of the part played by Planning and Development in wildlife protection is reflected in the Planning and Development Act 2000 and all subsequent amendments. All bats in Dublin are protected under Annex IV of the Directive as there are no horseshoe bats within this area.

Methodology

The assessment undertaken for bats at this site was a basic evaluation of the bat fauna of the surrounding area as the site has access limitations and overall has low feeding potential and no roost opportunities.

A static monitor was placed within the surrounding area (360 metres from the site) and an active bat survey was undertaken on the lands to the east of the site (closest point 180 metres) to determine bat presence within the area.

A visual evaluation of the site for bats was undertaken on July 7th and 8th 2025 and February 25th 2026.

Results

Three bat species were noted within the surrounding area and feed and commute here. These were the following:

Leisler's bat	*Nyctalus leisleri*
Common pipistrelle	*Pipistrellus pipistrellus*
Soprano pipistrelle	*Pipistrellus pygmaeus*

All data recorded within the area relate to these three species of bat. The site has limited bat habitat overall with some of the tallest vegetation being the *Buddleja*. There are no roosting opportunities within the site.

Bat activity throughout the night July 7th to 8th 2026 recorded by Songmeter Mini Bat

	Bat passes per hour					
Bat species	**9**	**10**	**11**	**03**	**04**	**Grand Total**
Leisler's Bat	23	99	1	2	3	128
Common Pipistrelle			3		3	6
Soprano Pipistrelle			4		61	65
Grand Total	23	99	8	2	67	199

Bat activity recorded by Batlogger M2 by surveyor 1 July 7th to 8th 2026

	Bat passes per hour					
Bat species	**9**	**10**	**11**	**03**	**04**	**Grand Total**
Leisler's Bat	35	54			4	93
Common Pipistrelle			3	1	1	5
Soprano Pipistrelle		4		2	19	25
Grand Total	35	58	3	3	24	123

Bat activity recorded by Batlogger M2 by surveyor 2 July 7th to 8th 2026

	Bat passes per hour							
Bat species	**9**	**10**	**11**	**12**	**02**	**03**	**04**	**Grand Total**
Leisler's Bat	10	60	1	1	1		5	78
Pipistrelle			2					2
Common Pipistrelle		1	7	1	3	1		13
Soprano Pipistrelle			1		1		18	20
Grand Total	**10**	**61**	**11**	**2**	**5**	**1**	**23**	**113**

Impacts and Mitigation

Impacts

There is a loss of green space and a very minor loss of feeding for bats from conversion of the site from a green area (subject to relatively high levels of disturbance) to housing. This has already been affected by the level of construction immediately adjacent to the site.

Mitigation

Planting within the site will include a variety of native plant species. The species included will benefit bats by supporting a variety of invertebrates, which will provide food for bats.

3. Ground mammals

Introduction

Protection of the mammal fauna present is provided by the Irish enactment of European Communities (Birds and Natural Habitats) Regulations 2011. the former Habitats Directive ((Council Directive 92/43/EEC)) and Birds Directive (Directive 2009/147/EC on the conservation of wild birds) under the Wildlife Act (1976), Wildlife (Amendment) Act 2000 and all subsequent Statutory Instruments and the recognition of the part played by Planning and Development in wildlife protection is reflected in the Planning and Development Act 2000 and all subsequent amendments. While badgers, stoats, pygmy shrews, hedgehogs etc are protected by the Wildlife Act, otters (which occur in north Dublin) are protected under Annex II of the Birds and Natural Habitats Directive. The most likely species to occur within this site are small mammals and mammals passing through the site, given the exposure of the site and the proximity of construction and through traffic.

Methodology

This assessment was undertaken on July 7th and 8th 2025 and on February 25th 2026. It involved a walkover of the site and an examination for evidence of mammal occupancy and activity. The surveys were undertaken in 2 seasons, the late winter / spring period being the best for identifying the presence of mammal burrows.

Results

There is very limited cover for any mammal species within the site. The only evidence of mammals was of fox tracks and a fox scent. There is no potential for otters or badgers within the site.

Impacts and Mitigation

There will be a loss of foraging for common and widespread mammal species (fox, brown rat, wood mouse). This will not affect the conservation status of any mammal species.

4. Conclusion

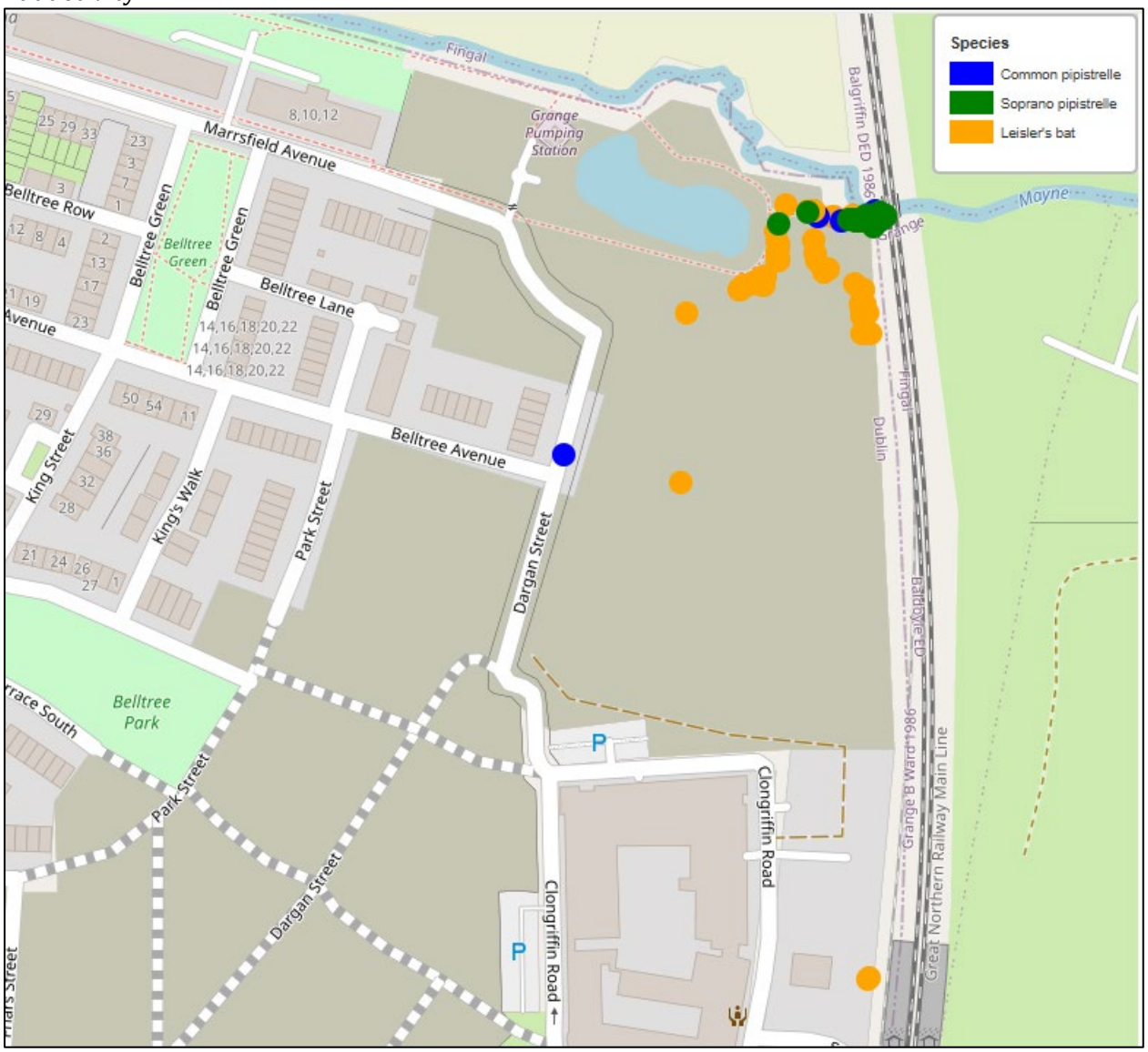
There will be a short-term very minor loss to the site which will be compensated by planting once it establishes within the project. This will reverse losses to the site that have occurred from the commencement of construction up to the time of completion of the proposal (and the time required for plants to establish and biodiversity to expand).

APPENDICES

Bar records from Bat Conservation Ireland

Bat Conservation Ireland data: search results 28 Feb 2026			
Search parameters: Roosts Transects Ad-hoc observation sites with observations of all species within 1000m of O2288040788			
Roosts			
Name	Grid reference	Species observed	
Garage house roost	O2241	Pipistrellus pygmaeus	
Transects			
Name	Grid reference start	Species observed	
Ad-hoc observations			
Survey	Grid reference	Date	Species observed

Bat activity



Bat activity recorded within the area surrounding Phase 2 in July 2025 between sunset 7th and sunrise 8th July

NBDC data where the dataset intersects the selected polygon (site) is given below (NBDC data where the data is within the site yielded no data)



Species group	***Species name***	***Record count***	***Date of last record***	***Designation***
Alga	*Ahnfeltia plicata*	*1*	*04/04/1976*	
Alga	*Bostrychia scorpioides*	*2*	*04/04/1976*	
Alga	*Carrageen (Chondrus crispus)*	*1*	*04/04/1976*	
Alga	*Chaetomorpha melagonium*	*1*	*04/04/1976*	
Alga	*Chylocladia verticillata*	*1*	*04/04/1976*	
Alga	*Coral Weed (Corallina officinalis)*	*1*	*04/04/1976*	
Alga	*Dulse (Palmaria palmata)*	*1*	*04/04/1976*	
Alga	*Dumontia contorta*	*1*	*04/04/1976*	
Alga	*False Irish Moss (Mastocarpus stellatus)*	*1*	*04/04/1976*	
Alga	*Furcellaria lumbricalis*	*1*	*04/04/1976*	
Alga	*Laurencia obtusa*	*1*	*04/04/1976*	
Alga	*Membranoptera alata*	*1*	*04/04/1976*	
Alga	*Osmundea hybrida*	*1*	*04/04/1976*	
Alga	*Pepper Dulse (Osmundea pinnatifida)*	*1*	*04/04/1976*	
Amphibian	*Common Frog (Rana temporaria)*	*1*	*31/12/1979*	*Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex V || Protected Species: Wildlife Acts*
Amphibian	*Smooth Newt (Lissotriton vulgaris)*	*1*	*31/12/1972*	*Protected Species: Wildlife Acts*

Bird	*Arctic Tern (Sterna paradisaea)*	*3*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Barn Owl (Tyto alba)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Bar-tailed Godwit (Limosa lapponica)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Black Guillemot (Cepphus grylle)*	*5*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Black Redstart (Phoenicurus ochruros)*	*1*	*29/02/1984*	
Bird	*Blackbird (Turdus merula)*	*8*	*31/12/2011*	
Bird	*Blackcap (Sylvia atricapilla)*	*6*	*31/12/2011*	
Bird	*Black-headed Gull (Chroicocephalus ridibundus)*	*4*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Black-necked Grebe (Podiceps nigricollis)*	*1*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Black-tailed Godwit (Limosa limosa)*	*3*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Black-throated Diver (Gavia arctica)*	*1*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Blue Tit (Cyanistes caeruleus)*	*8*	*31/12/2011*	

Bird	*Brambling (Fringilla montifringilla)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Brent Goose (Branta bernicla)*	*3*	*31/12/2011*	
Bird	*Bullfinch (Pyrrhula pyrrhula)*	*6*	*31/12/2011*	
Bird	*Buzzard (Buteo buteo)*	*4*	*31/12/2011*	
Bird	*Carrion Crow (Corvus corone)*	*1*	*31/12/2011*	
Bird	*Chaffinch (Fringilla coelebs)*	*8*	*31/12/2011*	
Bird	*Chiffchaff (Phylloscopus collybita)*	*3*	*31/12/2011*	
Bird	*Coal Tit (Periparus ater)*	*5*	*31/12/2011*	
Bird	*Collared Dove (Streptopelia decaocto)*	*7*	*31/12/2011*	
Bird	*Common Guillemot (Uria aalge)*	*5*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: OSPAR Convention || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Common Gull (Larus canus)*	*3*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Common Sandpiper (Actitis hypoleucos)*	*1*	*31/07/1972*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Common Scoter (Melanitta nigra)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Protected Species: EU Birds Directive >> Annex III, Section III Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Common Tern (Sterna hirundo)*	*2*	*31/07/1991*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*

Bird	*Coot (Fulica atra)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Cormorant (Phalacrocorax carbo)*	*5*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Corncrake (Crex crex)*	*1*	*31/07/1972*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Cuckoo (Cuculus canorus)*	*2*	*31/07/1991*	
Bird	*Curlew (Numenius arquata)*	*3*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Dunlin (Calidris alpina)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Dunnock (Prunella modularis)*	*8*	*31/12/2011*	
Bird	*Ferruginous Duck (Aythya nyroca)*	*1*	*31/12/1871*	
Bird	*Fieldfare (Turdus pilaris)*	*2*	*31/12/2011*	
Bird	*Fulmar (Fulmarus glacialis)*	*4*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*

Bird	*Gadwall (Mareca strepera)*	*1*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Gannet (Morus bassanus)*	*3*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Goldcrest (Regulus regulus)*	*6*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Golden Plover (Pluvialis apricaria)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Protected Species: EU Birds Directive >> Annex III, Section III Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Goldeneye (Bucephala clangula)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Goldfinch (Carduelis carduelis)*	*6*	*31/12/2011*	
Bird	*Grasshopper Warbler (Locustella naevia)*	*3*	*31/12/2011*	
Bird	*Great Black-backed Gull (Larus marinus)*	*5*	*31/12/2011*	
Bird	*Great Crested Grebe (Podiceps cristatus)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*

Bird	*Great Northern Diver (Gavia immer)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Great Tit (Parus major)*	*6*	*31/12/2011*	
Bird	*Greenfinch (Chloris chloris)*	*8*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Greenshank (Tringa nebularia)*	*2*	*31/12/2011*	
Bird	*Grey Heron (Ardea cinerea)*	*7*	*31/12/2011*	
Bird	*Grey Partridge (Perdix perdix)*	*1*	*31/07/1972*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Grey Plover (Pluvialis squatarola)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Grey Wagtail (Motacilla cinerea)*	*5*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Greylag Goose (Anser anser)*	*1*	*29/02/1984*	*Invasive Species: Regulation S.I. 477/2011 (Ireland) || Invasive Species: Regulation S.I. 374/2024 (Ireland) || Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Herring Gull (Larus argentatus)*	*6*	*31/12/2011*	*Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Hooded Crow (Corvus cornix)*	*8*	*31/12/2011*	

Bird	*House Martin (Delichon urbicum)*	*4*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*House Sparrow (Passer domesticus)*	*8*	*31/12/2011*	*Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Jack Snipe (Lymnocryptes minimus)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section III Bird Species*
Bird	*Jackdaw (Coloeus monedula)*	*8*	*31/12/2011*	
Bird	*Jay (Garrulus glandarius)*	*3*	*31/07/1991*	
Bird	*Kestrel (Falco tinnunculus)*	*8*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Kingfisher (Alcedo atthis)*	*4*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Kittiwake (Rissa tridactyla)*	*4*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: OSPAR Convention || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Knot (Calidris canutus)*	*1*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Lapwing (Vanellus vanellus)*	*6*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Lesser Black-backed Gull (Larus fuscus)*	*4*	*31/12/2011*	*Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Lesser Redpoll (Acanthis cabaret)*	*3*	*31/12/2011*	

Bird	*Light-bellied Brent Goose (Branta bernicla hrota)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Linnet (Linaria cannabina)*	*7*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Little Auk (Alle alle)*	*1*	*29/02/1984*	
Bird	*Little Bunting (Emberiza pusilla)*	*1*	*05/12/1949*	
Bird	*Little Egret (Egretta garzetta)*	*4*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species*
Bird	*Little Grebe (Tachybaptus ruficollis)*	*3*	*31/12/2011*	*Protected Species: Wildlife Acts*
Bird	*Little Gull (Hydrocoloeus minutus)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Little Tern (Sternula albifrons)*	*2*	*31/07/1991*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Long-eared Owl (Asio otus)*	*2*	*31/12/2011*	
Bird	*Long-tailed Duck (Clangula hyemalis)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Long-tailed Tit (Aegithalos caudatus)*	*5*	*31/12/2011*	
Bird	*Magpie (Pica pica)*	*8*	*31/12/2011*	

Bird	*Mallard (Anas platyrhynchos)*	*8*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Manx Shearwater (Puffinus puffinus)*	*2*	*31/07/1991*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Meadow Pipit (Anthus pratensis)*	*8*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Mediterranean Gull (Ichthyaetus melanocephalus)*	*1*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Merlin (Falco columbarius)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Mistle Thrush (Turdus viscivorus)*	*6*	*31/12/2011*	*Protected Species: Wildlife Acts*
Bird	*Moorhen (Gallinula chloropus)*	*6*	*31/12/2011*	
Bird	*Mute Swan (Cygnus olor)*	*6*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Oystercatcher (Haematopus ostralegus)*	*7*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Peregrine (Falco peregrinus)*	*8*	*24/04/2021*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species*

Bird	*Pheasant (Phasianus colchicus)*	*6*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section I Bird Species*
Bird	*Pied Wagtail (Motacilla alba)*	*8*	*31/12/2011*	
Bird	*Pink-footed Goose (Anser brachyrhynchus)*	*1*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species*
Bird	*Pintail (Anas acuta)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Pochard (Aythya ferina)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Puffin (Fratercula arctica)*	*3*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Purple Sandpiper (Calidris maritima)*	*1*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Raven (Corvus corax)*	*3*	*31/12/2011*	
Bird	*Razorbill (Alca torda)*	*4*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Red-breasted Merganser (Mergus serrator)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Red-necked Grebe (Podiceps grisegena)*	*1*	*29/02/1984*	

Bird	*Redshank (Tringa totanus)*	*5*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Red-throated Diver (Gavia stellata)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Redwing (Turdus iliacus)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Reed Bunting (Emberiza schoeniclus)*	*6*	*31/12/2011*	
Bird	*Ring-billed Gull (Larus delawarensis)*	*1*	*31/12/2011*	
Bird	*Ringed Plover (Charadrius hiaticula)*	*5*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Robin (Erithacus rubecula)*	*8*	*31/12/2011*	*Protected Species: Wildlife Acts*
Bird	*Rock Dove (Columba livia)*	*8*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species*
Bird	*Rock Pipit (Anthus petrosus)*	*3*	*31/12/2011*	
Bird	*Rook (Corvus frugilegus)*	*8*	*31/12/2011*	
Bird	*Roseate Tern (Sterna dougallii)*	*1*	*31/07/1991*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Ruff (Calidris pugnax)*	*1*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Sand Martin (Riparia riparia)*	*3*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*

Bird	*Sanderling (Calidris alba)*	*2*	*31/12/2011*	
Bird	*Scaup (Aythya marila)*	*1*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Protected Species: EU Birds Directive >> Annex III, Section III Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Sedge Warbler (Acrocephalus schoenobaenus)*	*3*	*31/12/2011*	
Bird	*Shag (Gulosus aristotelis)*	*5*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Shelduck (Tadorna tadorna)*	*6*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Short-eared Owl (Asio flammeus)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Shoveler (Spatula clypeata)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section III Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Siskin (Spinus spinus)*	*1*	*31/12/2011*	
Bird	*Skylark (Alauda arvensis)*	*8*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Slavonian Grebe (Podiceps auritus)*	*1*	*29/02/1984*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*

Bird	*Snipe (Gallinago gallinago)*	*6*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section III Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Snow Bunting (Plectrophenax nivalis)*	*1*	*29/02/1984*	
Bird	*Song Thrush (Turdus philomelos)*	*7*	*31/12/2011*	
Bird	*Sparrowhawk (Accipiter nisus)*	*6*	*31/12/2011*	*Protected Species: Wildlife Acts*
Bird	*Spotted Flycatcher (Muscicapa striata)*	*4*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Starling (Sturnus vulgaris)*	*8*	*31/12/2011*	*Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Stock Dove (Columba oenas)*	*5*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Stonechat (Saxicola rubicola)*	*4*	*31/12/2011*	*Protected Species: Wildlife Acts*
Bird	*Swallow (Hirundo rustica)*	*5*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Swift (Apus apus)*	*4*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Teal (Anas crecca)*	*3*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*

Bird	*Tree Sparrow (Passer montanus)*	*6*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Treecreeper (Certhia familiaris)*	*5*	*31/12/2011*	
Bird	*Tufted Duck (Aythya fuligula)*	*1*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Turnstone (Arenaria interpres)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Velvet Scoter (Melanitta fusca)*	*1*	*29/02/1984*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Water Pipit (Anthus spinoletta)*	*1*	*31/12/2011*	
Bird	*Water Rail (Rallus aquaticus)*	*1*	*31/12/2011*	
Bird	*Wheatear (Oenanthe oenanthe)*	*3*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Whitethroat (Curruca communis)*	*4*	*31/12/2011*	
Bird	*Whooper Swan (Cygnus cygnus)*	*1*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Wigeon (Mareca penelope)*	*3*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section II Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*

Bird	*Willow Warbler (Phylloscopus trochilus)*	*5*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List*
Bird	*Woodcock (Scolopax rusticola)*	*2*	*31/12/2011*	*Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section III Bird Species || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bird	*Woodpigeon (Columba palumbus)*	*8*	*31/12/2011*	
Bird	*Wren (Troglodytes troglodytes)*	*8*	*31/12/2011*	
Bird	*Yellowhammer (Emberiza citrinella)*	*6*	*31/12/2011*	*Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List*
Bony fish (Actinopterygii)	*Black Sea-bream (Spondyliosoma cantharus)*	*1*	*31/12/1872*	
Bony fish (Actinopterygii)	*Wolf Fish (Anarhichas lupus)*	*1*	*28/04/1977*	
Centipede	*Geophilus flavus*	*1*	*01/03/1977*	
Centipede	*Geophilus insculptus*	*1*	*01/03/1977*	
Centipede	*Lithobius (Lithobius) variegatus*	*1*	*01/08/1913*	
Centipede	*Strigamia maritima*	*2*	*01/03/1977*	
Chromist	*Bladder Wrack (Fucus vesiculosus)*	*1*	*04/04/1976*	
Chromist	*Dictyota dichotoma*	*1*	*04/04/1976*	
Chromist	*Leathesia marina*	*1*	*04/04/1976*	
Chromist	*Oarweed (Laminaria digitata)*	*1*	*04/04/1976*	
Chromist	*Sea Oak (Halidrys siliquosa)*	*1*	*04/04/1976*	
Chromist	*Spiral Wrack (Fucus spiralis)*	*2*	*04/04/1976*	
Chromist	*Sugar Kelp (Saccharina latissima)*	*1*	*04/04/1976*	
Chromist	*Toothed Wrack (Fucus serratus)*	*1*	*04/04/1976*	
False scorpion (Pseudoscorpiones)	*Halbert's Chthonid (Chthonius halberti)*	*1*	*31/05/1915*	
False scorpion (Pseudoscorpiones)	*Shore Neobisid (Neobisium (Neobisium) maritimum)*	*1*	*31/12/1915*	
Flowering plant	*Alexanders (Smyrnium olusatrum)*	*1*	*06/06/2017*	
Flowering plant	*Annual Wall-rocket (Diplotaxis muralis)*	*7*	*31/12/1887*	
Flowering plant	*Ash (Fraxinus excelsior)*	*2*	*06/06/2017*	

Flowering plant	*Bastard Cabbage (Rapistrum rugosum)*	*1*	*06/06/2017*	
Flowering plant	*Beaked Hawk's-beard (Crepis vesicaria)*	*1*	*06/06/2017*	
Flowering plant	*Bearded Couch (Elymus caninus)*	*1*	*31/12/1972*	
Flowering plant	*Beech (Fagus sylvatica)*	*1*	*06/06/2017*	
Flowering plant	*Bilbao Fleabane (Conyza floribunda)*	*2*	*06/06/2017*	
Flowering plant	*Black Medick (Medicago lupulina)*	*2*	*06/06/2017*	
Flowering plant	*Bramble (Rubus fruticosus agg.)*	*1*	*06/06/2017*	
Flowering plant	*Broad-leaved Dock (Rumex obtusifolius)*	*2*	*06/06/2017*	
Flowering plant	*Broad-leaved Willowherb (Epilobium montanum)*	*1*	*06/06/2017*	
Flowering plant	*Bulrush (Typha latifolia)*	*1*	*06/06/2017*	
Flowering plant	*Bush Vetch (Vicia sepium)*	*1*	*06/06/2017*	
Flowering plant	*Butterfly-bush (Buddleja davidii)*	*2*	*06/06/2017*	*Invasive Species: Medium Risk Invasive Species (2013 Report)*
Flowering plant	*Charlock (Sinapis arvensis)*	*2*	*06/06/2017*	
Flowering plant	*Cleavers (Galium aparine)*	*2*	*06/06/2017*	
Flowering plant	*Cock's-foot (Dactylis glomerata)*	*1*	*06/06/2017*	
Flowering plant	*Coltsfoot (Tussilago farfara)*	*2*	*06/06/2017*	
Flowering plant	*Common Bird's-foot-trefoil (Lotus corniculatus)*	*2*	*06/06/2017*	
Flowering plant	*Common Chickweed (Stellaria media)*	*1*	*06/06/2017*	
Flowering plant	*Common Couch (Elytrigia repens)*	*1*	*06/06/2017*	
Flowering plant	*Common Field-speedwell (Veronica persica)*	*1*	*06/06/2017*	
Flowering plant	*Common Fleabane (Pulicaria dysenterica)*	*1*	*06/06/2017*	
Flowering plant	*Common Mouse-ear (Cerastium fontanum)*	*1*	*06/06/2017*	
Flowering plant	*Common Nettle (Urtica dioica)*	*1*	*06/06/2017*	
Flowering plant	*Common Poppy (Papaver rhoeas)*	*2*	*06/06/2017*	
Flowering plant	*Common Ragwort (Jacobaea vulgaris)*	*2*	*06/06/2017*	
Flowering plant	*Common Vetch (Vicia sativa)*	*1*	*06/06/2017*	
Flowering plant	*Corn Marigold (Glebionis segetum)*	*1*	*06/06/2017*	*Threatened Species: Near threatened*

Flowering plant	*Creeping Bent (Agrostis stolonifera)*	*1*	*06/06/2017*	
Flowering plant	*Creeping Buttercup (Ranunculus repens)*	*2*	*06/06/2017*	
Flowering plant	*Creeping Cinquefoil (Potentilla reptans)*	*1*	*06/06/2017*	
Flowering plant	*Creeping Thistle (Cirsium arvense)*	*1*	*06/06/2017*	
Flowering plant	*Curled Dock (Rumex crispus)*	*2*	*06/06/2017*	
Flowering plant	*Cut-leaved Crane's-bill (Geranium dissectum)*	*2*	*06/06/2017*	
Flowering plant	*Daisy (Bellis perennis)*	*2*	*06/06/2017*	
Flowering plant	*Dog-rose (Rosa canina)*	*1*	*06/06/2017*	
Flowering plant	*Elder (Sambucus nigra)*	*1*	*06/06/2017*	
Flowering plant	*False Fox-sedge (Carex otrubae)*	*1*	*06/06/2017*	
Flowering plant	*False Oat-grass (Arrhenatherum elatius)*	*3*	*06/06/2017*	
Flowering plant	*False-brome (Brachypodium sylvaticum)*	*1*	*06/06/2017*	
Flowering plant	*Festuca rubra agg.*	*2*	*06/06/2017*	
Flowering plant	*Field Forget-me-not (Myosotis arvensis)*	*1*	*06/06/2017*	
Flowering plant	*Glaucous Sedge (Carex flacca)*	*1*	*06/06/2017*	
Flowering plant	*Gorse (Ulex europaeus)*	*1*	*06/06/2017*	
Flowering plant	*Great Mullein (Verbascum thapsus)*	*1*	*06/06/2017*	
Flowering plant	*Great Willowherb (Epilobium hirsutum)*	*1*	*06/06/2017*	
Flowering plant	*Greater Plantain (Plantago major)*	*2*	*06/06/2017*	
Flowering plant	*Groundsel (Senecio vulgaris)*	*1*	*06/06/2017*	
Flowering plant	*Hard Rush (Juncus inflexus)*	*2*	*06/06/2017*	
Flowering plant	*Hare's-foot Clover (Trifolium arvense)*	*2*	*31/12/1867*	
Flowering plant	*Hawthorn (Crataegus monogyna)*	*1*	*06/06/2017*	
Flowering plant	*Hedge Bindweed (Calystegia sepium)*	*1*	*06/06/2017*	
Flowering plant	*Hedgerow Crane's-bill (Geranium pyrenaicum)*	*1*	*06/06/2017*	
Flowering plant	*Herb-Robert (Geranium robertianum)*	*2*	*06/06/2017*	
Flowering plant	*Hoary Willowherb (Epilobium parviflorum)*	*2*	*06/06/2017*	
Flowering plant	*Hogweed (Heracleum sphondylium)*	*1*	*06/06/2017*	

Flowering plant	*Hook-lobed Dandelion (Taraxacum hamatum)*	*1*	*31/12/1999*	
Flowering plant	*Hop Trefoil (Trifolium campestre)*	*1*	*06/06/2017*	
Flowering plant	*Ivy (Hedera helix)*	*1*	*06/06/2017*	
Flowering plant	*Marsh Thistle (Cirsium palustre)*	*1*	*06/06/2017*	
Flowering plant	*Meadow Barley (Hordeum secalinum)*	*1*	*31/12/1906*	*Protected Species: Flora Protection Order (FPO) || Protected Species: Flora Protection Order (FPO) >> FPO 2022 Schedule A (Vascular Plants) || Threatened Species: Vulnerable*
Flowering plant	*Meadow Buttercup (Ranunculus acris)*	*2*	*06/06/2017*	
Flowering plant	*Mugwort (Artemisia vulgaris)*	*2*	*06/06/2017*	
Flowering plant	*Nipplewort (Lapsana communis)*	*2*	*06/06/2017*	
Flowering plant	*Oxeye Daisy (Leucanthemum vulgare)*	*1*	*06/06/2017*	
Flowering plant	*Perennial Sow-thistle (Sonchus arvensis)*	*1*	*06/06/2017*	
Flowering plant	*Petty Spurge (Euphorbia peplus)*	*1*	*06/06/2017*	
Flowering plant	*Prickly Lettuce (Lactuca serriola)*	*1*	*06/06/2017*	
Flowering plant	*Purple Toadflax (Linaria purpurea)*	*1*	*06/06/2017*	
Flowering plant	*Red Clover (Trifolium pratense)*	*2*	*06/06/2017*	
Flowering plant	*Red Valerian (Centranthus ruber)*	*1*	*06/06/2017*	
Flowering plant	*Ribbed Melilot (Melilotus officinalis)*	*1*	*31/12/1881*	
Flowering plant	*Ribwort Plantain (Plantago lanceolata)*	*2*	*06/06/2017*	
Flowering plant	*Rosebay Willowherb (Chamerion angustifolium)*	*2*	*06/06/2017*	
Flowering plant	*Rusty Willow (Salix cinerea subsp. oleifolia)*	*2*	*06/06/2017*	
Flowering plant	*Scarlet Pimpernel (Anagallis arvensis)*	*2*	*06/06/2017*	
Flowering plant	*Silverweed (Potentilla anserina)*	*1*	*06/06/2017*	
Flowering plant	*Smooth Sow-thistle (Sonchus oleraceus)*	*1*	*06/06/2017*	
Flowering plant	*Snapdragon (Antirrhinum majus)*	*1*	*06/06/2017*	
Flowering plant	*Spear Thistle (Cirsium vulgare)*	*2*	*06/06/2017*	
Flowering plant	*Spring Vetch (Vicia lathyroides)*	*7*	*31/12/1963*	
Flowering plant	*Square-stalked St John's-wort (Hypericum tetrapterum)*	*1*	*06/06/2017*	

Flowering plant	*Sycamore (Acer pseudoplatanus)*	*1*	*06/06/2017*	*Invasive Species: Medium Risk Invasive Species (2013 Report)*
Flowering plant	*Taraxacum agg.*	*3*	*06/06/2017*	
Flowering plant	*Tufted Vetch (Vicia cracca)*	*1*	*06/06/2017*	
Flowering plant	*Turnip (Brassica rapa)*	*1*	*06/06/2017*	
Flowering plant	*Wall Barley (Hordeum murinum)*	*1*	*31/12/1888*	
Flowering plant	*Water Bent (Polypogon viridis)*	*1*	*06/06/2017*	
Flowering plant	*Wavy Bitter-cress (Cardamine flexuosa)*	*1*	*06/06/2017*	
Flowering plant	*Weld (Reseda luteola)*	*2*	*06/06/2017*	
Flowering plant	*White Clover (Trifolium repens)*	*2*	*06/06/2017*	
Flowering plant	*Wild Radish (Raphanus raphanistrum subsp. raphanistrum)*	*5*	*31/12/1894*	
Flowering plant	*Winter Heliotrope (Petasites fragrans)*	*1*	*06/06/2017*	
Flowering plant	*Wych Elm (Ulmus glabra)*	*1*	*06/06/2017*	
Flowering plant	*Yellow-wort (Blackstonia perfoliata)*	*1*	*06/06/2017*	
Flowering plant	*Yorkshire-fog (Holcus lanatus)*	*2*	*06/06/2017*	
Fungus	*Daisy Rust (Puccinia lagenophorae)*	*1*	*25/09/1963*	
Harvestman (Opiliones)	*Dicranopalpus ramosus sensu lato (pre 2015)*	*1*	*07/10/1997*	
Insect - beetle (Coleoptera)	*Ant Beetle (Thanasimus formicarius)*	*1*	*30/06/1947*	
Insect - beetle (Coleoptera)	*Bolitochara obliqua*	*1*	*31/12/1854*	
Insect - beetle (Coleoptera)	*Epuraea melanocephala*	*1*	*13/08/1933*	
Insect - beetle (Coleoptera)	*Grynobius planus*	*2*	*31/12/1928*	
Insect - beetle (Coleoptera)	*Melandrya caraboides*	*1*	*31/12/1854*	
Insect - beetle (Coleoptera)	*Octotemnus glabriculus*	*1*	*31/12/1932*	
Insect - beetle (Coleoptera)	*Quedius puncticollis*	*1*	*07/06/1905*	
Insect - beetle (Coleoptera)	*Shore Sexton Beetle (Necrodes littoralis)*	*1*	*31/12/1894*	
Insect - beetle (Coleoptera)	*Vincenzellus ruficollis*	*1*	*31/12/1928*	
Insect - butterfly	*Common Blue (Polyommatus icarus)*	*7*	*22/06/1977*	

Insect - butterfly	*Dark Green Fritillary (Speyeria aglaja)*	*4*	*24/07/1977*	*Threatened Species: Vulnerable*
Insect - butterfly	*Gatekeeper (Pyronia tithonus)*	*1*	*31/12/1976*	*Threatened Species: Near threatened*
Insect - butterfly	*Grayling (Hipparchia semele)*	*3*	*24/07/1977*	*Threatened Species: Near threatened*
Insect - butterfly	*Green-veined White (Pieris napi)*	*4*	*31/12/1972*	
Insect - butterfly	*Large White (Pieris brassicae)*	*5*	*31/12/1972*	
Insect - butterfly	*Meadow Brown (Maniola jurtina)*	*8*	*24/07/1977*	
Insect - butterfly	*Orange-tip (Anthocharis cardamines)*	*3*	*31/12/1972*	
Insect - butterfly	*Painted Lady (Vanessa cardui)*	*3*	*31/12/1976*	
Insect - butterfly	*Peacock (Aglais io)*	*4*	*31/12/1972*	
Insect - butterfly	*Red Admiral (Vanessa atalanta)*	*5*	*31/12/1976*	
Insect - butterfly	*Ringlet (Aphantopus hyperantus)*	*4*	*07/07/1977*	
Insect - butterfly	*Small Blue (Cupido minimus)*	*1*	*30/06/1973*	*Threatened Species: Endangered*
Insect - butterfly	*Small Copper (Lycaena phlaeas)*	*4*	*31/12/1972*	
Insect - butterfly	*Small Heath (Coenonympha pamphilus)*	*4*	*24/07/1977*	*Threatened Species: Near threatened*
Insect - butterfly	*Small Tortoiseshell (Aglais urticae)*	*5*	*16/07/1977*	
Insect - butterfly	*Small White (Pieris rapae)*	*6*	*07/07/1977*	
Insect - butterfly	*Speckled Wood (Pararge aegeria)*	*6*	*07/07/1977*	
Insect - butterfly	*Wall (Lasiommata megera)*	*4*	*31/12/1972*	*Threatened Species: Endangered*
Insect - butterfly	*Wood White (Leptidea sp.)*	*1*	*31/12/1971*	

Insect - earwig (Dermaptera)	*Common Earwig (Forficula auricularia)*	*1*	*31/10/1893*	
Insect - flea (Siphonaptera)	*a seabird nest flea (Ornithopsylla laetitiae)*	*1*	*31/12/1993*	
Insect - flea (Siphonaptera)	*Archaeopsylla erinacei subsp. erinacei*	*1*	*23/07/1984*	
Insect - flea (Siphonaptera)	*Ceratophyllus (Ceratophyllus) vagabundus subsp. insularis*	*1*	*31/12/1993*	
Insect - flea (Siphonaptera)	*Ceratophyllus (Monopsyllus) sciurorum subsp. sciurorum*	*1*	*31/12/1996*	
Insect - flea (Siphonaptera)	*House Martin Flea (Ceratophyllus (Ceratophyllus) hirundinis)*	*1*	*31/12/1993*	
Insect - hymenopteran	*Bare-saddled Colletes (Colletes similis)*	*1*	*23/07/1943*	*Threatened Species: Near threatened*
Insect - hymenopteran	*Buff-tailed Bumblebee (Bombus terrestris)*	*1*	*30/07/1926*	
Insect - hymenopteran	*Common Carder Bee (Bombus pascuorum)*	*1*	*30/07/1926*	
Insect - hymenopteran	*Field Cuckoo Bee (Bombus campestris)*	*1*	*30/07/1926*	*Threatened Species: Vulnerable*
Insect - hymenopteran	*Great Yellow Bumblebee (Bombus distinguendus)*	*1*	*20/05/1921*	*Threatened Species: Endangered*
Insect - hymenopteran	*Gwynne's Mining Bee (Andrena bicolor)*	*1*	*30/07/1926*	
Insect - hymenopteran	*Moss Carder Bee (Bombus muscorum)*	*1*	*30/07/1926*	*Threatened Species: Near threatened*
Insect - hymenopteran	*Smeathman's Furrow Bee (Lasioglossum smeathmanellum)*	*1*	*30/07/1926*	
Insect - hymenopteran	*White-tailed Bumblebee (Bombus lucorum)*	*1*	*30/07/1926*	
Insect - hymenopteran	*Yellow-legged Furrow Bee (Halictus rubicundus)*	*1*	*30/07/1926*	
Insect - moth	*Cinnabar (Tyria jacobaeae)*	*1*	*04/06/2021*	
Insect - moth	*Common Emerald (Hemithea aestivaria)*	*1*	*08/07/2008*	
Insect - moth	*Diamond-back Moth (Plutella xylostella)*	*1*	*28/09/1985*	
Insect - moth	*Humming-bird Hawk-moth (Macroglossum stellatarum)*	*2*	*31/12/1992*	
Insect - moth	*Large Nutmeg (Apamea anceps)*	*1*	*04/07/1860*	
Insect - moth	*Large Willow Roller (Epinotia caprana)*	*1*	*31/08/1894*	
Insect - moth	*Meal Moth (Pyralis farinalis)*	*1*	*31/12/1890*	
Insect - moth	*Oleander Hawk-moth (Daphnis nerii)*	*1*	*17/09/1953*	
Insect - moth	*Pearly Underwing (Peridroma saucia)*	*1*	*30/09/1982*	
Insect - moth	*Poplar Hawk-moth (Laothoe populi)*	*1*	*03/08/2018*	

Insect - moth	*Rose Tortrix (Archips rosana)*	*1*	*08/07/1933*	
Insect - moth	*Rush Veneer (Nomophila noctuella)*	*1*	*02/09/1984*	
Insect - moth	*Sandhill Moss-moth (Bryotropha umbrosella)*	*2*	*29/06/1940*	
Insect - moth	*Silver-barred Moss-moth (Oxypteryx wilkella)*	*3*	*31/12/1900*	
Insect - moth	*Straw-barred Pearl (Pyrausta despicata)*	*3*	*31/07/1855*	
Insect - moth	*Sulphur Bark Moth (Esperia sulphurella)*	*1*	*15/04/1933*	
Insect - moth	*Willow Case-bearer (Coleophora lusciniaepennella)*	*2*	*01/08/1985*	
Insect - orthopteran	*Field Grasshopper (Chorthippus brunneus)*	*1*	*31/12/1920*	
Insect - true bug (Hemiptera)	*Acalypta parvula*	*1*	*30/09/1926*	
Insect - true bug (Hemiptera)	*Aepophilus bonnairei*	*1*	*29/07/1917*	
Insect - true bug (Hemiptera)	*Birch Catkin Bug (Kleidocerys resedae)*	*1*	*31/10/1927*	
Insect - true bug (Hemiptera)	*Black-Kneed Apple Capsid (Blepharidopterus angulatus)*	*2*	*30/09/1927*	
Insect - true bug (Hemiptera)	*Broad Damselbug (Nabis (Nabicula) flavomarginatus)*	*1*	*30/09/1927*	
Insect - true bug (Hemiptera)	*Charagochilus (Charagochilus) gyllenhalii*	*1*	*30/09/1927*	
Insect - true bug (Hemiptera)	*Chartoscirta cincta*	*1*	*30/09/1928*	
Insect - true bug (Hemiptera)	*Chilacis typhae*	*1*	*30/06/1925*	
Insect - true bug (Hemiptera)	*Chiloxanthus pilosus*	*3*	*31/08/1898*	
Insect - true bug (Hemiptera)	*Common Damselbug (Nabis (Nabis) rugosus)*	*2*	*30/09/1928*	
Insect - true bug (Hemiptera)	*Cymus glandicolor*	*1*	*30/09/1928*	
Insect - true bug (Hemiptera)	*Cyrtorhinus caricis*	*1*	*30/09/1928*	
Insect - true bug (Hemiptera)	*Dicyphus (Dicyphus) epilobii*	*1*	*30/06/1925*	
Insect - true bug (Hemiptera)	*Dicyphus (Dicyphus) stachydis*	*1*	*31/12/1893*	
Insect - true bug (Hemiptera)	*Drymus (Sylvadrymus) sylvaticus*	*1*	*30/09/1927*	
Insect - true bug (Hemiptera)	*Fieberocapsus flaveolus*	*2*	*02/09/1928*	
Insect - true bug (Hemiptera)	*Gampsocoris punctipes*	*4*	*10/05/1943*	
Insect - true bug (Hemiptera)	*Halosalda lateralis*	*1*	*13/08/1896*	
Insect - true bug (Hemiptera)	*Harpocera thoracica*	*1*	*31/12/1893*	

Insect - true bug (Hemiptera)	*Hawthorn Shieldbug (Acanthosoma haemorrhoidale)*	*2*	*30/09/1928*	
Insect - true bug (Hemiptera)	*Kalama tricornis*	*2*	*31/08/1894*	
Insect - true bug (Hemiptera)	*Leptopterna ferrugata*	*1*	*30/06/1926*	
Insect - true bug (Hemiptera)	*Liocoris tripustulatus*	*1*	*31/10/1927*	
Insect - true bug (Hemiptera)	*Liorhyssus hyalinus*	*1*	*27/06/1903*	
Insect - true bug (Hemiptera)	*Lucerne Bug (Adelphocoris lineolatus)*	*1*	*31/08/1894*	
Insect - true bug (Hemiptera)	*Macrotylus (Alloeonycha) paykulli*	*1*	*30/06/1893*	
Insect - true bug (Hemiptera)	*Marsh Damselbug (Nabis (Dolichonabis) limbatus)*	*1*	*30/09/1928*	
Insect - true bug (Hemiptera)	*Mecomma (Globicellus) dispar*	*2*	*23/09/1927*	
Insect - true bug (Hemiptera)	*Mecomma (Mecomma) ambulans*	*1*	*30/09/1927*	
Insect - true bug (Hemiptera)	*Megalonotus chiragra*	*1*	*30/07/1917*	
Insect - true bug (Hemiptera)	*Nysius thymi*	*2*	*31/08/1917*	
Insect - true bug (Hemiptera)	*Orthotylus (Orthotylus) ochrotrichus*	*1*	*31/08/1925*	
Insect - true bug (Hemiptera)	*Pantilius (Pantilius) tunicatus*	*2*	*19/09/1932*	
Insect - true bug (Hemiptera)	*Phytocoris (Ktenocoris) ulmi*	*1*	*31/08/1893*	
Insect - true bug (Hemiptera)	*Phytocoris (Ktenocoris) varipes*	*1*	*31/08/1893*	
Insect - true bug (Hemiptera)	*Phytocoris (Phytocoris) longipennis*	*2*	*09/10/1927*	
Insect - true bug (Hemiptera)	*Phytocoris (Phytocoris) populi*	*1*	*09/09/1928*	
Insect - true bug (Hemiptera)	*Phytocoris (Phytocoris) tiliae*	*1*	*09/10/1927*	
Insect - true bug (Hemiptera)	*Pinalitus cervinus*	*1*	*31/10/1927*	
Insect - true bug (Hemiptera)	*Pithanus maerkelii*	*2*	*31/10/1927*	
Insect - true bug (Hemiptera)	*Plagiognathus (Plagiognathus) arbustorum*	*1*	*31/07/1916*	
Insect - true bug (Hemiptera)	*Plagiognathus (Plagiognathus) chrysanthemi*	*1*	*30/09/1934*	
Insect - true bug (Hemiptera)	*Psallus (Psallus) falleni*	*1*	*31/12/1893*	
Insect - true bug (Hemiptera)	*Psallus (Psallus) lepidus*	*1*	*31/12/1893*	
Insect - true bug (Hemiptera)	*Red-legged Shieldbug (Pentatoma rufipes)*	*1*	*30/09/1927*	
Insect - true bug (Hemiptera)	*Saldula opacula*	*1*	*25/08/1889*	

Insect - true bug (Hemiptera)	*Saldula palustris*	*1*	*30/09/1894*	
Insect - true bug (Hemiptera)	*Scolopostethus thomsoni*	*1*	*30/06/1926*	
Insect - true bug (Hemiptera)	*Stenodema (Brachystira) calcarata*	*1*	*30/09/1928*	
Insect - true bug (Hemiptera)	*Stenodema (Stenodema) laevigata*	*2*	*30/09/1928*	
Insect - true bug (Hemiptera)	*Stygnocoris fuligineus*	*1*	*31/08/1894*	
Insect - true bug (Hemiptera)	*Stygnocoris sabulosus*	*1*	*30/09/1928*	
Insect - true bug (Hemiptera)	*Temnostethus (Montandoniella) gracilis*	*1*	*30/04/1894*	
Insect - true bug (Hemiptera)	*Teratocoris saundersi*	*1*	*30/09/1928*	
Insect - true bug (Hemiptera)	*Tytthus pygmaeus*	*1*	*02/09/1928*	
Insect - true fly (Diptera)	*Cheilosia bergenstammi*	*2*	*31/12/1918*	
Insect - true fly (Diptera)	*Nemopoda nitidula*	*1*	*06/09/1908*	
Insect - true fly (Diptera)	*Parhelophilus versicolor*	*1*	*29/05/1918*	
Insect - true fly (Diptera)	*Sphaerophoria interrupta*	*1*	*31/08/1915*	
Insect - true fly (Diptera)	*Syritta pipiens*	*1*	*25/05/1918*	
Insect - true fly (Diptera)	*Themira minor*	*1*	*17/07/1971*	
Liverwort	*Bifid Crestwort (Lophocolea bidentata)*	*1*	*31/12/1989*	
Liverwort	*Greasewort (Aneura pinguis)*	*1*	*31/12/1876*	
Liverwort	*Hooker's Flapwort (Haplomitrium hookeri)*	*1*	*31/12/1878*	
Liverwort	*Moerckia flotoviana s.str.*	*5*	*31/01/1902*	
Liverwort	*Petalwort (Petalophyllum ralfsii)*	*10*	*31/12/1904*	*Protected Species: EU Habitats Directive || Protected Species: EU Habitats Directive >> Annex II || Protected Species: Flora Protection Order (FPO) || Protected Species: Flora Protection Order (FPO) >> FPO 2022 Schedule C (Liverworts)*
Mollusc	*Blind Snail (Cecilioides (Cecilioides) acicula)*	*1*	*31/12/1919*	*Threatened Species: Vulnerable*
Mollusc	*Brown-lipped Snail (Cepaea (Cepaea) nemoralis)*	*1*	*31/12/1919*	
Mollusc	*Clear Glass Snail (Aegopinella pura)*	*1*	*31/12/1919*	
Mollusc	*Common Garden Snail (Cornu aspersum)*	*1*	*31/12/1940*	*Invasive Species: Medium Risk Invasive Species (2013 Report)*
Mollusc	*Common Whorl Snail (Vertigo (Vertigo) pygmaea)*	*1*	*31/12/1919*	*Threatened Species: Near threatened*

Mollusc	*Dwarf Snail (Punctum (Punctum) pygmaeum)*	*1*	*31/12/1919*	
Mollusc	*English Chrysalis Snail (Leiostyla (Leiostyla) anglica)*	*1*	*31/12/1919*	*Threatened Species: Vulnerable*
Mollusc	*Heath Snail (Helicella itala)*	*2*	*31/12/1940*	*Threatened Species: Vulnerable*
Mollusc	*Laver Spire Shell (Peringia ulvae)*	*2*	*31/12/1940*	
Mollusc	*Moss Chrysalis Snail (Pupilla (Pupilla) muscorum)*	*1*	*31/12/1919*	*Threatened Species: Endangered*
Mollusc	*Mouse-eared Snail (Myosotella myosotis)*	*2*	*31/12/1940*	
Mollusc	*Nautilus Ramshorn (Gyraulus (Armiger) crista)*	*1*	*31/12/1919*	
Mollusc	*Pointed Snail (Cochlicella (Cochlicella) acuta)*	*1*	*31/12/1919*	
Mollusc	*Rock Snail (Pyramidula umbilicata)*	*1*	*31/12/1940*	
Mollusc	*Striped Snail (Cernuella (Cernuella) virgata)*	*1*	*31/12/1919*	
Mollusc	*Two-toothed Door Snail (Clausilia (Clausilia) bidentata)*	*1*	*31/12/1919*	
Mollusc	*Two-toothed White Snail (Leucophytia bidentata)*	*1*	*28/02/1902*	
Mollusc	*Wandering Snail (Ampullaceana balthica)*	*1*	*31/12/1919*	
Moss	*Abietinella abietina var. abietina*	*7*	*31/12/1912*	*Threatened Species: Endangered*
Moss	*Big Shaggy-moss (Hylocomiadelphus triquetrus)*	*1*	*31/12/1988*	
Moss	*Broom Fork-moss (Dicranum scoparium)*	*1*	*31/12/1991*	
Moss	*Cernuous Thread-moss (Bryum uliginosum)*	*1*	*31/12/1860*	*Protected Species: Flora Protection Order (FPO) || Protected Species: Flora Protection Order (FPO) >> FPO 2022 Schedule B (Mosses) || Threatened Species: Endangered*
Moss	*Common Feather-moss (Kindbergia praelonga)*	*1*	*31/12/1988*	
Moss	*Creeping Feather-moss (Amblystegium serpens)*	*2*	*31/12/1861*	
Moss	*Ditrichum flexicaule s.l.*	*2*	*31/12/1872*	
Moss	*Drooping Thread-moss (Bryum algovicum)*	*1*	*31/12/1872*	
Moss	*Fertile Feather-moss (Drepanocladus polygamus)*	*2*	*31/12/1872*	
Moss	*Fine-leaved Marsh Feather-moss (Kandaea elodes)*	*2*	*31/12/1852*	*Threatened Species: Near threatened*
Moss	*Glittering Wood-moss (Hylocomium splendens)*	*1*	*31/12/1988*	

Moss	*Golden Feather-moss (Campylium chrysophyllum)*	*1*	*31/12/1872*	
Moss	*Heim's Pottia (Hennediella heimii)*	*2*	*31/12/1872*	
Moss	*Hypnum cupressiforme var. cupressiforme*	*1*	*31/12/1988*	
Moss	*Kneiff's Hook-moss (Drepanocladus aduncus)*	*1*	*31/12/1863*	
Moss	*Many-seasoned Thread-moss (Bryum intermedium)*	*1*	*31/12/1860*	*Protected Species: Flora Protection Order (FPO) || Protected Species: Flora Protection Order (FPO) >> FPO 2022 Schedule B (Mosses) || Threatened Species: Endangered*
Moss	*Megapolitan Feather-moss (Rhynchostegium megapolitanum)*	*11*	*31/12/1904*	*Threatened Species: Near threatened*
Moss	*Montagne's Cylinder-moss (Entodon concinnus)*	*2*	*31/12/1872*	
Moss	*Mosses (Bryopsida)*	*1*	*31/12/1871*	
Moss	*Neat Feather-moss (Pseudoscleropodium purum)*	*2*	*03/04/2006*	
Moss	*Pale Thread-moss (Bryum pallens)*	*1*	*31/12/1988*	
Moss	*Pale-fruited Thread-moss (Pohlia annotina)*	*1*	*31/12/1872*	
Moss	*Pointed Spear-moss (Calliergonella cuspidata)*	*1*	*31/12/1988*	
Moss	*Rigid Aloe-moss (Aloina rigida)*	*2*	*31/12/1879*	*Threatened Species: Regionally Extinct*
Moss	*Rock Pocket-moss (Fissidens dubius)*	*1*	*03/04/2006*	
Moss	*Roof Plait-moss (Hypnum cupressiforme var. lacunosum)*	*2*	*03/04/2006*	
Moss	*Rough-stalked Feather-moss (Brachythecium rutabulum)*	*1*	*31/12/1988*	
Moss	*Rusty Beard-moss (Didymodon ferrugineus)*	*1*	*31/12/1915*	
Moss	*Sand-hill Screw-moss (Syntrichia ruraliformis)*	*2*	*03/04/2006*	
Moss	*Short-tooth Hump-moss (Amblyodon dealbatus)*	*1*	*31/12/1872*	
Moss	*Side-fruited Crisp-moss (Tortella squarrosa)*	*8*	*31/12/1979*	*Threatened Species: Near threatened*
Moss	*Springy Turf-moss (Rhytidiadelphus squarrosus)*	*1*	*31/12/1988*	
Moss	*Starke's Pottia (Microbryum starckeanum)*	*1*	*12/11/1950*	
Moss	*Supine Plait-moss (Hypnum*	*1*	*31/12/1988*	

	cupressiforme var. resupinatum)			
Moss	*Tree-moss (Climacium dendroides)*	*1*	*31/12/1988*	
Moss	*Warne's Thread-moss (Bryum warneum)*	*7*	*31/12/1910*	*Protected Species: Flora Protection Order (FPO) || Protected Species: Flora Protection Order (FPO) >> FPO 2022 Schedule B (Mosses) || Threatened Species: Critically Endangered*
Moss	*Wavy Beard-moss (Didymodon sinuosus)*	*1*	*31/12/1872*	
Moss	*Whitish Feather-moss (Brachythecium albicans)*	*1*	*31/12/1988*	
Moss	*Woodsy Thyme-moss (Plagiomnium cuspidatum)*	*2*	*30/11/1950*	
Moss	*Yellow Feather-moss (Homalothecium lutescens)*	*2*	*03/04/2006*	
Slime mould	*Diderma spumarioides*	*2*	*31/10/1922*	



Otter records and signs within the immediate area = no otter records from the site on the NBDC database

Appendix 8.2 Bird Survey Reports

Breeding Bird Survey of Lands at Clongriffin, Dublin 13. May to June 2025.

Compiled by John Fox Dip field ecology.

July 2025.



Fig 1. Meadow Pipit. Red Listed Bird Species found on Clongriffin Lands.

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Summary:

On the 26th of May 10th and 26th of June 2025, day-time visits were made to the Clongriffin Lands in Dublin 13. Visits were done in the early morning when birds are most active. The visits were for a duration of between 2 hours and 45 minutes and 2 hours and 15 minutes.

During each visit the accessible lands were walked slowly. The routes walked focused primarily on areas with pools, ditches, wet areas, hedges, scrub, meadow and trees.

Data from the visit were recorded and the approximate positions for the birds as seen or heard were plotted on aerial photographs. Approximate numbers of birds present and their breeding status if any were recorded.

A total of 24 common bird species of Ireland were recorded on the lands. Two species of high conservation concern, seven species of medium conservation concern and a further 15 species which were of least conservation concern were encountered on or over the lands.



Fig 2 Skylark. Amber listed species singing over Clongriffin Lands.

Introduction:

This short Breeding Bird Survey of the lands at Clongriffin, Dublin 13, was commissioned by in late May 2025 and was stopped in mid-July. The surveys were undertaken from late May through June 2025.

The survey's aim was to get an overview of the bird species present on the lands over that period of 2025 and to indicate the breeding status of those species and their abundance.

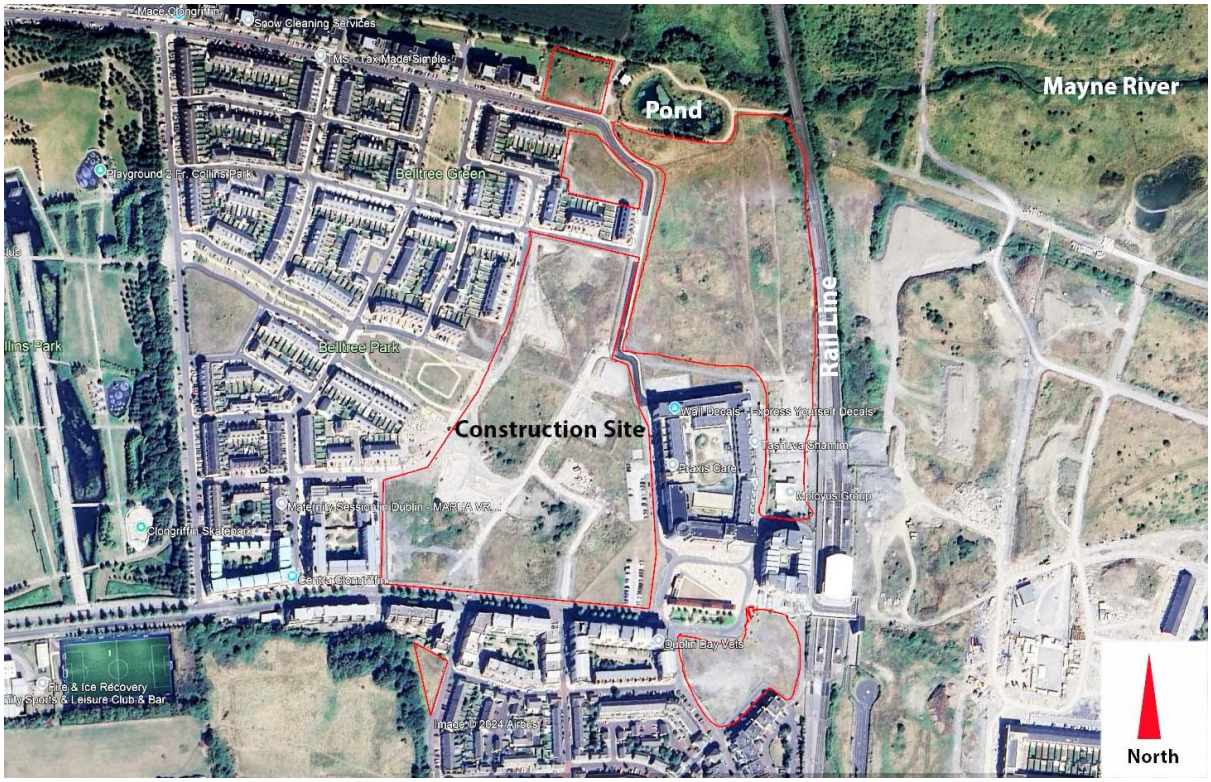


Fig 3. Clongriffin Lands Ariel View. winter Bird Survey Areas Outlined Red.

Study Area:

The survey lands at Clongriffin, Dublin 13 have an area of approximately 12.3 Hectares. The lands are broken into six parcels. Each is by and large flat and much of it has been disturbed in the recent past. The lands have areas of, scrub, rank grassland, meadow, hedges, hard standing, areas of compacted hardcore, a small pond and a few immature trees. Most of the land is unmanaged and one of the larger areas is under construction as a building site and is now inaccessible for surveying. Two of the small areas to the northwest are also inaccessible. There is a larger pond close to the northern boundary of the lands where a few waterbird species were found. Each parcel of the lands is enclosed with a tall wire mesh or palisade fences which restricts all casual access and separates the parcels from each other. Roads, footpaths and several recently constructed buildings are present between many of the land parcels.

The lands are bounded to the east by a rail line. To the north by a walking path and The Moyne River. Other boundaries are most often adjacent to roads and footpaths.

Many of the land parcels can be accessed via locked gates that are sited along existing roads and footpaths. There are some informal trails through the lands perhaps used by walkers in the recent past or for shortcuts but by and large the lands are unused and undisturbed by human amenity activity. No people or domestic pets were encountered on the lands during any of the three visits.

Methodology:

Survey work commenced on site on 26/05/2025 and finished on 26/07/2025. Each survey visit was for a period of over two hours. Just three visits were made during the survey period amounting to total of about 7 hours and 30 minutes spent surveying. The visits were undertaken in the early morning.

The visits were at intervals to achieve the best overview of birds present through the survey period. Surveys could not commence earlier in the breeding season due to the lateness of appointment and ended in early July.

During each visit the accessible lands and perimeter of inaccessible lands were walked. All accessible areas were entered, and all vegetated areas and accessible boundaries were walked slowly. Stops were made frequently to listen and scan for birds. All observations took place when weather conditions were suitable for surveying.

Observations were made primarily with the naked eye and through 42x10 binoculars. The songs and calls of birds were also used to identify various species and their locations on the lands. During each visit, all birds present on the land or seen close to the lands, were identified where possible and their locations noted. Night-time visits were not undertaken to the lands.

A conservation status was also assigned to each species based on their latest conservation status as indicated in Birds of Conservation Concern in Ireland 4: 2020-2026 (Gilbert et al 2021).

Conservation Status: A list of “Birds of Conservation Concern in Ireland 4: 2020 to 2026” (Gilbert et all 2021) indicates three categories of concern as follows. See appendix 1 for more detail.

- Red list species (high conservation concern).
- Amber list species (medium conservation concern).
- Green list species (least conservation concern).

These statuses have been assigned to all regularly occurring species in Ireland. The criteria on which they have been assessed is based on their international conservation status, historical breeding declines, recent population declines, European conservation status, breeding rarity, localised distribution and the international importance of populations.

Breeding Status Indicators: The following breeding status indicators were used to establish breeding status.

1. **Confirmed Breeding**: Eggs/nest, Occupied nest, Adult carrying faecal sac or food for young or recently fledged young.
2. **Probable Breeding**: Paired birds seen, Agitated behaviour, Permanent territory, Courtship or display, Nest building or visiting a nest site.
3. **Possible Breeding**: Species in suitable habitat during breeding season or singing male present.
4. **Non-Breeding**: Birds present but not likely breeding due to a lack of suitable nesting habitat and no behavioural evidence to suggest breeding on the site.

Results:

Table 1. Clongriffin Lands, Dublin 13, Breeding Bird Survey. Bird Species Identified, Breeding Status and Numbers Present, 2025.

Common Name	BTO Code	Species	Breeding Status	Numbers Present & Behaviour
Buzzard	BZ	*Buteo Buteo*	Non breeding	One bird hunting
Kestrel	K.	*Falco tinnunculus*	Non breeding	One bird hunting
Herring Gull	HG	*Larus argentatus*	Non breeding	4 birds bathing
Great Black-backed Gull	GB	*Larus marinus*	Non breeding	Single bird fly over
Lesser Black-backed Gull	LB	*Larus fuscus*	Non breeding	Single bird fly over
Feral Pigeon	FP	*Columba livia* (domest.)	Confirmed	4-6 birds. Fledglings.
Skylark.	S.	*Alauda arvensis*	Possible	1 bird singing
Meadow Pipit	MP	*Anthus pratensis*	Confirmed	3-5 birds. Fledglings.
Pied Wagtail	PW	*Moticilla alba*	Possible	Single bird.
Dunnock	D.	*Prunella modularis*	Possible	1 Singing male.
Robin	R.	*Erithacus rubecula*	Possible	1 singing male.
Blackbird	B.	*Turdus merula*	Possible	3-4 birds foraging.
Blackcap	BC	*Sylvia articapilla*	Possible	1 Singing male.
Wren	WR	*Troglodytes troglodytes*	Possible	3-4 singing males
Blue Tit	BT	*Parus caeruleus*	Possible	2-3 birds
Magpie	MG	*Pica pica*	Confirmed	4 birds
Jackdaw	JD	*Corvus monedula*	Non breeding	4 birds
Hooded Crow	HC	*Corvus cornix*	Non breeding	4-6 birds
Starling	SG	*Sturnus vulgaris*	Possible	2 juvenile birds
House Sparrow	HS	*Passer domesticus*	Non breeding	2 birds
Linnet	LI	*Linaria cannabina*	Confirmed	4-6 birds. Fledglings.
Chaffinch	CH	*Fringilla coelebs*	Possible	1 singing male
Goldfinch	GO	*Carduelis carduelis*	Possible	1 singing male
Greenfinch	GR	*Chloris chloris*	Possible	1 singing male

A total of 24 bird species were recorded on, close to or over the lands. Of these species two were red listed, seven were amber listed and 15 were green listed. See Table 1.

Three waterbird species were recorded, on, close to or over the lands during the visits. Two species Herring Gull and Lesser Black-backed Gull are amber listed while the third Great Black-backed Gull is green listed. None of the three Gull species breeds on the lands as there is no suitable breeding habitat for them.

The three gull species, Herring Gull, Great and Lesser Black-backed were seen in flight over the lands on several occasions and were also found bathing in a puddle on the large western parcel of lands which is now part of an active building site.

Six additional waterbird species were found on the pond which is outside the site but is close to the northern boundary. These waterbird species were Mute Swan, Mallard, Little Grebe, Cormorant, Grey Heron and Moorhen. They are not included in Table 1 as they were not recorded on the lands themselves. it is also probable that they do not visit the lands and even more unlikely that they would breed on the lands as there is no suitable habitat for most of these species.

Two red listed species, Kestrel and Meadow Pipit were seen while surveying the lands.

A single male kestrel was seen hunting briefly over the lands during the final visit on 10th of June 2025. No breeding evidence was found for Kestrel on the lands. There are no obvious sites where a Kestrel might breed on the lands either.

Meadow Pipit were encountered regularly in several parts of the lands with between 3 and 5 birds estimated to be present over the survey period. Singing males were encountered during each visit and adults with food and recently fledged young birds were found during the final visit on 26th of June 2025. At least one pairs of Meadow Pipits appear to have bred successfully on the survey lands during the survey periods.

Apart from the waterbirds, a further five amber listed species were found on the lands. These species were Skylark, Starling, House Sparrow, Linnet and Greenfinch.

A single singing Skylark was recorded in the air over the large parcel of land close to the rail line during the early visits in May and June. No stronger evidence of breeding was found for this species, and it is possible that this bird was holding territory over the land but nesting to the east of the rail line outside the lands.

Starling was observed on the lands on two occasions in very small numbers. These were groups of juvenile birds which indicates successful breeding during 2025. The probability however is that very few if any pairs bred within the survey lands themselves due to a lack of suitable nest sites. Starling are hole nesters, and it is unlikely that there are many suitable holes available for them to nest in, within the lands.

Three House Sparrows were found in the small southeasterly parcel of land on 26th of June with a single bird detected earlier on the 26th of May 2025 at the same location. No evidence of breeding was found and there is no suitable habitat for nesting House Sparrow within this parcel of land. It is likely however that House Sparrow nested in housing nearby.

Linnets were found in small numbers during visits in the large parcel of land to the northeast. It is estimated that at least four birds were present in that area through the survey period. Recently fledged linnets were found in the same area during the second visit on 10th of June 2025 confirming them to have bred in the area.

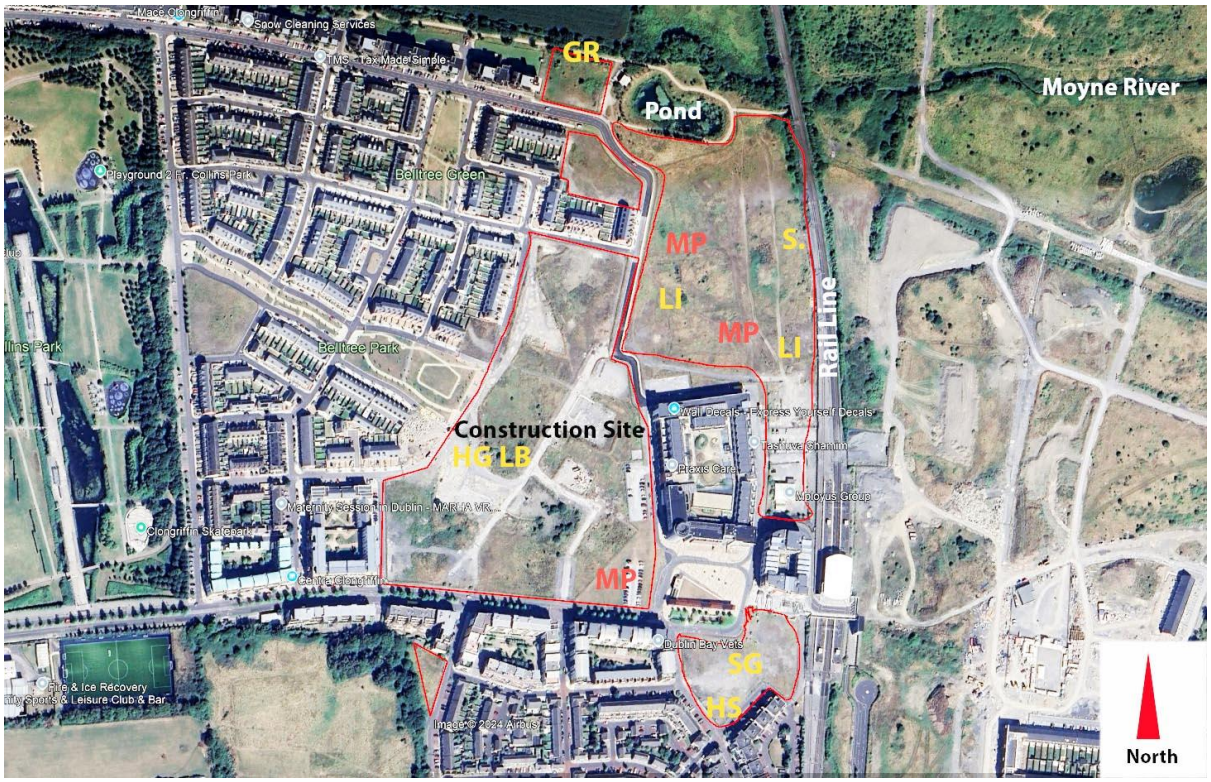


Fig 4. Red and Amber Listed Bird Species, Distribution Map Winter 2025. (For BTO Codes see Table 1) Red listed Species shown Red, Amber listed species shown yellow.

Greenfinch was seen and heard singing from trees close to the northern western corner of the lands along the Moyne River during the first visit on 26th of May 2025, which indicates a bird in suitable breeding habitat. It's possible that Greenfinch bred on or close to the lands but no stronger evidence could be found, and no further sightings were made.

15 green listed species were observed on or over the lands. Therse species were Buzzard, Great Black-backed Gull, Feral Pigeon, Woodpigeon, Pied Wagtail, Dunnock, Blackbird, Robin, Stonechat, Blackbird, Blackcap, Wren, Blue Tit, Magpie, Jackdaw, Rook, Hooded Crow, Chaffinch and Goldfinch.

Just two of the green listed species were confirmed to breed on or close to the lands. These were Feral Pigeon and Magpie. Fledglings of both species having been found on the lands.

Four of the green listed species were identified as non-breeding on the lands due to a lack of suitable breeding habitat for those species. Those four species were Buzzard, Great Black-backed Gull, Jackdaw and Hooded Crow.

The remaining nine green listed species were identified as possible breeding species as they were found in suitable breeding habitat. Those species were Pied Wagtail, Dunnock, Robin, Blackbird, Blackcap, Wren, Blue Tit, Chaffinch and Goldfinch.

Discussion:

A breeding bird survey of the Clongriffin lands was carried out by visiting the lands just three times between late May and June of 2025. The species encountered on the site are all widespread common birds of Ireland.

During the three visits 24 species of common birds were recorded on the lands two of which were red and seven were amber listed species. The remaining 15 species were green listed.

Just four bird species were confirmed to breed. A further twelve species were identified as possible breeding species on the survey lands as they were in suitable habitat and/or males were heard singing. A further eight species were identified as non-breeders because the survey lands do not contain suitable nesting habitat for those species.

It should be noted that some of the recently fledged birds found on the lands, which confirmed them as breeding species, may have come from nests close by but outside the lands.

Conclusion:

This short survey was carried out during May and June of 2025, that being the time of year available following appointment to conduct a breeding bird survey before the survey was halted in early July.

24 common widespread species of bird typical of the habitat present were identified on or close to the development lands of which two, Kestrel and Meadow Pipit, were red listed. Seven amber listed species were identified, together with a further 15 green listed species.

Appendix 1.

Birds of Conservation of Concern in Ireland (BoCCI)

The first comprehensive analysis of the population status of birds on the island which identified those species most in need of conservation was published in 1999. (Newton et al 1999). It was an initial review following the publication of the Irish Red Data Book by Wilde in 1993. A further review followed several years later (Lynas et al 2007), which include data for the first time on an all-Ireland basis. A third review six years later BoCCI (Colhoun and Cummin 2013) followed and was also on an all-Ireland basis. BoCCI in Ireland 4: (Gilbert et all 2021) was published in 2021 and forms the basis on which the conservation statuses were assigned to the bird species in this report.

Seven quantitative criteria have been adopted to determine population status for birds in Ireland.

These include, assessments of global and European conservation status, recent population decline (both in terms of numbers and distribution), historical population decline, breeding rarity, localised distribution and international importance.

The status of 211 species in Ireland was assessed against each of the chosen criteria.

Of these, 54 species, were assigned to the Red List. A further 79 species were assigned to the Amber List. The remaining 78 species were assigned to the Green List. In terms of conservation concern the Red listed species are species of immediate conservation concern, Amber listed species are of medium-term concern while Green listed species are currently of least conservation concern.

Refrences:

- Gilbert G., Stanbury A., & Lewis L. 2021. Birds of Conservation Concern in Ireland 2020-2026. Irish Birds, 43: 1-22. Birdwatch Ireland, Kilcoole Co Wicklow.
- Colhoun, K. and Cummins, S. 2013. Birds of Conservation Concern in Ireland 2014-2019. Irish Birds, 9: 523 - 544. Birdwatch Ireland, Kilcoole Co Wicklow.
- Lynas, P., Newton, S.F, & Robinson, J.A., 2007. The Status of Birds in Ireland: an analysis of conservation concern 2008 – 2013. Irish Birds 8:149 – 166.
- Newton, S.F., Donaghy, A., Allen, D. & Gibbons, D.1999. Birds of Conservation Concern in Ireland. Irish Birds 6: 333 – 344.

Bird Survey of Area A,

Clongriffin Lands, Dublin 13.

2025 to 2026.

Compiled by John Fox Dip field ecology.

February 2026.



Fig 1. Meadow Pipit. Red Listed Bird Species found on Area A, Clongriffin Lands.

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Summary:

Between 4th February 2025 and 11th of February 2026, twelve day-time visits were made to the Area A Clongriffin Lands, Dublin 13. Visits were done at various times, but most were started in the morning. The visits were for a duration of no more than one hour each.

During each visit the accessible lands were walked slowly. The routes walked focused primarily on areas with pools, wet areas, scrub and meadow. All birds detected were recorded on field sheets. Bird species that were heard or seen were identified their activity and approximate locations noted.

Data from the twelve visits were amalgamated and approximate positions for the birds as seen or heard were plotted on aerial photographs. Approximate maximum populations and conservation status were assigned to each species. Both a table of all bird species and a distribution map for red and amber listed bird species encountered on the lands was prepared. Fig 4.

A total of 18 common bird species of Ireland were recorded on the lands. Three species of high conservation concern, four species of medium conservation concern and a further 11 species which were of least conservation concern were encountered on close to or over the lands.



Fig 2 Clongriffin Lands. Habitat from which Snipe were flushed.

Introduction:

This Bird Survey of the Area A lands at Clongriffin, Dublin 13, was commissioned by Brady Shipman Martin, Canal House, Canal Road, Dublin, in early February 2025. The survey was undertaken between early February 2025 and mid February 2026.

This survey aims to describe the distribution and abundance of bird species occurring on the lands as outlined in table 1. and the aerial photography at fig 4.

Study Area:

The survey of Area A lands at Clongriffin, Dublin 13, have an area of approximately 2.7 Hectares.



Fig 3. Clongriffin Lands Area A, Ariel View. Bird Survey Areas Outlined Red.

The lands are by and large flat and much of it has been disturbed in the recent past. The lands have areas of, scrub, rank grassland, meadow, hard standing, areas of compacted hardcore and wet areas with large puddles. The land is currently unmanaged and adjoins an area that is under construction as a building site. Since April 2025 the land has been secured and from then until February 2026 was not entered to carry out the surveys. However, its perimeter was accessible from three sides, and surveying was continued from there. On February 11th access was again gained to the lands which were once again walked and surveyed from within.

Roads and footpaths are present along three sides of the lands allowing access along the south, west and eastern boundaries. Wire mesh fencing is present along these three sides which enabled good views into the lands.

By and large the lands are unused and undisturbed by human activity apart from the area in the northeastern triangle which is used as a carpark for the construction site.

Methodology:

Survey work commenced on site on 4th of February 2025 and finished on the 11th of January 2026. Each survey visit was for a period of less than an hour. A total of 12 visits were made during that survey period. The visits were undertaken mainly in the morning.

The visits were at irregular intervals within the available survey period.

During visits when access was available, the lands were walked. All accessible areas were entered, and all vegetated areas and accessible boundaries were walked slowly. Stops were made frequently to listen and scan for birds.

When access became unavailable the perimeter of the lands was walked on three sides close to the perimeter fencing. The lands were scanned regularly for any bird present.

All observations took place when weather conditions were suitable for surveying. All species discovered were recorded, and their activity noted. A conservation status was also assigned to each species based on their latest conservation status as indicated in Birds of Conservation Concern in Ireland 4: 2020-2026 (Gilbert et al 2021).

Observations were made primarily with the naked eye and through 42x10 binoculars. The songs and calls of birds were also used to identify various species and their locations on the lands. During each visit, all birds present on the land or seen close to the lands, were identified where possible and their locations noted. Night-time visits were not undertaken to the lands.

Conservation Status: A list of “Birds of Conservation Concern in Ireland 4: 2020 to 2026” (Gilbert et all 2021) indicates three categories of concern as follows. See appendix 1 for more detail.

- Red list species (high conservation concern).
- Amber list species (medium conservation concern).
- Green list species (least conservation concern).

These statuses have been assigned to all regularly occurring species in Ireland. The criteria on which they have been assessed is based on their international conservation status, historical breeding declines, recent population declines, European conservation status, breeding rarity, localised distribution and the international importance of populations.

Results:

A total of 18 bird species were recorded on, close to or over the lands. Of these species three were red listed, four were amber listed and 11 were green listed. See Table 1.

Three waterbird species were recorded, on and/or over the lands during the visits. One of the waterbird species, Snipe, is red listed while the other two, Black-headed Gull and Herring Gull, are amber listed.

Table 1. Area A, Clongriffin Lands, Dublin 13, Winter Bird Survey. Bird Species Identified, Maximum Numbers Present, 2025 to 2026.

Common Name	BTO Code	Species	Activity	Estimated Maximum Numbers Present
Snipe	SN	*Gallinago gallinago*	Foraging	34 birds flushed
Black-headed Gull	BH	*Chroicocephalus ridibundus*	Flying	2 birds bathing
Herring Gull	HG	*Larus argentatus*	Flying	8 birds bathing
Feral Pigeon	FP	*Columba livia* (domest.)	Foraging	Single bird
Meadow Pipit	MP	*Anthus pratensis*	Foraging	2 birds
Pied Wagtail	PW	*Moticilla alba*	Foraging	Single bird
Grey Wagtail	GL	*Moticilla cinerea*	Foraging	Single bird
Robin	R.	*Erithacus rubecula*	Singing	Single bird
Stonechat	SC	*Saxicola rubicola*	Foraging	Single pair (2 birds)
Wren	WR	*Troglodytes troglodytes*	Singing	2 singing males
Blue Tit	BT	*Parus caeruleus*	Foraging	Single birds
Magpie	MG	*Pica pica*	Foraging	2 birds
Jackdaw	JD	*Corvus monedula*	Bathing	35 birds bathing
Rook	RO	*Corvus frugilegus*	Flying	21 birds bathing
Hooded Crow	HC	*Corvus cornix*	Foraging	2 birds
Starling	SG	*Sturnus vulgaris*	Foraging	25 birds
Linnet	LI	*Linaria cannabina*	Foraging	5 birds
Goldfinch	GO	*Carduelis carduelis*	Foraging	2 birds

The two gull species, Black-headed and Herring Gull were seen in flight over the lands on several occasions and were found bathing in a puddle in the western part of the lands which is often present just south of the currently active building site.

Snipe were flushed from various parts of the land on three occasions. In the winter of 2025, on 17th of February, 22 Snipe were flushed from the southeastern part of the of land. Nine Snipe were also flushed on the 4th of February 2025 and on 11th February 2026 a total of 34 Snipe were flushed from the approximate same location.

Two other red listed species, Meadow Pipit and Grey Wagtail were also seen while surveying the lands. A maximum of two Meadow Pipits were encountered on the lands on 20th of November 2025 while single birds were seen on several other occasions. Grey Wagtail was recorded on a single occasion during the latest survey on 11th February 2026 when a single bird flew up from the lands leaving the site.

Apart from the waterbirds, a further two amber listed species were found on the lands. These species were Starling and Linnet. A small flock of 25 Starlings were found foraging close to the northeastern boundaries on 20th November with smaller flocks seen on many other occasions. A maximum of five Linnets were found in the southeasterly corner of the land on 4th of February 2025. Smaller numbers of Linnets were detected on other occasions at the same location.

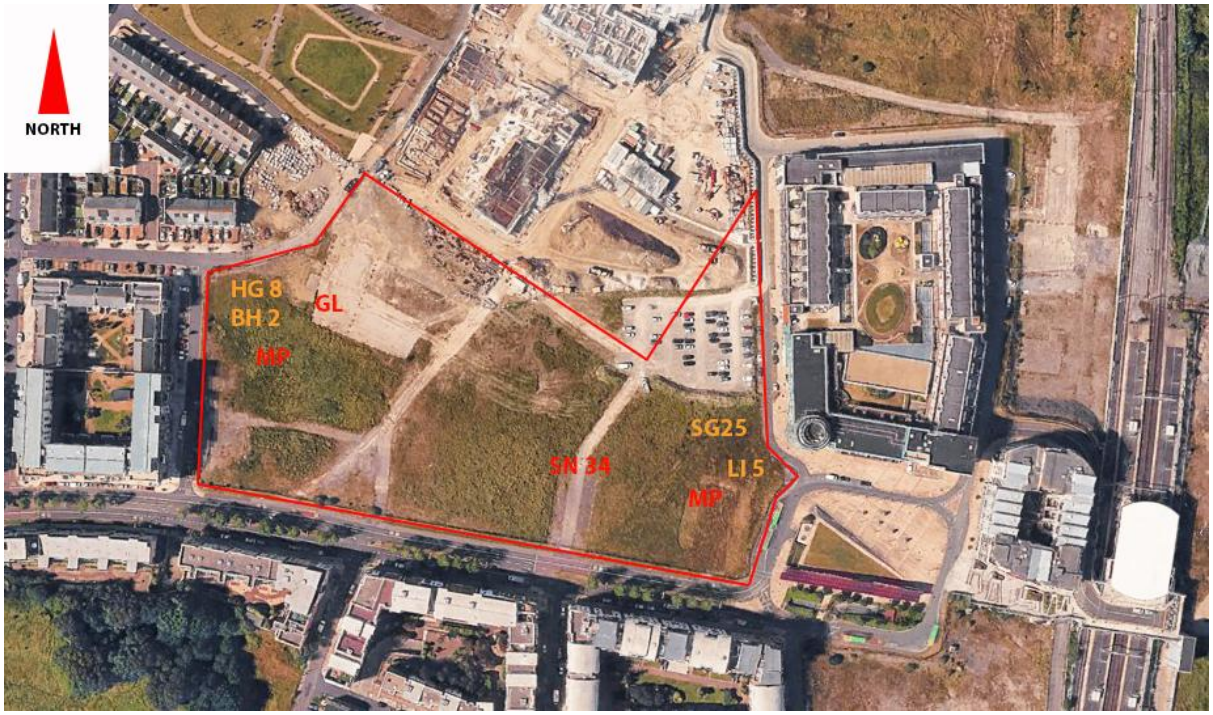


Fig 4. Red and Amber Listed Bird Species, Distribution Map 2025 to 2026. (For BTO Codes see Table 1) Red listed Species shown Red, Amber listed species shown Amber.

11 green listed species were observed on or close to the lands. Therse species were Feral Pigeon, Pied Wagtail, Robin, Stonechat, Wren, Blue Tit, Magpie, Jackdaw, Rook, Hooded Crow, and Goldfinch

Discussion:

The species encountered on the site are all widespread common birds of Ireland. Most species observed are currently green listed as species of least conservation concern in Ireland.

Three red listed species, that is, those of highest conservation concern, were identified. The red listed species were Snipe, Meadow Pipit and Grey Wagtail.

Four amber listed species, those of medium conservation concern, were identified on the lands. Of the four amber listed species two were waterbird species. These were Black-headed Gull and Herring Gull. The gulls were seen bathing on the lands in puddles and in flight over the lands. The other two amber listed species were Starling and Linnet. Starlings were seen in small foraging flocks during many vists. Linnets were also found in small numbers during several visits.

Conclusion:

The survey was carried out between early February 2025 and mid February 2026, that being the time period available following appointment to conduct bird surveys.

18 common widespread species of bird typical of the habitat present were identified on and/or over to the development lands of which three, Snipe, Meadow Pipit and Grey Wagtail were red listed. Four amber listed species were identified, together with a further 11 green listed species.

Appendix 1.

Birds of Conservation of Concern in Ireland (BoCCI)

The first comprehensive analysis of the population status of birds on the island which identified those species most in need of conservation was published in 1999. (Newton et al 1999). It was an initial review following the publication of the Irish Red Data Book by Wilde in 1993. A further review followed several years later (Lynas et al 2007), which include data for the first time on an all-Ireland basis. A third review six years later BoCCI (Colhoun and Cummin 2013) followed and was also on an all-Ireland basis. BoCCI in Ireland 4: (Gilbert et all 2021) was published in 2021 and forms the basis on which the conservation statuses were assigned to the bird species in this report.

Seven quantitative criteria have been adopted to determine population status for birds in Ireland.
These include, assessments of global and European conservation status, recent population decline (both in terms of numbers and distribution), historical population decline, breeding rarity, localised distribution and international importance.

The status of 211 species in Ireland was assessed against each of the chosen criteria.
Of these, 54 species, were assigned to the Red List. A further 79 species were assigned to the Amber List. The remaining 78 species were assigned to the Green List. In terms of conservation concern the Red listed species are species of immediate conservation concern, Amber listed species are of medium-term concern while Green listed species are currently of least conservation concern.

Refrences:

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- Lynas, P., Newton, S.F, & Robinson, J.A., 2007. The Status of Birds in Ireland: an analysis of conservation concern 2008 – 2013. Irish Birds 8:149 – 166.
- Newton, S.F., Donaghy, A., Allen, D. & Gibbons, D.1999. Birds of Conservation Concern in Ireland. Irish Birds 6: 333 – 344.

Appendix 9.1 NRA/TII Criteria for Rating the Magnitude and Significance of Impacts

Impact Ratings and Assessment Criteria (Soils, Geology and Hydrogeology)

Table 1 *Criteria for rating site Attributes – Estimation of Importance of Soil and Geology Attributes (NRA)*

Importance	Criteria	Typical Examples
Very High	Attribute has a high quality, significance or value on a regional or national scale Degree or extent of soil contamination is significant on a national or regional scale Volume of peat and/or soft organic soil underlying route is significant on a national or regional scale*	Geological feature rare on a regional or national scale (NHA) Large existing quarry or pit Proven economically extractable mineral resource
High	Attribute has a high quality, significance or value on a local scale. Degree or extent of soil contamination is significant on a local scale. Volume of peat and/or soft organic soil underlying route is significant on a local scale. *	Contaminated soil on site with previous heavy industrial usage Large recent landfill site for mixed wastes Geological feature of high value on a local scale (County Geological Site) Well drained and/or high fertility soils Moderately sized existing quarry or pit Marginally economic extractable mineral resource
Medium	Attribute has a medium quality, significance or value on a local scale Degree or extent of soil contamination is moderate on a local scale Volume of peat and/or soft organic soil underlying route is moderate on a local scale*	Contaminated soil on site with previous light industrial usage Small recent landfill site for mixed wastes Moderately drained and/or moderate fertility soils Small existing quarry or pit Sub-economic extractable mineral resource
Low	Attribute has a low quality, significance or value on a local scale Degree or extent of soil contamination is minor on a local scale. Volume of peat and/or soft organic soil underlying route is small on a local scale*	Large historical and/or recent site for construction and demolition wastes. Small historical and/or recent landfill site for construction and demolition wastes. Poorly drained and/or low fertility soils. Uneconomically extractable mineral resource.

** relative to the total volume of inert soil disposed of and/or recovered*

Source: *Box 4.1: 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009)*

Table 2 *Criteria for Rating Impact Significance at EIA Stage - Estimation Of Magnitude of Impact on Soil / Geology Attribute (NRA)*

Magnitude of Impact	Criteria	Typical Examples
Large Adverse	Results in loss of attribute	Loss of high proportion of future quarry or pit reserves Irreversible loss of high proportion of local high fertility soils Removal of entirety of geological heritage feature Requirement to excavate / remediate entire waste site Requirement to excavate and replace high proportion of peat, organic soils and/or soft mineral soils beneath alignment
Moderate Adverse	Results in impact on integrity of attribute or loss of part of attribute	Loss of moderate proportion of future quarry or pit reserves Removal of part of geological heritage feature Irreversible loss of moderate proportion of local high fertility soils Requirement to excavate / remediate significant proportion of waste site Requirement to excavate and replace moderate proportion of peat, organic soils and/or soft mineral soils benath alignment
Small Adverse	Results in minor impact on integrity of attribute or loss of small part of attribute	Loss of small proportion of future quarry or pit reserves Removal of small part of geological heritage feature Irreversible loss of small proportion of local high fertility soils and/or high proportion of local low fertility soils Requirement to excavate / remediate small proportion of waste site Requirement to excavate and replace small proportion of peat, organic soils and/or soft mineral soils beneath alignment
Negligible	Results in an impact on attribute but of insufficient magnitude to affect either use or integrity	No measurable changes in attributes
Minor Beneficial	Results in minor improvement of attribute quality	Minor enhancement of geological heritage feature
Moderate Beneficial	Results in moderate improvement of attribute quality	Moderate enhancement of geological heritage feature
Major Beneficial	Results in major improvement of attribute quality	Major enhancement of geological heritage feature

Source: *Box 5.1: 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009)*

Table 3 *Criteria for rating Site Attributes - Estimation of Importance of Hydrogeology Attributes (NRA)*

Magnitude of Impact	**Criteria**	**Typical Examples**
Extremely High	Attribute has a high quality or value on an international scale	Groundwater supports river, wetland or surface water body ecosystem protected by EU legislation e.g. SAC or SPA status
Very High	Attribute has a high quality or value on a regional or national scale	Regionally Important Aquifer with multiple well fields Groundwater supports river, wetland or surface water body ecosystem protected by national legislation – NHA status Regionally important potable water source supplying >2500 homes Inner source protection area for
High	Attribute has a high quality or value on a local scale	Regionally Important Aquifer Groundwater provides large proportion of baseflow to local rivers Locally important potable water source supplying >1000 homes Outer source protection area for regionally important water source Inner source protection area for locally important water source
Medium	Attribute has a medium quality or value on a local scale	Locally Important Aquifer Potable water source supplying >50 homes Outer source protection area for locally important water source
Low	Attribute has a low quality or value on a local scale	Poor Bedrock Aquifer Potable water source supplying <50 homes

Source: *Box 4.3: 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009)*

Table 4 *Criteria for Rating Impact Significance at EIS Stage – Estimation of Magnitude of Impact on Hydrogeology Attribute (NRA)*

Magnitude of Impact	Criteria	Typical Examples
Large Adverse	Results in loss of attribute and /or quality and integrity of attribute	Removal of large proportion of aquifer. Changes to aquifer or unsaturated zone resulting in extensive change to existing water supply springs and wells, river baseflow or ecosystems. Potential high risk of pollution to groundwater from routine run- off. [1] Calculated risk of serious pollution incident >2% annually. [2]
Moderate Adverse	Results in impact on integrity of attribute or loss of part of attribute	Removal of moderate proportion of aquifer. Changes to aquifer or unsaturated zone resulting in moderate change to existing water supply springs and wells, river baseflow or ecosystems. Potential medium risk of pollution to groundwater from routine run-off. [1] Calculated risk of serious pollution incident >1% annually. [2]
Small Adverse	Results in minor impact on integrity of attribute or loss of small part of attribute	Removal of small proportion of aquifer. Changes to aquifer or unsaturated zone resulting in minor change to water supply springs and wells, river baseflow or ecosystems. Potential low risk of pollution to groundwater from routine run- off. [1] Calculated risk of serious pollution incident >0.5% annually. [2]
Negligible	Results in an impact on attribute but of insufficient magnitude to affect either use or integrity	Calculated risk of serious pollution incident <0.5% annually. [2]

1 *refer to Annex 1, Method C, Annex 1 of HA216/06*

2 *refer to Appendix B3 / Annex 1, Method D, Annex 1 of HA216/06*

Source: *Box 5.3: 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009)*

Table 5 *Rating of Significant Environmental Impacts at EIA Stage (NRA)*

Importance of Attribute	**Magnitude of Importance**			
	Negligible	**Small Adverse**	**Moderate Adverse**	**Large Adverse**
Extremely High	Imperceptible	Significant	Profound	Profound
Very High	Imperceptible	Significant/moderate	Profound/Significant	Profound
High	Imperceptible	Moderate/Slight	Significant/moderate	Profound/Significant
Medium	Imperceptible	Slight	Moderate	Significant
Low	Imperceptible	Imperceptible	Slight	Slight/Moderate

Source: *Box 5.4: 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009)*

Appendix 10.1 NRA/TII Criteria for Rating the Magnitude and Significance of Impacts

Impact Ratings and Assessment Criteria (Soils, Geology and Hydrogeology)

Table 1 *Criteria for rating site Attributes – Estimation of Importance of Soil and Geology Attributes (NRA)*

Importance	Criteria	Typical Examples
Very High	Attribute has a high quality, significance or value on a regional or national scale Degree or extent of soil contamination is significant on a national or regional scale Volume of peat and/or soft organic soil underlying route is significant on a national or regional scale*	Geological feature rare on a regional or national scale (NHA) Large existing quarry or pit Proven economically extractable mineral resource
High	Attribute has a high quality, significance or value on a local scale. Degree or extent of soil contamination is significant on a local scale. Volume of peat and/or soft organic soil underlying route is significant on a local scale. *	Contaminated soil on site with previous heavy industrial usage Large recent landfill site for mixed wastes Geological feature of high value on a local scale (County Geological Site) Well drained and/or high fertility soils Moderately sized existing quarry or pit Marginally economic extractable mineral resource
Medium	Attribute has a medium quality, significance or value on a local scale Degree or extent of soil contamination is moderate on a local scale Volume of peat and/or soft organic soil underlying route is moderate on a local scale*	Contaminated soil on site with previous light industrial usage Small recent landfill site for mixed wastes Moderately drained and/or moderate fertility soils Small existing quarry or pit Sub-economic extractable mineral resource
Low	Attribute has a low quality, significance or value on a local scale Degree or extent of soil contamination is minor on a local scale. Volume of peat and/or soft organic soil underlying route is small on a local scale*	Large historical and/or recent site for construction and demolition wastes. Small historical and/or recent landfill site for construction and demolition wastes. Poorly drained and/or low fertility soils. Uneconomically extractable mineral resource.

** relative to the total volume of inert soil disposed of and/or recovered*

Source: *Box 4.1: 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009)*

Table 2 *Criteria for Rating Impact Significance at EIA Stage - Estimation Of Magnitude of Impact on Soil / Geology Attribute (NRA)*

Magnitude of Impact	Criteria	Typical Examples
Large Adverse	Results in loss of attribute	Loss of high proportion of future quarry or pit reserves Irreversible loss of high proportion of local high fertility soils Removal of entirety of geological heritage feature Requirement to excavate / remediate entire waste site Requirement to excavate and replace high proportion of peat, organic soils and/or soft mineral soils beneath alignment
Moderate Adverse	Results in impact on integrity of attribute or loss of part of attribute	Loss of moderate proportion of future quarry or pit reserves Removal of part of geological heritage feature Irreversible loss of moderate proportion of local high fertility soils Requirement to excavate / remediate significant proportion of waste site Requirement to excavate and replace moderate proportion of peat, organic soils and/or soft mineral soils benath alignment
Small Adverse	Results in minor impact on integrity of attribute or loss of small part of attribute	Loss of small proportion of future quarry or pit reserves Removal of small part of geological heritage feature Irreversible loss of small proportion of local high fertility soils and/or high proportion of local low fertility soils Requirement to excavate / remediate small proportion of waste site Requirement to excavate and replace small proportion of peat, organic soils and/or soft mineral soils beneath alignment
Negligible	Results in an impact on attribute but of insufficient magnitude to affect either use or integrity	No measurable changes in attributes
Minor Beneficial	Results in minor improvement of attribute quality	Minor enhancement of geological heritage feature
Moderate Beneficial	Results in moderate improvement of attribute quality	Moderate enhancement of geological heritage feature
Major Beneficial	Results in major improvement of attribute quality	Major enhancement of geological heritage feature

Source: *Box 5.1: 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009)*

Table 3 *Criteria for rating Site Attributes - Estimation of Importance of Hydrogeology Attributes (NRA)*

Magnitude of Impact	**Criteria**	**Typical Examples**
Extremely High	Attribute has a high quality or value on an international scale	Groundwater supports river, wetland or surface water body ecosystem protected by EU legislation e.g. SAC or SPA status
Very High	Attribute has a high quality or value on a regional or national scale	Regionally Important Aquifer with multiple well fields Groundwater supports river, wetland or surface water body ecosystem protected by national legislation – NHA status Regionally important potable water source supplying >2500 homes Inner source protection area for
High	Attribute has a high quality or value on a local scale	Regionally Important Aquifer Groundwater provides large proportion of baseflow to local rivers Locally important potable water source supplying >1000 homes Outer source protection area for regionally important water source Inner source protection area for locally important water source
Medium	Attribute has a medium quality or value on a local scale	Locally Important Aquifer Potable water source supplying >50 homes Outer source protection area for locally important water source
Low	Attribute has a low quality or value on a local scale	Poor Bedrock Aquifer Potable water source supplying <50 homes

Source: *Box 4.3: 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009)*

Table 4 *Criteria for Rating Impact Significance at EIS Stage – Estimation of Magnitude of Impact on Hydrogeology Attribute (NRA)*

Magnitude of Impact	Criteria	Typical Examples
Large Adverse	Results in loss of attribute and /or quality and integrity of attribute	Removal of large proportion of aquifer. Changes to aquifer or unsaturated zone resulting in extensive change to existing water supply springs and wells, river baseflow or ecosystems. Potential high risk of pollution to groundwater from routine run- off. [1] Calculated risk of serious pollution incident >2% annually. [2]
Moderate Adverse	Results in impact on integrity of attribute or loss of part of attribute	Removal of moderate proportion of aquifer. Changes to aquifer or unsaturated zone resulting in moderate change to existing water supply springs and wells, river baseflow or ecosystems. Potential medium risk of pollution to groundwater from routine run-off. [1] Calculated risk of serious pollution incident >1% annually. [2]
Small Adverse	Results in minor impact on integrity of attribute or loss of small part of attribute	Removal of small proportion of aquifer. Changes to aquifer or unsaturated zone resulting in minor change to water supply springs and wells, river baseflow or ecosystems. Potential low risk of pollution to groundwater from routine run- off. [1] Calculated risk of serious pollution incident >0.5% annually. [2]
Negligible	Results in an impact on attribute but of insufficient magnitude to affect either use or integrity	Calculated risk of serious pollution incident <0.5% annually. [2]

1 *refer to Annex 1, Method C, Annex 1 of HA216/06*

2 *refer to Appendix B3 / Annex 1, Method D, Annex 1 of HA216/06*

Source: *Box 5.3: 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009)*

Table 5 *Rating of Significant Environmental Impacts at EIA Stage (NRA)*

Importance of Attribute	**Magnitude of Importance**			
	Negligible	**Small Adverse**	**Moderate Adverse**	**Large Adverse**
Extremely High	Imperceptible	Significant	Profound	Profound
Very High	Imperceptible	Significant/moderate	Profound/Significant	Profound
High	Imperceptible	Moderate/Slight	Significant/moderate	Profound/Significant
Medium	Imperceptible	Slight	Moderate	Significant
Low	Imperceptible	Imperceptible	Slight	Slight/Moderate

Source: *Box 5.4: 'Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes' by the National Roads Authority (NRA, 2009)*

Appendix 10.2 Water Framework Directive Assessment



Water Framework Directive Assessment

Project Title: Water Framework Directive Assessment for Residential Development at Clongriffin, Dublin 13

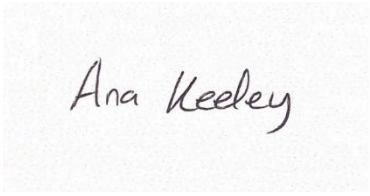
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TABLE OF CONTENTS

1. INTRODUCTION 1
   - 1.1 Objective of the Assessment 1
   - 1.2 Site Setting and History 2
   - 1.3 Experience of Authors 2
   - 1.4 Legislation and Guidance 2
   - 1.5 Methodology 3
     - 1.5.1 WFD Risk Status 3
     - 1.5.2 WFD Water Body Status 4
     - 1.5.3 Methodology for Determination of No Deterioration 4
     - 1.5.4 Assessment against Future Status Objectives 6

2. WATER BODY IDENTIFICATION 7
   - 2.1 Surface Water Bodies 7
     - 2.1.1 Hydrological Environment 7
   - 2.2 Groundwater Bodies 8
     - 2.2.1 Regional Groundwater Bodies 8
     - 2.2.2 Local Hydrogeology 9
     - 2.2.3 Designated Sites 11
     - 2.2.4 Bathing Waters and Recreational Waterbodies 12
     - 2.2.5 Surface Water Public Water Supplies 12
     - 2.2.6 Ground Water Public Water Supplies 12
   - 2.3 Site Investigation 13

3. WATERBODIES IDENTIFICATION AND STATUS 15
   - 3.1 Waterbody Status 15
     - 3.1.1 Surface Waterbody Status 15
     - 3.1.2 Ground Waterbody Status 19

4. DESCRIPTION OF THE PROPOSED DEVELOPMENT 21
   - 4.1 Construction Phase 21
   - 4.2 Operational Phase 21
   - 4.3 Pollution Prevention Measures 22

5. NO DETERIORATION ASSESSMENT 24
   - 5.1 Hydrological Environment 24
   - 5.2 Hydrogeological Environment 25
   - 5.3 Assessment in Terms of Future Good Status 26

6. CONCLUSIONS 27

APPENDIX A. WFD ASSESMENT MATRIX 28

APPENDIX B. NON-DETERIORATION ASSESMENT 32

LIST OF TABLES

Table 1-1	Surface Water Assessment Matrix	4
Table 1-2	Groundwater Assessment Matrix	5
Table 3-1	WFD Waterbodies relevant to the Study Area	15

LIST OF FIGURES

Figure 1-1. Site Location (GSI, 2026) 1

Figure 2-1. Hydrological Environment and River Sub-Catchments (EPA, 2026) 7

1. INTRODUCTION

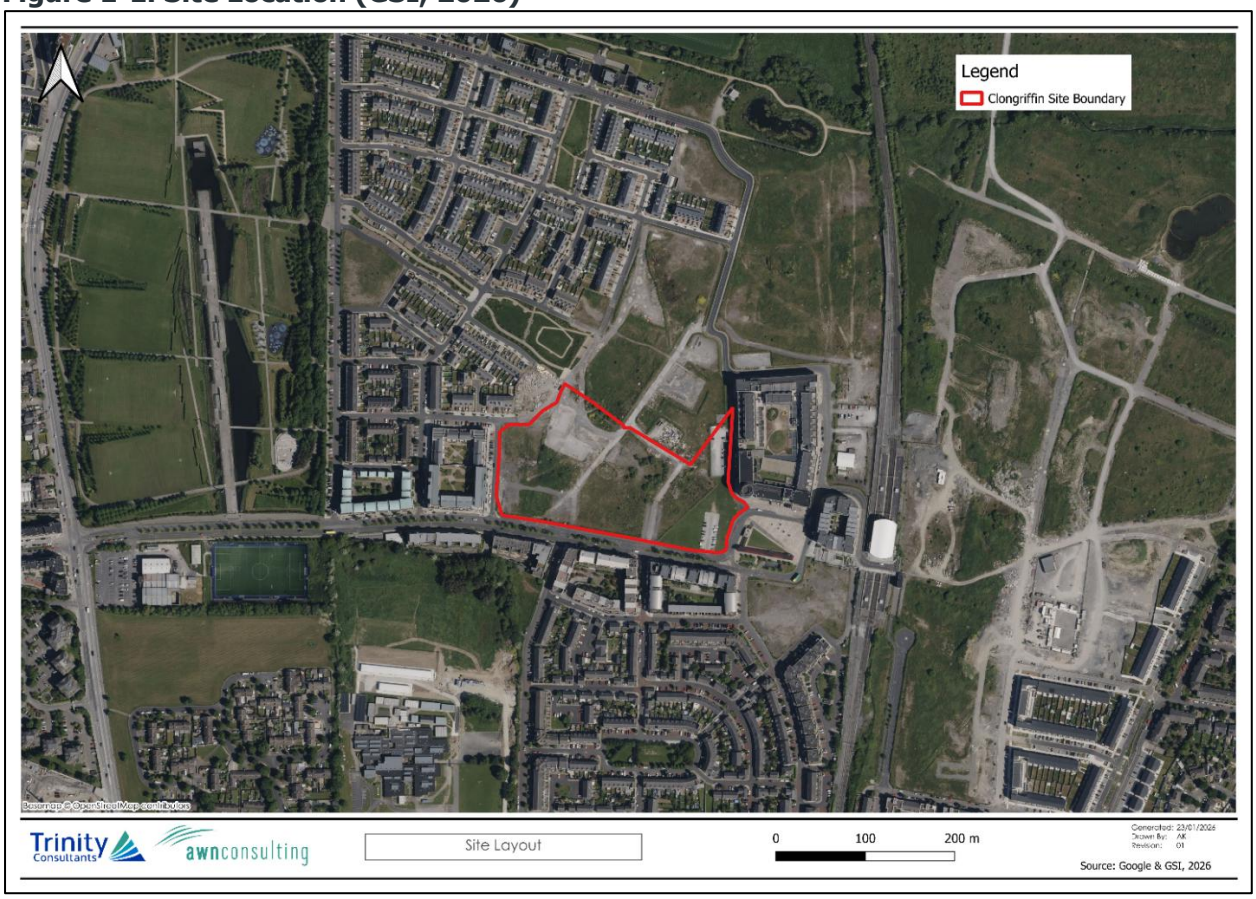
1.1 Objective of the Assessment

AWN Consulting Limited (AWN) has prepared this Water Framework Directive (WFD) Screening Assessment to support the competent authority, in determining if there is a likelihood of significant effects on the Water Framework status of the receiving waterbodies for the proposed Large-scale Residential Development at Clongriffin, Co, Dublin covering a total area of approximately 11.17 hectares (27.6 acres). This WFD Assessment has been prepared in response to the requirements of the Water Framework Directive 2000/60/EC. This WFD compliance document should be read in conjunction with the Environmental Impact Assessment Report prepared.

The objective of the assessment is to address if the proposed development may compromise WFD status objectives including:

- Does the development cause deterioration of a water body from its current status or impede its potential for reaching "Good" status?
- Does the development impact on any water dependent protected areas, priority species, habitats etc.?
- Does the development support the achievement of water body objectives and programme of measures?

Figure 1-1. Site Location (GSI, 2026)



1.2 Site Setting and History

The site of the Proposed Development is located at Clongriffin, north of Donaghmede in Dublin 13 Co. Dublin, covering a total area of approximately 11.17 hectares (27.6 acres). It is located c. 15 km north of Dublin city. At present the site is a greenfield site unoccupied by any structures or buildings as shown in Figure 1-1 above. The site lies within the administration of Dublin City Council. It is bounded to the north by undeveloped lands, to the east by the Dublin-Belfast Railway line. Directly south of the site is Main Street and to the west residential estates. The topography of the site is relatively uniform, the site moderately slopes from the south to north; levels of approximately 8m AOD to the south and 6m AOD to the north. The Mayne River is located c. 0. 2 km north of the northern boundary of the site and flows in an eastern direction discharging into the Mayne Estuary Transitional Waterbody.

1.3 Experience of Authors

This report was prepared by Marcelo Allende and Ana Keely. Marcelo Allende (BSc, BEng) is a Principal Environmental Consultant (Hydrologist) with AWN Consulting with over 20 years of experience in water resources technical studies, conceptual and numerical hydrological/hydrogeological modelling and environmental consultancy. Marcelo holds a degree in Water Resource Civil Engineering (BEng, Hons) from the University of Chile and a Bachelor of Science in Engineering (BSc, Hons). He has worked on a wide of range of projects including multi-aspect environmental investigations, geo-environmental impact assessments, surface and groundwater resource management, hydrological and hydrogeological conceptual and numerical modelling, strategic and site specific flood risk assessments (Stage 1,2 and 3), Due Diligence reporting, baselines studies, soils, surface water and groundwater monitoring and field sampling programmes on a variety of brownfield and greenfield sites throughout Ireland as well as overseas in Chile, Argentina, Peru and Panama. He also has detailed knowledge of environmental guidance, legislation, regulations & standards and expertise in GIS (expert level) and MATTE studies at COMAH establishments. He is currently a member of the International Association of Hydrogeologists (IAH, Irish Group) and a member of Engineers Ireland (MIEI).

Ana Keeley is an Environmental Consultant with AWN Consulting with ongoing roles within the water department. Ana has a BSc in GeoScience from Trinity College Dublin. Ana has worked on a range of projects including environmental investigations, environmental impact assessment reports, hydrological risk assessments and ArcGIS mapping. Ana is a member of the International Association of Hydrogeologists (Irish Group).

1.4 Legislation and Guidance

The Water Framework Directive (WFD) 2000/60/EC aims to protect and enhance the quality of the water environment (both surface water and groundwater) across all European Union member states. The WFD was transposed into Irish law by the European Communities (Water Policy) regulations 2003 (S.I. No 722 of 2003). The WFD requires that EU Member States achieve at least "Good" status for al water bodies by the year of 2027 at the latest. Additionally, where Member States assign "High" status objectives to water bodies, the "High" status must be achieved or maintained by 2027.

The concept of 'deterioration of the status' of a body of surface water in Article 4(1)(a)(i) of Directive 2000/60 is interpreted as meaning that there is deterioration as soon as the status of at least one of the quality elements, within the meaning of Annex V to the directive, falls by one class, even if that fall does not result in a fall in classification of the body of the surface water as a whole. However, if the quality element concerned, within the meaning of that annex, is already in the lowest class, any deterioration of that element constitutes a 'deterioration of the status' of a body of surface water, within the meaning of Article 4(1)(a)(i).

As part of the WFD implementation process the EPA completes a risk assessment and the outcomes are implemented through River Basin Management Plans (RBMPs) in six-year cycles. Ireland is currently in WFD third cycle 2022-2027 i.e. Water Action Plan 2024 - A River Basin Management Plan for Ireland, (Department of Housing Local Government & Heritage, Sept 2024). Waterbodies are either "At Risk" or "Not at Risk" of meeting WFD environmental objectives. Where a waterbody is "At Risk", the EPA determines the significant pressures that are placing the water body at risk of meeting its status objective. This determination focuses the Programme of Measures for the relevant subcatchment(s).

The primary aim of the RBMP is that water bodies identified as being 'At Risk' of not achieving their WFD environmental objectives need to have targeted measures implemented to achieve objectives under this Plan. The EPA determines the significant pressures that are placing the water body at risk of meeting its status objective. This determination focuses the programme of Measures for the relevant subcatchment(s).

As part of its role, the EPA and other stakeholders such as local authorities must consider whether proposals for new developments (other than where exemptions apply Article 4.4 - 4.7 of the WFD) have the potential to:

- Cause a deterioration of a water body from its current status or potential; and/ or
- Prevent future attainment of good status or potential where not already achieved.

As a result, new developments that have the potential to impact on current or predicted WFD status are required to assess their compliance against the WFD objectives of the potentially affected water bodies.

1.5 Methodology

This WFD assessment is based on desktop review of the Environmental Protection Agency (EPA) dataset which was obtained from the www.catchments.ie (accessed January 2026).

The water bodies identified for this assessment are related to the vicinity of the proposed development and its direct or indirect hydrological or hydrogeological connection. From the aforementioned source of information, the WFD Status classification and Risk score was obtained for the identified water bodies.

Besides the status classification of water bodies, the WFD also requires that 'designated sites' meet their environmental requirements and conservation objectives. Designated sites are Natura 2000 sites (Special Areas of Conservation, SACs, with water-dependent habitats, and Special Protection Areas for species listed in the EU Habitats Directive); drinking water protected areas; bathing waters; shellfish waters; salmonid waters; and nutrient sensitive waters. Environmental requirements and conservation objectives for designated sites are stipulated in existing regulations or are being developed by the relevant public bodies (e.g., National Parks and Wildlife Service for SACs).

1.5.1 WFD Risk Status

The WFD Risk score (determined by the EPA) is the risk for each waterbody of failing to meet their WFD objectives by 2027.

The three risk categories are:

- Waterbodies that are 'At Risk' of not meeting their Water Framework Directive objectives. For these waterbodies an evidence-based process was undertaken to identify the significant pressures; once a pressure is designated as 'significant', measures and accompanying resources are needed to mitigate the impact(s) from this pressure. These 'At Risk' waterbodies require not only implementation of the existing measures described in the various regulations, e.g., the Good Agricultural Practices Regulations, but also in many instances more targeted supplementary measures that may have to be taken by a variety of actors, in both the public and private sector.

- Waterbodies that are categorised as 'Review' either because additional information is needed to determine their status before resources and more targeted measures are initiated or the measures have been undertaken, e.g., a wastewater treatment plant upgrade, but the outcome hasn't yet been measured/monitored.
- Waterbodies that are 'Not at Risk' and therefore are meeting their Water Framework Directive objectives. These require maintenance of existing measures to protect the satisfactory status of the water bodies.

1.5.2 WFD Water Body Status

Surface water body status is classified by the EPA on the basis of chemical and ecological status or potential. This system is summarised in Appendix A Figure 1. Under the WFD, groundwater body status is classified on the basis of quantitative and chemical status. This system is summarised in Appendix A Figure 2.

1.5.3 Methodology for Determination of No Deterioration

Proposed developments that have the potential to impact on current or predicted WFD status are required to assess their compliance against the objectives defined for potentially affected water bodies.

1.5.3.1 Surface Water No Deterioration Assessment

Table 1-1 below presents the matrix used to assess the effect of the proposed development on surface water status or potential class. It ranges from a major beneficial effect (i.e., a positive change in overall WFD status) through no effect to deterioration in overall status class. The colour coding used in Table 1-1 is applied to the No Deterioration Assessment' spreadsheet provided in Appendix A of this report. An assessment of in combination and cumulative effects has been undertaken in Chapters 21 and 22 of the EIAR, no significant effects relating to Hydrology were identified in either chapter.

Table 1-1 Surface Water Assessment Matrix

Effect	Description/ Criteria	Outcome
Major Beneficial	Impacts that taken on their own or in combination with others have the potential to lead to the improvement in the ecological status or potential of a WFD quality element for the entire waterbody	Increase in status of one or more WFD element giving rise to a predicted rise in status class for that waterbody.
Minor/ localised beneficial	Impacts when taken on their own or in combination with others have the potential to lead to a minor localised or temporary improvement that does not affect the overall WFD status of the waterbody or any quality elements	Localised improvement, no change in status of WFD element
No Impact	No measurable change to any quality elements.	No change

Effect	Description/ Criteria	Outcome
Localised / temporary adverse effect	Impacts when taken on their own or in combination with others have the potential to lead to a minor localised or temporary deterioration that does not affect the overall WFD status of the waterbody or any quality elements. Consideration will be given to habitat creation measures.	Localised deterioration, no change in status of WFD element when balanced against pollution prevention measures embedded in the project.
Adverse effect on class of WFD element	Impacts when taken on their own or in combination with others have the potential to lead to the deterioration in the WFD status class of one or more biological quality elements, but not in the overall status of the waterbody. Consideration will be given to habitat creation measures.	Decrease in status of WFD element when balanced against positive measures embedded in the project.
Adverse effect on overall WFD class of waterbody	Impacts when taken on their own or in combination with others have the potential to lead to the deterioration in the ecological status or potential of a WFD quality element, which then lead to a deterioration of status/potential of waterbody.	Decrease in status of overall WFD waterbody status when balanced against positive measures embedded in the project.

1.5.3.2 Groundwater No Deterioration Assessment

Table 1-2 below presents the matrix used to assess the effect of the proposed development on groundwater status class. It ranges from a beneficial effect but no change in status to deterioration in overall status class. The colour coding used in Table 1-2 is applied to the final 'No Deterioration Assessment' spreadsheet in Appendix A of this report.

Table 1-2 Groundwater Assessment Matrix

Magnitude of Impact of the proposed development on WFD Element	Effect on WFD Element within the assessment boundary	Effect on Status of WFD element at the Groundwater Body Scale
Impacts lead to beneficial effect	Combined impacts have the potential to have a beneficial effect on the WFD element.	Improvement but no change to status of WFD element
No measurable change to groundwater levels or quality.	No measurable change to WFD elements.	No change and no deterioration in status of WFD element
Impacts when taken on their own have the potential to lead to a minor localised or temporary effect	Combined impacts have the potential to lead to a minor localised or temporary adverse effect on the WFD element.	Combined impacts have the potential to lead to a minor localised or temporary effect on the WFD element. No change to status of WFD element and no significant deterioration at groundwater body scale.

Magnitude of Impact of the proposed development on WFD Element	Effect on WFD Element within the assessment boundary	Effect on Status of WFD element at the Groundwater Body Scale
Impacts when taken on their own have the potential to lead to a widespread or prolonged effect.	Combined impacts have the potential to have an adverse effect on the WFD element.	Combined impacts have the potential to have an adverse effect on the WFD element, resulting in significant deterioration but no change in status class at groundwater body scale.
Impacts when taken on their own have the potential to lead to a significant effect.	Combined impacts in combination with others have the potential to have a significant adverse effect on the WFD element.	Combined impacts in combination with others have the potential to have an adverse effect on the WFD element AND change its status at the groundwater body scale

1.5.4 Assessment against Future Status Objectives

The assessment considers whether the proposed development has the potential to prevent the implementation or impact the effectiveness of the defined measures to achieve the objectives in the RBMP. The Water Action Plan 2024 has been reviewed in the context of ensuring pollution prevention measures comply with current and expected future measures required to be implemented for protection of water body status within the context of the proposed development.

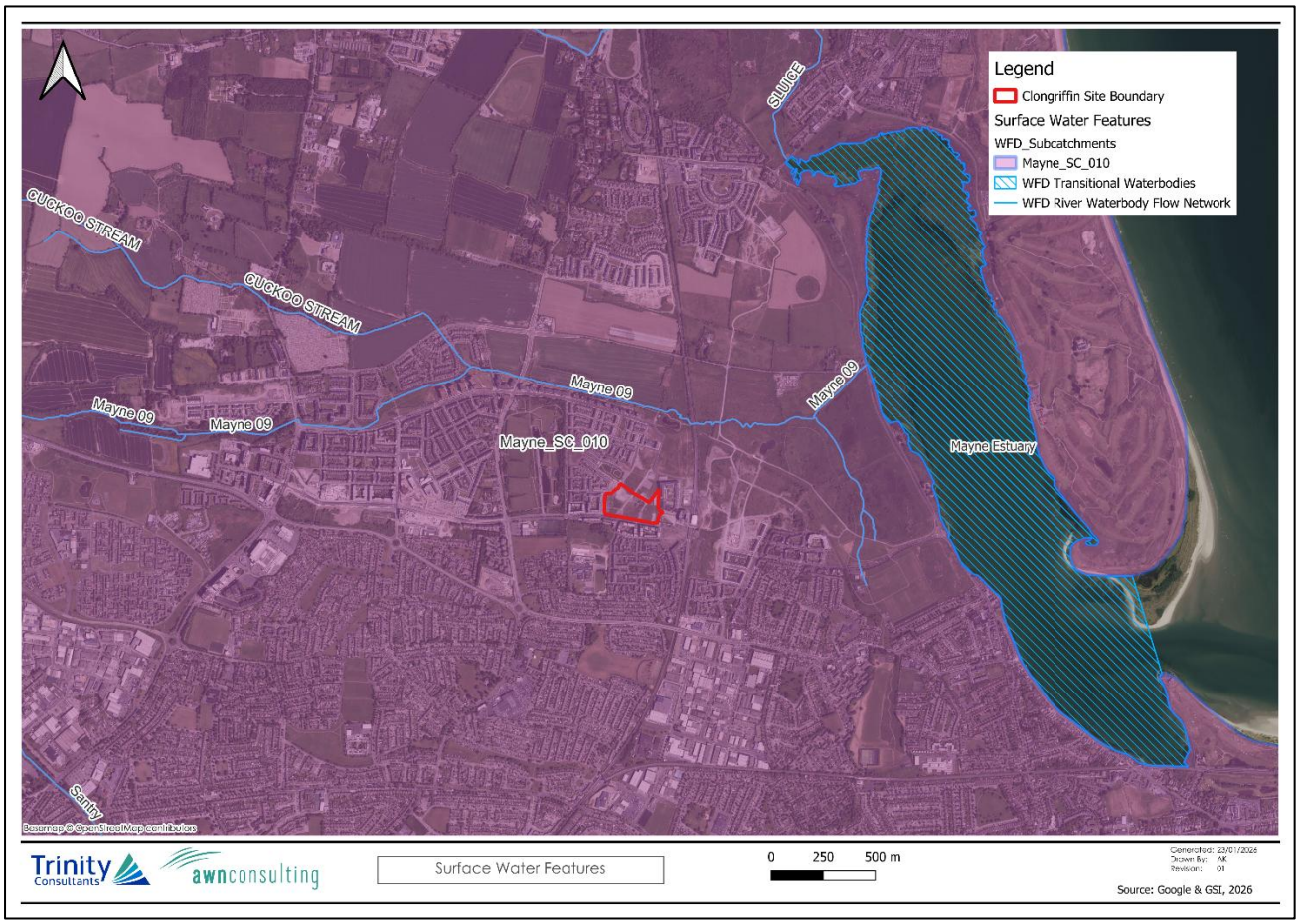
2. WATER BODY IDENTIFICATION

2.1 Surface Water Bodies

2.1.1 Hydrological Environment

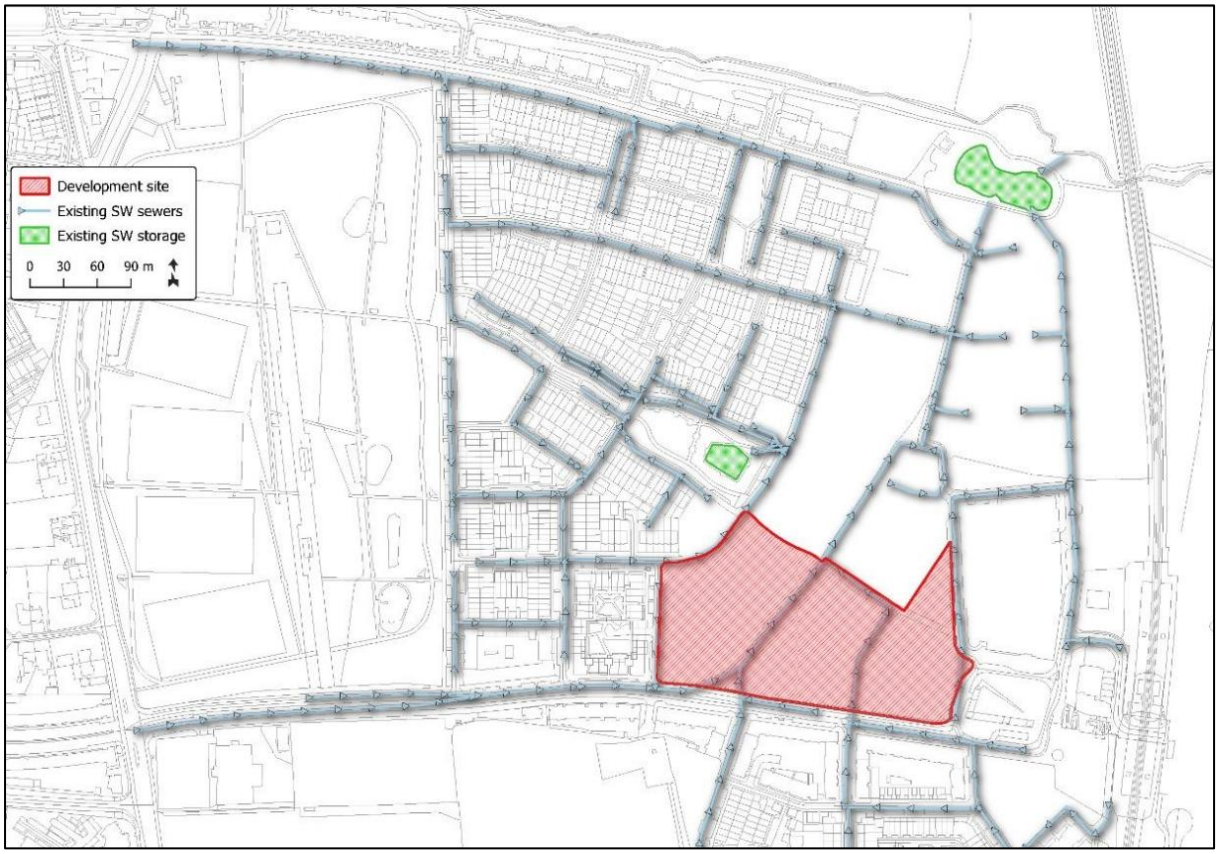
Figure 2-1 below illustrates the hydrological environment within and surrounding the site. According to the EPA watercourse mapping (accessed 28th January 2026), there are no waterbodies identified within the boundaries of the proposed development. The site lies within the Liffey and Dublin Bay Catchment (Catchment ID: 09) and the Mayne_SC_010 subcatchment. The Mayne River (Water Body Code: IE_EA_09M030500) is located 0.2km north of the site boundary. The Mayne River rises to the south of Dublin Airport, within the townlands of Collinstown and Ballystruan, in Fingal County. The river system comprises of two headwater streams that flow in an easterly direction, running parallel before converging at Balgriffin Park, Dublin. From this confluence, the Mayne River continues eastward, passing c. 0.2 km north of the proposed development site. Downstream from the site, the Mayne River discharges into the Mayne Estuary Transitional Waterbody (European Code: IE_EA_080_0100), which subsequently flows into the Irish Sea (Hydrometric Area 09). The Mayne Estuary hosts Baldoyle Bay SAC (Site Code: 000199), Baldoyle Bay SPA (Site Code: 004016) and Baldoyle Bay NHA (Site Code: 000199). The Mayne Estuary is hydraulically connected to the subject site through the Mayne River.

Figure 2-1. Hydrological Environment and River Sub-Catchments (EPA, 2026)



At present, a local surface water drainage network was designed and constructed under the Clongriffin masterplan area parent permission (Reg. Ref. 0132/02). Any runoff collected by this network drains into the Clongriffin attenuation pond located north of the site adjacent to the Mayne River. The attenuation pond discharges to the Mayne River. The local surface water drainage network includes surface water sewers along Belltree Avenue, Lake Street, and Park Street.

Figure 2-2 Existing Surface Water Drainage Network (CS Consulting, 2025)

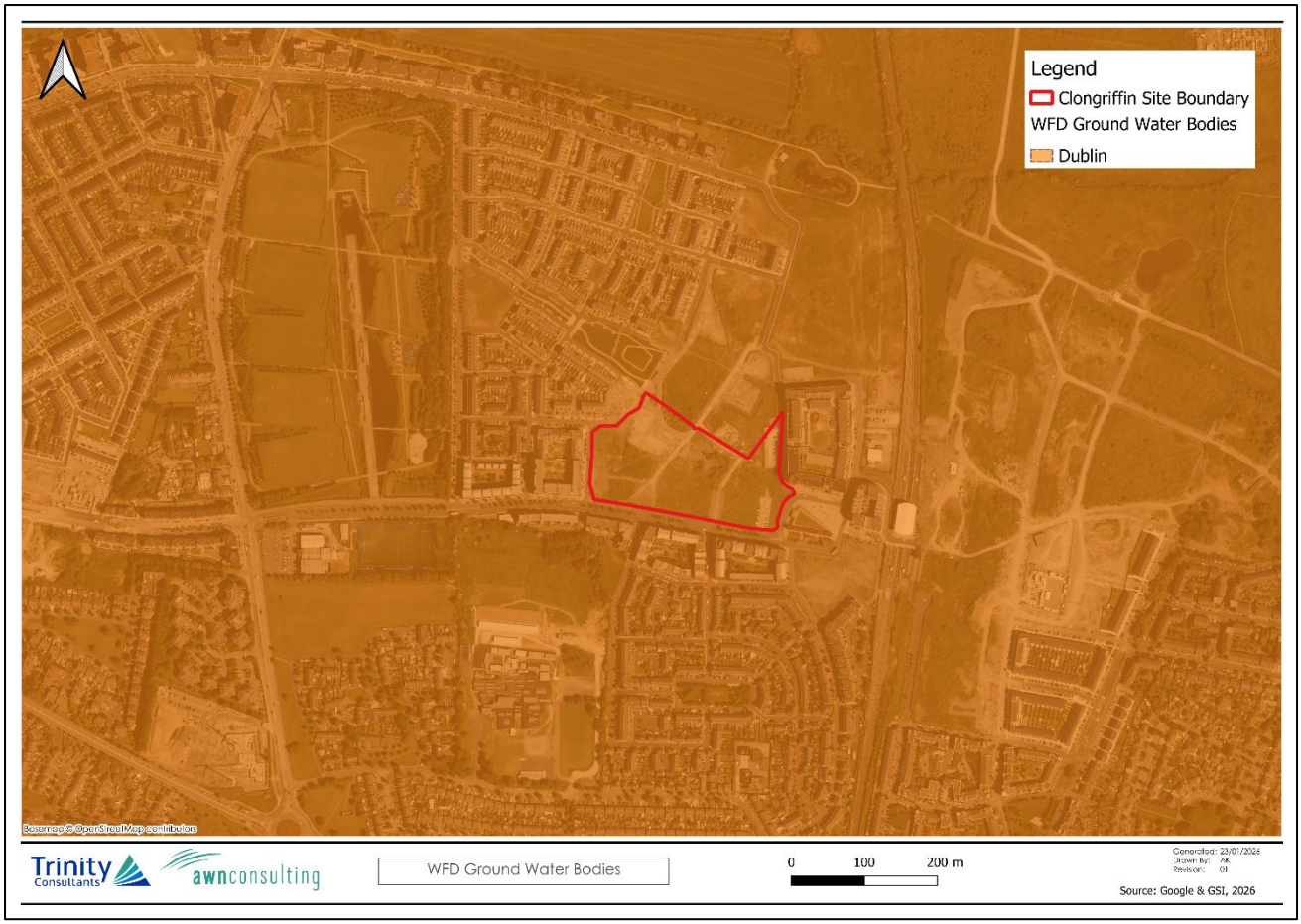


2.2 Groundwater Bodies

2.2.1 Regional Groundwater Bodies

The Groundwater Body (GWB) underlying the site is Dublin GWB (European Code: IE_EA_G_008). Refer to Figure 2- below which indicates the groundwater bodies in the region / context of the site.

Figure 2-3. WFD Groundwater Bodies (EPA, 2026)



2.2.2 Local Hydrogeology

The GSI has devised a system for classifying the bedrock aquifers in Ireland. The aquifer classification for bedrock depends on a number of parameters including, the area extent of the aquifer (km^2), well yield (m^3/d), specific capacity ($m^3/d/m$) and groundwater throughput (mm^3/d). There are three main classifications: regionally important, locally important and poor aquifers. Where an aquifer has been classified as regionally important, it is further subdivided according to the main groundwater flow regime within it. This sub-division includes regionally important fissured aquifers (Rf) and regionally important karstified aquifers (Rk). Locally important aquifers are sub-divided into those that are generally moderately productive (Lm) and those that are generally moderately productive only in local zones (Ll). Similarly, poor aquifers are classed as either generally unproductive except for local zones (Pl) or generally unproductive (Pu).

According to GSI (2026), it was identified that the site is underlain by Malahide Formation (Code: CDMALH), part of the Dublin Basin's Lower Carboniferous (Dinantian) succession, consists mainly of pale-grey, poorly bedded limestone often forming mud mounds or reef-like structures with occasional internal dolomitisation and thin shale interbeds.

The bedrock aquifer underlying the proposed development site, according to the GSI (www.gsi.ie/mapping) National Draft Bedrock Aquifer Map, is classified as a "*Locally Important Aquifer (LI), i.e. Bedrock which is Moderately Productive only in Local Zones*". 6 The potential for local vertical or horizontal migration within this type of aquifer is moderate depending on the area but may not have extensive regional connectivity. As such the aquifer is not a significant pathway for off-site migration. The GSI map does not identify structural faults underneath the area of the subject site.

2.2.2.1 Soils and Subsoils

The Teagasc online mapping (2026) for the site indicates that the soils underlying the site and the surrounding area comprise of mineral poorly drained (mainly basic) soils in the northern section of the site and towards the southeastern portion deep well drained mineral (mainly basic) soils. Along the southwestern corner of the site shallow well drained mineral (mainly basic) soils are identified.

Based on a review of GSI online mapping, the site and surrounding lands are underlain by tills derived from limestone (GSI, 2026).

A ground investigation and subsoils assessment of Phase 2 (proposed development site) and Phase 3 lands were undertaken by Ground Investigation Ireland (GII) in July and August 2025. The ground conditions encountered generally comprised the following sequence of strata:

- Topsoil: Present in all exploratory holes, with a maximum thickness of 0.2m BGL.
- Made Ground: Encountered beneath the topsoil extending to depths between 0.20m and 1.10m BGL. These deposits were generally described as sandy, clayey Gravel.
- Cohesive Deposits: Found at an average depth of 2.0m BGL. These were typically described as sandy and gravelly.
- Granular Deposits: Only recorded to be present at isolated locations.
- Bedrock: Found at an average depth of 12.0m BGL. Identified as a strong thinly bedded limestone

Refer to Chapter 9 of the EIAR for further details.

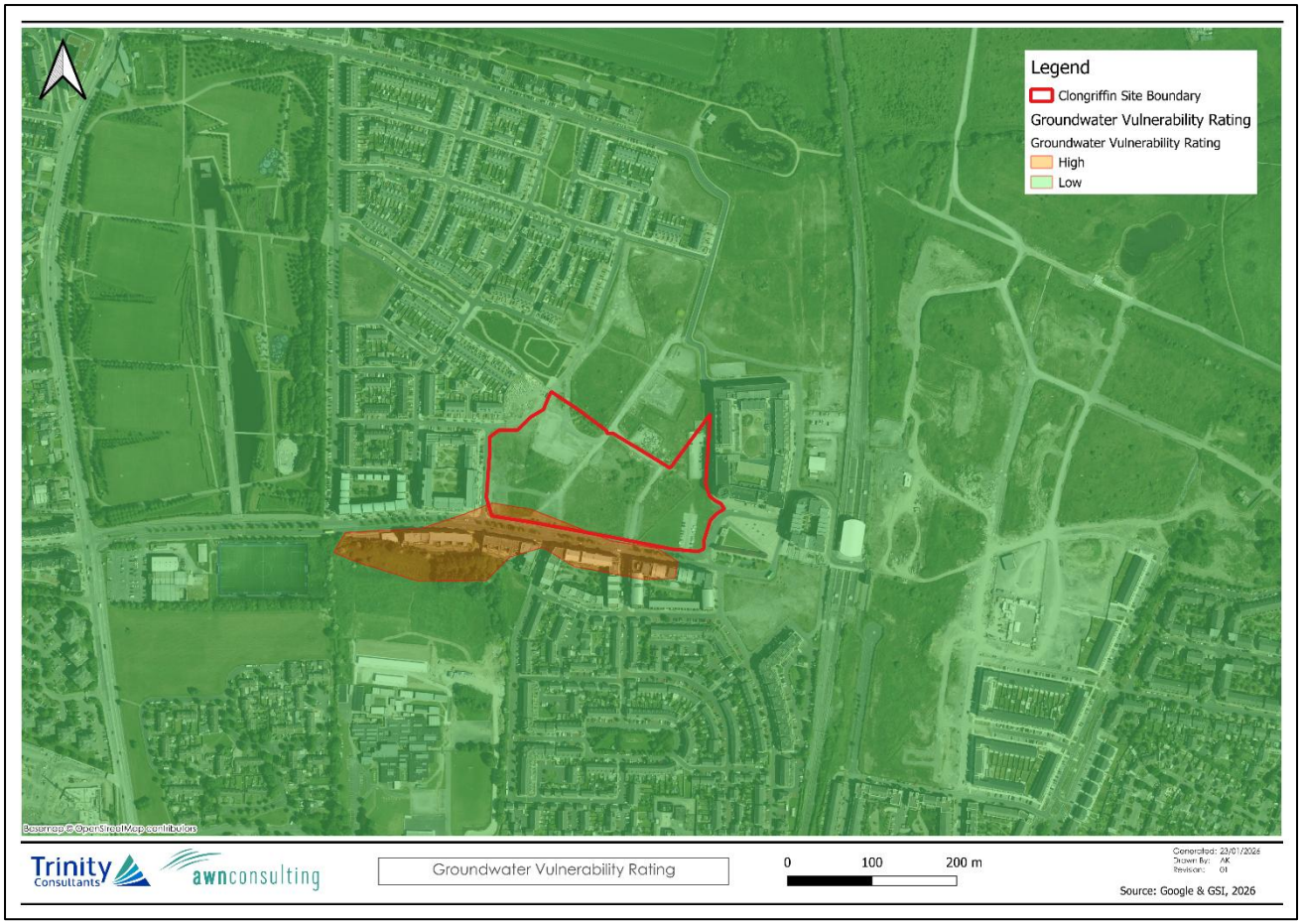
2.2.2.2 Aquifer Vulnerability

Groundwater vulnerability is an indication of how easily the aquifer can become contaminated by human activity. It is dependent on the thickness and permeability of the overlying soils and depth to the water table. For example, a bedrock aquifer with minimal thickness of overburden or with a thin layer of permeable overburden will be more vulnerable to contamination than a bedrock aquifer which has a thick layer of low permeability overburden. Extreme groundwater vulnerability is also associated with karst landforms as these are a direct pathway for water and contaminants to enter the aquifer from the surface.

The GSI presently classifies the groundwater vulnerability for the majority of the proposed development is classified as Low Vulnerability, a small portion located just at the southern portion of the site is classified as High Vulnerability as shown in Figure 2- below.

This classification is consistent with ground investigation and subsoil assessment undertaken by Ground Investigation Ireland (GII) in July and August 2025. The ground conditions encountered bedrock at an average depth of 12.0m BGL, which is representative of a 'Low' groundwater vulnerability (refer to Chapter 9 of the EIAR for further details).

Figure 2-4. Groundwater Vulnerability Rating (GSI, 2026)



2.2.3 Designated Sites

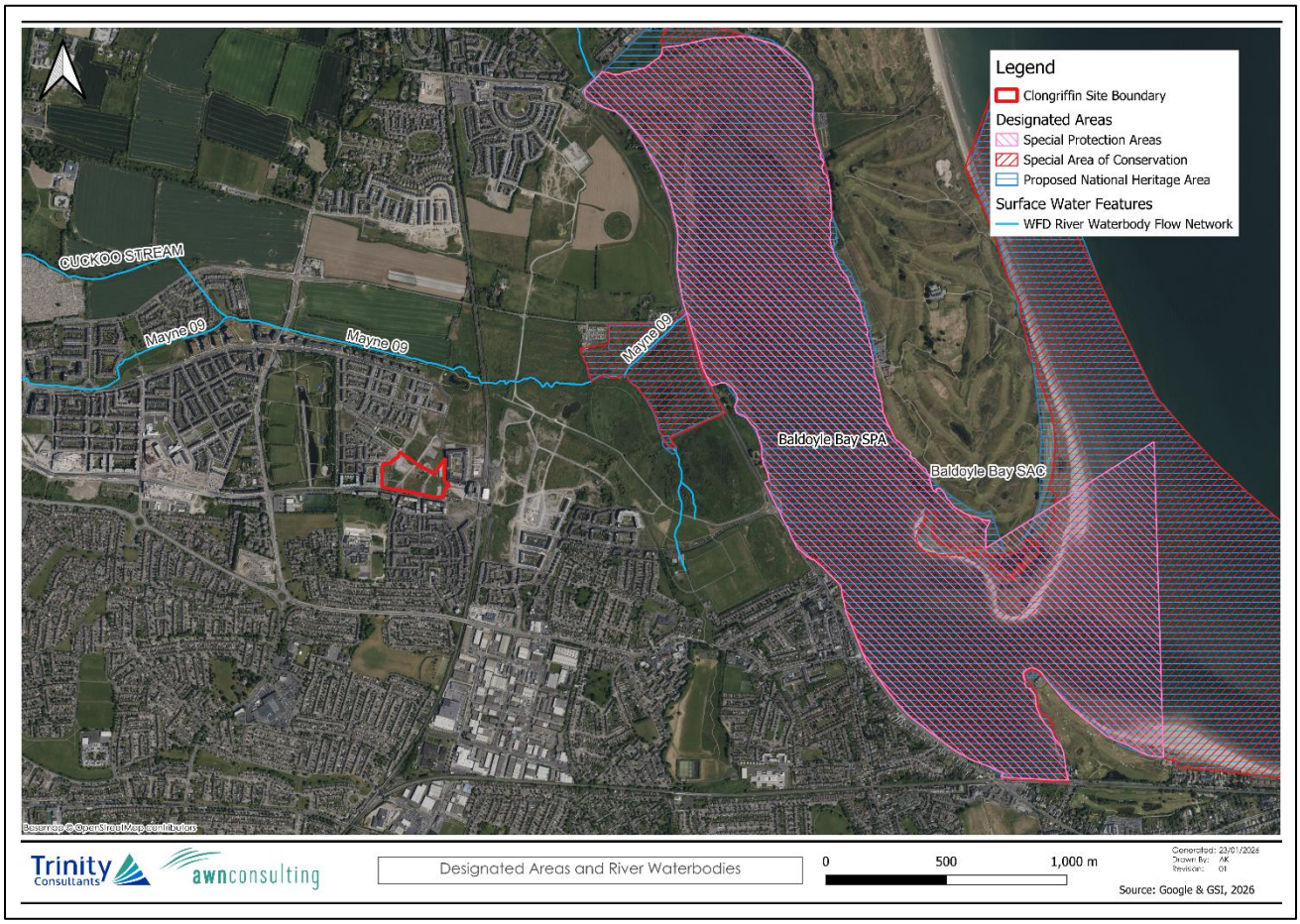
The NPWS (2026) on-line database have been reviewed to determine the location of areas of conservation within proximity to the proposed development site, and there are no Special Protected Areas (SPA) established under the EU Birds Directive (79/409/EEC), or Special Areas of Conservation (SAC) established under the Habitats Directive on or within the boundary of the proposed development site. Furthermore, there are no Natural Heritage Areas (NHA), or proposed Natural Heritage Areas (pNHA) established under the Wildlife Acts, 1976 and 2000 (as amended).

The European sites in closest proximity of the site are as follows:

- Baldoyle Bay SAC (Site Code 000199) c. 0.8 km east;
- Baldoyle Bay SPA (Site Code 004016) c. 0.8 km east;
- Baldoyle Bay NHA (Site Code 000199) c. 0.8 km east;
- North-West Irish Sea SPA (Site Code 004236) c. 2.7 km east.

The site has an indirect hydrological pathway/connection to these Natura sites as the Mayne River (located 0.2km north of the site) drains into the Mayne Estuary Transitional Waterbody, which hosts these European sites. Refer to Figure 2-5 below for locations of designated areas in context to the proposed development.

Figure 2-5. Designated Sites (NPWS, 2026)



2.2.4 Bathing Waters and Recreational Waterbodies

A review of the Environmental Protection Agency's (EPA) online mapping that includes the Register of Protected Areas (RPA) under the Water Framework Directive (WFD) has shown that there are no Recreational Waters or Bathing Waterbodies located in the vicinity of the site. The nearest Recreational Waters, Bathing Waterbodies, or Surface Water Drinking RPA to the proposed development is Portmarnock, Velvet Strand Beach (Bathing Waters ID: IEEABWC070_0000_0200) located c. 1km northeast.

2.2.5 Surface Water Public Water Supplies

A review of the Environmental Protection Agency's (EPA) online mapping, which includes the Register of Protected Areas (RPA) established under the Water Framework Directive (WFD), indicates Mayne River is not located within a designated Surface Water Drinking RPA. This classification of drinking water river lines has been delineated in accordance with the European Communities (Drinking Water) (No. 2) Regulations 2007 (SI No. 278/2007). This regulatory framework aims to ensure the protection of water resources utilised for human consumption, thus safeguarding public health and the environment.

2.2.6 Ground Water Public Water Supplies

There are no recorded Public Supply Source Protection Area or Group Scheme Preliminary Source Protection Areas in the vicinity of the proposed development site. The nearest Group Scheme Preliminary Source Protection area is Kiltale, located c.34 km northwest of the site. The nearest Public Supply Source Protection area is Dunboyne PWS located c.21km west of the site. Neither of these areas share a

hydrological or hydrogeological connection to the site and are located within separate Sub-Catchments i.e. Kiltale: Boyne_SC_090 (Sub-Catchment ID: 07_19) and Boyne_SC_060 (Sub-Catchment ID: 07_20). Tolka_SC_010 (Sub-Catchment ID: 09_10), respectively.

2.3 Site Investigation

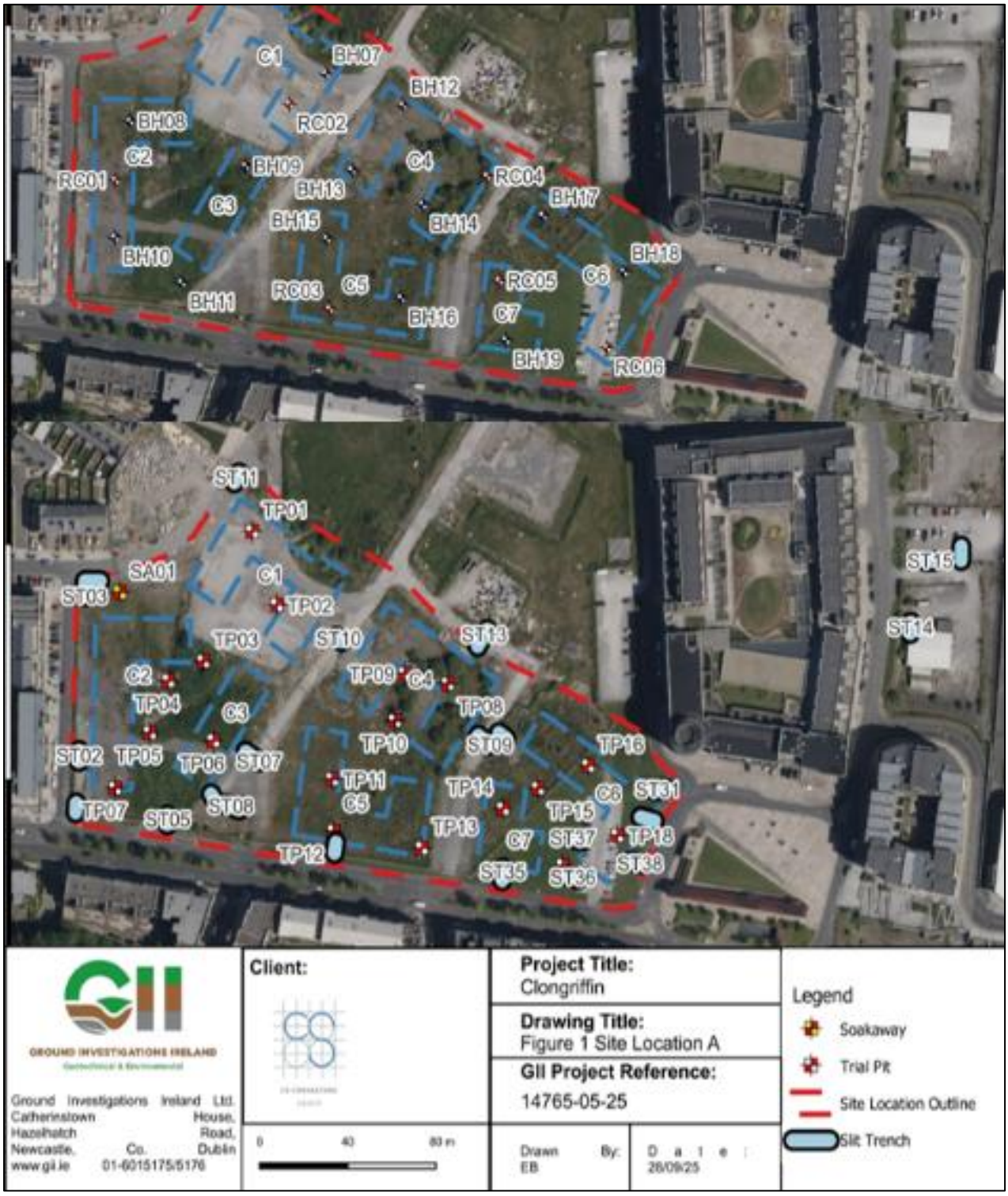
Ground Investigations Ireland (GII) carried out a site investigation for the proposed development in July and August 2025 to assess the subsoil conditions within the site boundary. The investigation comprised of 38 trial pits, 4 soakaways, 7 Rotary Core Boreholes, 19 Cable Percussion Boreholes and 5 Groundwater monitoring wells. Soil samples were collected from these trial pits and boreholes and submitted for Geotechnical and Chemical laboratory analysis. The locations of the trial pits and boreholes are illustrated in Figure 2-6 below. The ground conditions encountered generally comprised the following sequence of strata:

- Topsoil: Present in all exploratory holes, with a maximum thickness of 0.2m BGL.
- Made Ground: Encountered beneath the topsoil extending to depths between 0.20m and 1.10m BGL. These deposits were generally described as sandy, clayey Gravel.
- Cohesive Deposits: Found at an average depth of 2.0m BGL. These were typically described as sandy and gravelly.
- Granular Deposits: Only recorded to be present at locations TP10, BH04, BH06, BH11 and BH15.
- Bedrock: Found at an average depth of 12.0m BGL. Identified as a strong thinly bedded limestone

Groundwater ingress was not encountered in the majority of trial pits, however; minor water seepage was encountered at depths of approximately 3.0m BGL. While groundwater ingress was noted at some trial pits, it is not expected to pose a concern for shallow foundation excavations.

The findings of the investigation are consistent with the Geological Survey Ireland (GSI) groundwater vulnerability rating of 'Low', outlined in Section 2.2.2.2. Thick glacial till deposits were encountered to depths of up to approximately 12.0 m BGL prior to encountering bedrock, providing natural protection to the underlying Dublin GWB.

Figure 2-6. Site Map and Exploratory Hole Locations (GII, 2025)



3. WATERBODIES IDENTIFICATION AND STATUS

3.1 Waterbody Status

The Water Framework Directive (WFD) 2000/60/EC was adopted in 2000 as a single piece of legislation covering rivers, lakes, groundwater, transitional (estuarine) and coastal waters. In addition to protecting said waters, its objectives include the attainment of 'Good Status' in water bodies that are of lesser status at present and retaining 'Good Status' or better where such status exists at present. 'Good Status' was to be achieved in all waters by 2015 or at least by 2027, as well as maintaining 'high status' where the status already exists. The EPA co-ordinates the activities of the River Basin Districts, local authorities and state agencies in implementing the directive, and operates a groundwater quality monitoring programme undertaking surveys and studies across the Republic of Ireland.

This WFD Screening has identified 3 no. WFD surface water bodies and 1 no. groundwater body which need to be considered: Mayne River (European Code: IE_EA_09M030500) River, Mayne Estuary (European Code: IE_EA_080_0100) Irish Sea Dublin (HA 09) (European Code: IE_EA_070_0000) and Dublin Ground Waterbody (European Code: IE_EA_G_008).

A summary of the WFD status and Risk for all relevant waterbodies is provided below in Table 3-1

Table 3-1 WFD Waterbodies relevant to the Study Area

Type	WFD Classification	WFD Name/ID	WFD Status (2019-2024)	WFD Risk Score	Location
Surface Water Body	River Waterbody	Mayne River (European Code: IE_EA_09M030500)	"Poor"	"At Risk"	c. 0.2 km north of the site
	Transitional Waterbody	Mayne Estuary (European Code: IE_EA_080_0100)	"Moderate"	"Review"	c. 0.8 km east of the site
	Coastal Waterbody	Irish Sea Dublin (HA 09) (European Code: IE_EA_070_0000)	"Good"	"Not at Risk"	c. 2.7 km east of the site
	Coastal Waterbody	Dublin Bay (European Code: IE_EA_090_0000)	"Good"	"Not at Risk"	c. 7.3 km south of the site
Groundwater	Groundwater Body	Dublin GWB (European Code: IE_EA_G_008)	"Good"	"Not at Risk"	Underlying site

3.1.1 Surface Waterbody Status

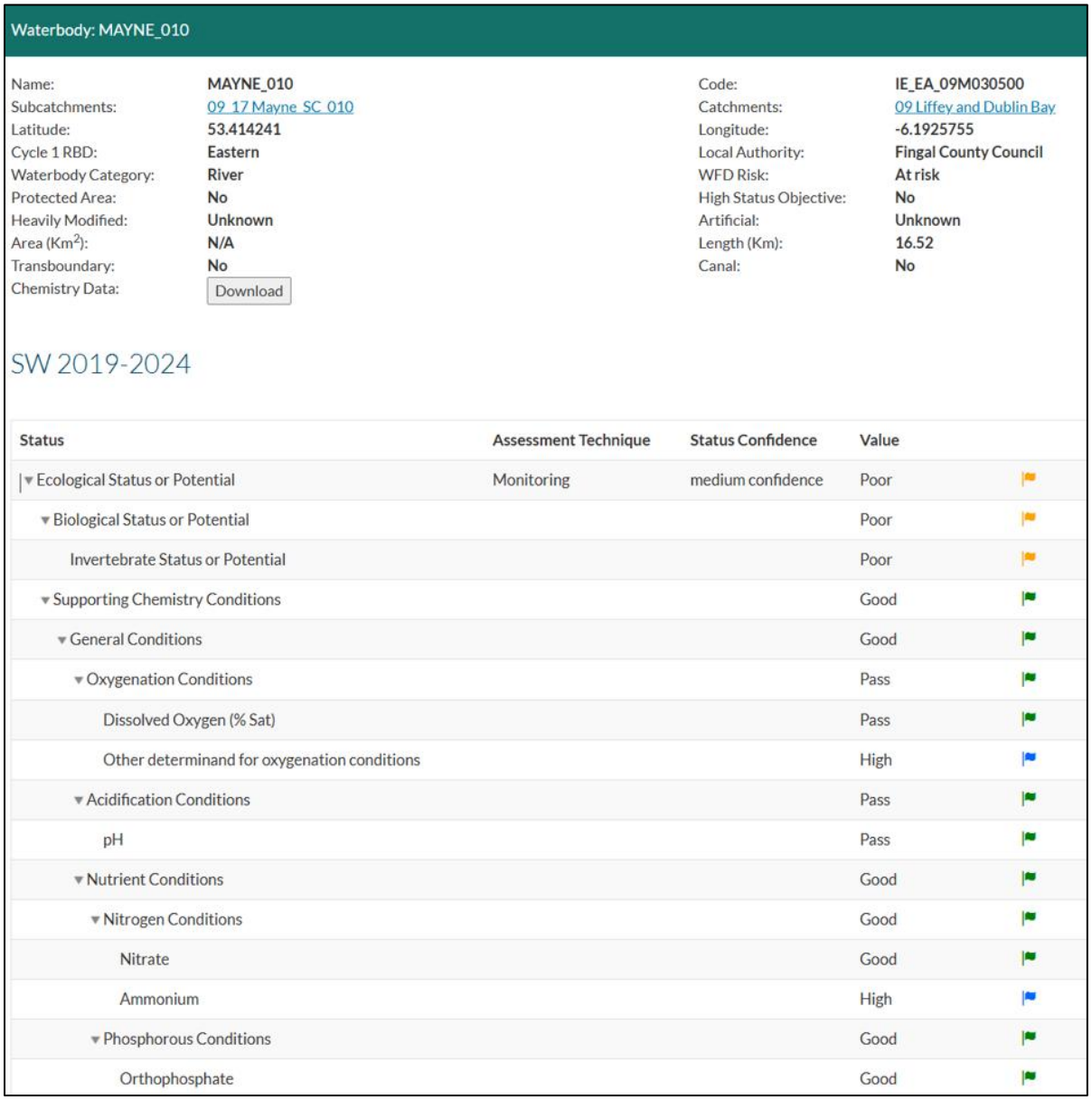
The proposed development site lies within the Liffey and Dublin Bay (Catchment ID: 09) and the Mayne_SC_010 WFD Subcatchment.

There is an existing "indirect" hydrological connection/pathway through the site drainage to the Mayne River (European Code: IE_EA_09M030500) before discharging to Mayne Estuary c. 0.8 km east of the site.

The Mayne River (MAYNE_010) WFD surface waterbody has a most recent WFD surface water status (WFD Period: 2019-2024) of "Poor" and its current WFD risk score (3rd risk cycle) of "At risk" of not

achieving good status. This "Poor" status is related to its ecological status or potential, biological status or potential and supporting chemistry conditions.

Figure 3-1. Surface Water Quality for the Mayne River (MAYNE_010) (Catchments.ie, 2026)



Waterbody: MAYNE_010

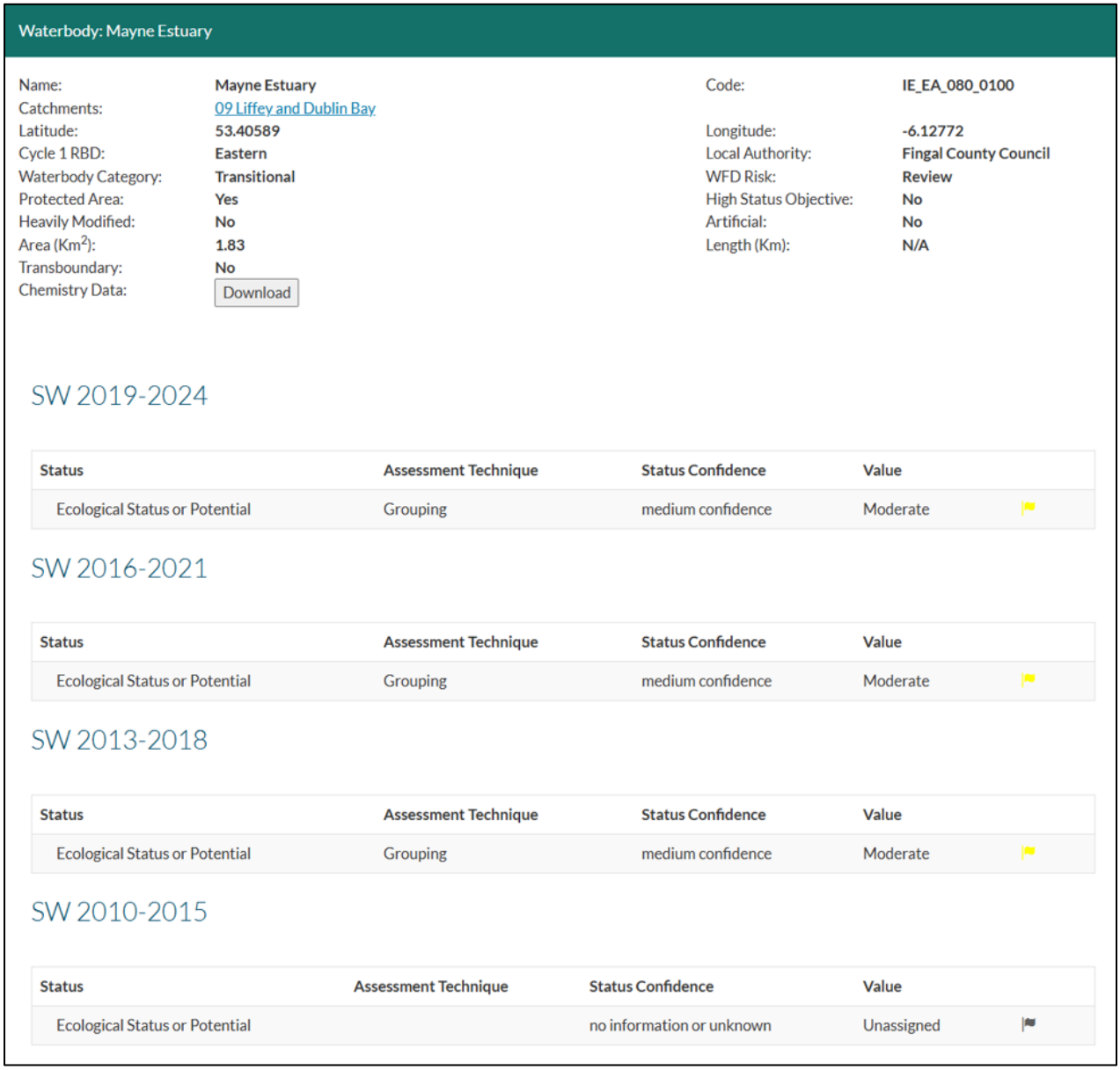
Name:	MAYNE_010	Code:	IE_EA_09M030500
Subcatchments:	09_17 Mayne_SC_010	Catchments:	09 Liffey and Dublin Bay
Latitude:	53.414241	Longitude:	-6.1925755
Cycle 1 RBD:	Eastern	Local Authority:	Fingal County Council
Waterbody Category:	River	WFD Risk:	At risk
Protected Area:	No	High Status Objective:	No
Heavily Modified:	Unknown	Artificial:	Unknown
Area (Km^2):	N/A	Length (Km):	16.52
Transboundary:	No	Canal:	No
Chemistry Data:	Download		

SW 2019-2024

Status	Assessment Technique	Status Confidence	Value
▾ Ecological Status or Potential	Monitoring	medium confidence	Poor
▾ Biological Status or Potential			Poor
Invertebrate Status or Potential			Poor
▾ Supporting Chemistry Conditions			Good
▾ General Conditions			Good
▾ Oxygenation Conditions			Pass
Dissolved Oxygen (% Sat)			Pass
Other determinand for oxygenation conditions			High
▾ Acidification Conditions			Pass
pH			Pass
▾ Nutrient Conditions			Good
▾ Nitrogen Conditions			Good
Nitrate			Good
Ammonium			High
▾ Phosphorous Conditions			Good
Orthophosphate			Good

Mayne Estuary Transitional Waterbody (European Code: IE_EA_080_0100) for which the Mayne River discharges into has a has a WFD status of "Moderate" (WFD Period: 2019-2024) and a WFD risk score (3rd Cycle) of "Review". This "Moderate" status has been assigned to the Mayne River since 2018; this is due to the transitional waterbodies' Ecological Status (see Figure 3-2).

Figure 3-2. Surface Water Quality for Mayne Estuary (Catchments.ie, 2026)



Waterbody: Mayne Estuary

Name:	Mayne Estuary	Code:	IE_EA_080_0100
Catchments:	09 Liffey and Dublin Bay		
Latitude:	53.40589	Longitude:	-6.12772
Cycle 1 RBD:	Eastern	Local Authority:	Fingal County Council
Waterbody Category:	Transitional	WFD Risk:	Review
Protected Area:	Yes	High Status Objective:	No
Heavily Modified:	No	Artificial:	No
Area (Km^2):	1.83	Length (Km):	N/A
Transboundary:	No		
Chemistry Data:	Download		

SW 2019-2024

Status	Assessment Technique	Status Confidence	Value
Ecological Status or Potential	Grouping	medium confidence	Moderate

SW 2016-2021

Status	Assessment Technique	Status Confidence	Value
Ecological Status or Potential	Grouping	medium confidence	Moderate

SW 2013-2018

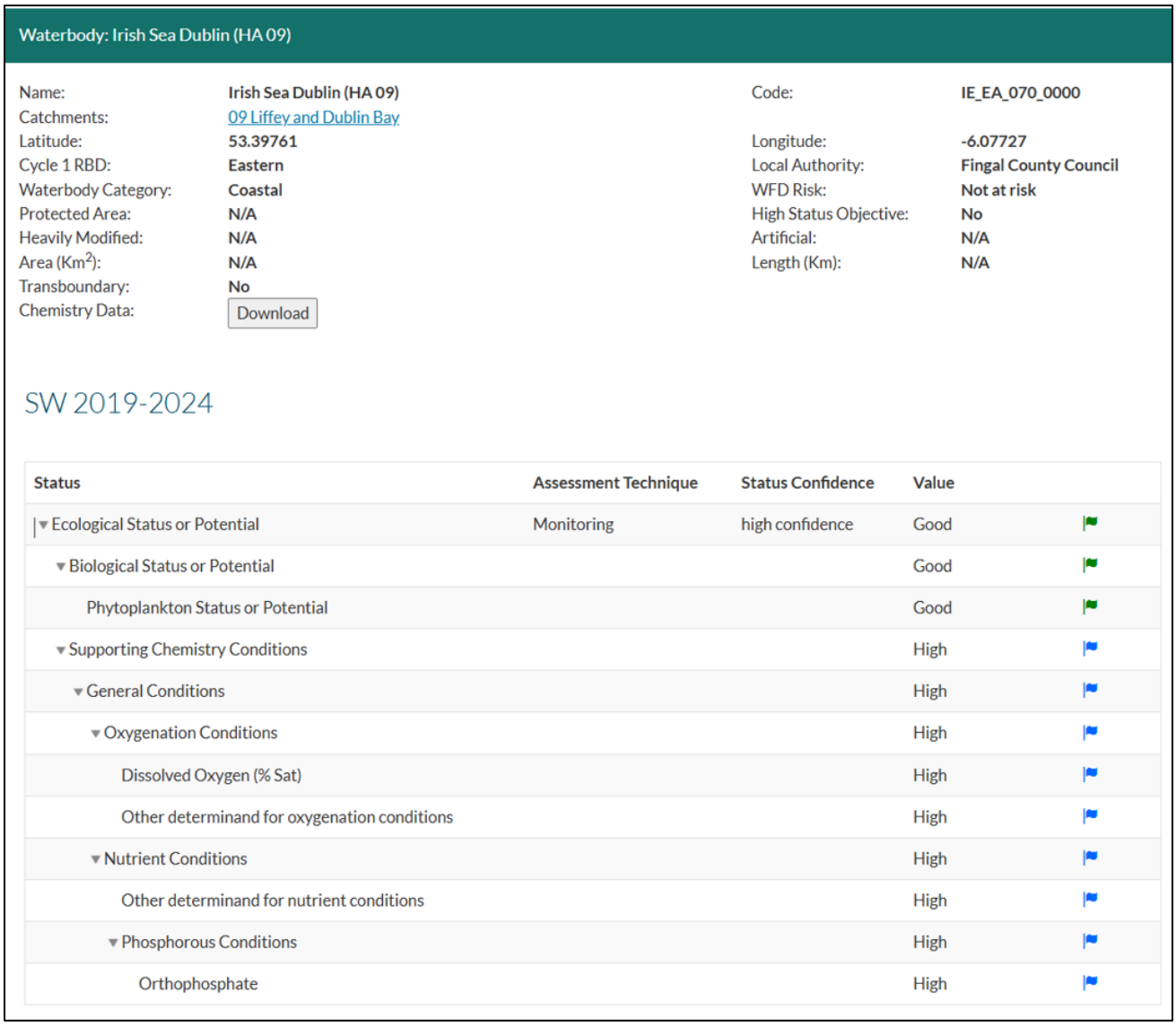
Status	Assessment Technique	Status Confidence	Value
Ecological Status or Potential	Grouping	medium confidence	Moderate

SW 2010-2015

Status	Assessment Technique	Status Confidence	Value
Ecological Status or Potential		no information or unknown	Unassigned

The Irish Sea Dublin (HA 09) (European Code: IE_EA_070_0000) for which the Mayne Estuary discharges into has a has a WFD status of "Good" (WFD Period: 2019-2024) and a WFD risk score (3rd Cycle) of "Not at Risk". This "Good" status has been assigned to the coastal waterbody due to "Good" Phytoplankton Status or Potential.

Figure 3-3. Surface Water Quality for Irish Sea Dublin (Catchments.ie, 2026)



Waterbody: Irish Sea Dublin (HA 09)

Name:	**Irish Sea Dublin (HA 09)**	Code:	**IE_EA_070_0000**
Catchments:	09 Liffey and Dublin Bay		
Latitude:	**53.39761**	Longitude:	**-6.07727**
Cycle 1 RBD:	**Eastern**	Local Authority:	**Fingal County Council**
Waterbody Category:	**Coastal**	WFD Risk:	**Not at risk**
Protected Area:	**N/A**	High Status Objective:	**No**
Heavily Modified:	**N/A**	Artificial:	**N/A**
Area (Km^2):	**N/A**	Length (Km):	**N/A**
Transboundary:	**No**		
Chemistry Data:	Download		

SW 2019-2024

Status	Assessment Technique	Status Confidence	Value
▼ Ecological Status or Potential	Monitoring	high confidence	Good
▼ Biological Status or Potential			Good
Phytoplankton Status or Potential			Good
▼ Supporting Chemistry Conditions			High
▼ General Conditions			High
▼ Oxygenation Conditions			High
Dissolved Oxygen (% Sat)			High
Other determinand for oxygenation conditions			High
▼ Nutrient Conditions			High
Other determinand for nutrient conditions			High
▼ Phosphorous Conditions			High
Orthophosphate			High

Dublin Bay (European Code: IE_EA_090_0000) for which Ringsend WwTP discharges into has a has a WFD status of "Good" (WFD Period: 2019-2024) and a WFD risk score (3rd Cycle) of "Not at Risk". This "Good" status has been assigned to the coastal waterbody due to "High" Phytoplankton Status or Potential and "Good" Hydromorphological Conditions.

3.1.2 Ground Waterbody Status

The groundwater body in the region of the site Dublin GWB (European Code: IE_EA_G_008) for which the site is located entirely within, has a WFD status of "Good" (WFD Period: 2019-2024) and a WFD risk score (3rd Cycle) of "Not at Risk" of not achieving good status, meaning it has achieved its objectives and the overall status is considered good. as presented in Figure 3-4. This "Good" status is related to the overall groundwater status i.e. quantitative groundwater status and chemical groundwater status.

Figure 3-4. Groundwater Quality for Dublin Groundwater Body (Catchments.ie, 2026)

Waterbody: Dublin

Name:	**Dublin**	Code:	**IE_EA_G_008**
Catchments:	07 Boyne 08 Nanny-Delvin 09 Liffey and Dublin Bay 14 Barrow		
Latitude:	**-6.4891473**	Longitude:	**53.3593898**
Cycle 1 RBD:	**Eastern**	Local Authority:	**South Dublin County Council**
Waterbody Category:	**Groundwater**	WFD Risk:	**Review**
Protected Area:	**N/A**	High Status Objective:	**No**
Heavily Modified:	**N/A**	Artificial:	**N/A**
Area (Km^2):	**N/A**	Length (Km):	**N/A**
Transboundary:	**No**	Canal:	**No**
Chemistry Data:	Download		

GW 2019-2024

Status	Assessment Technique	Status Confidence	Value	
▼ Overall Groundwater Status			Good	
▼ Quantitative Groundwater Status			Good	
Saline (or Other) Intrusions Test			Good	
Impact of Groundwater on Surface Water Ecological/Quantitative Status Test			Good	
Groundwater Dependent Ecosystems (GWDTE) - Quantitative Assessment Test			Good	
Water Balance Test			Good	
▼ Chemical Groundwater Status			Good	
Saline (or Other) Intrusions Test			Good	
Impact of Groundwater on Surface Water Ecological/Chemical Status Test			Good	
Groundwater Dependent Ecosystems (GWDTE) - Chemical Assessment Test			Good	
Drinking Water Protected Area Test			Good	
General Chemical Assessment Test			Good	

4. DESCRIPTION OF THE PROPOSED DEVELOPMENT

The purpose of this section is to provide an overview of the key relevant details of the proposed development which could have an impact on WFD compliance. The proposed development is approximately 11.17 hectares (27.6 acres). The site at present is a greenfield site unoccupied by any structures or buildings. The proposed phase 2 development shall comprise 711 no. residential units.

The elements of the development which would have potential impact are summarised in Sections 4.1 (Construction) and 4.2 (Operation).

4.1 Construction Phase

The activities required for the construction phase of the proposed development represents the greatest risk of potential impact on the hydrological and hydrogeological environment. During construction of the development, the potential of impact on water body status is associated with the following sources:

- Accidental release of suspended solids (muddy water with increased turbidity (measure of the degree to which the water loses its transparency due to the presence of suspended particulates) – arising from excavation and ground disturbance;
- Accidental release of alkaline water from cement/concrete (increase turbidity and pH) works;
- Accidental release of hydrocarbons and other construction chemicals (ecotoxic) – accidental spillages from construction plant or onsite storage; and
- Accidental release of wastewater (nutrient and microbial rich) – arising from accidental discharge from on-site toilets and washrooms. Construction phase sewerage will be contained in a tank and taken by tanker off site for disposal at a licensed waste management facility.
- Direct physical damage during river alignment works which could lead to hydromorphological changes if incorrectly designed.

With regard to the Designated Sites located downstream, during construction phase there is no direct open-water pathway between the site and the Mayne Estuary. However, there is an indirect pathway through the stormwater drainage which discharges into the Mayne River. Should any silt-laden stormwater from construction or hydrocarbon-contaminated water from a construction vehicle leak/tank leak manage to enter into the surface path, the suspended solids will naturally settle within the sewer; however, in the event of a worst case hydrocarbon leak of 1,000 litres this would be diluted to background levels (established as surface water quality objectives as outlined in S.I. No. 272 of 2009, S.I. No. 386 of 2015 and S.I. No. 77 of 2019) by the time the stormwater reaches the European Sites mentioned in Section 2.2.3 which are located downgradient of the Proposed Development site.

Ultimately, these are temporary short-lived events which could impact on status without pollution prevention measures being in place. The most likely impact would be to surface water body status. There is no long-term dewatering or water abstractions required during construction so no likely impact on groundwater quantitative status.

4.2 Operational Phase

The proposed activity which could have an impact on water body status during operation can broadly be described as:

- Potential release of contaminants from a vehicle

During operation, the potential for a release is low as there is no bulk fuel/chemical storage and no silt laden run-off. Stormwater will be collected by a drainage system which includes SuDS measures, an

attenuation system and oil/ petrol interceptors prior to discharge off-site. In addition, the potential for hydrocarbon discharge is quite minimal based on an individual vehicle (70 litres) leak being the only source for hydrocarbon release. A range of Sustainable Drainage System (SuDS) measures will be introduced across the site to improve water quality and manage runoff during the operational phase. An attenuation system will be developed on site, which will provide treatment of run-off and subsequent improvement of discharge surface water quality.

With regard to the Designated Sites located downstream, even if the operation of the proposed SuDS and interceptor systems are excluded from consideration, there is no likely impact above water quality objectives as outlined in S.I. No. 272 of 2009, S.I. No. 386 of 2015 and S.I. No. 77 of 2019 there will be no significant effect on any European site, as confirmed in the AA Screening report for the proposed development. The volume of contaminant release is low and combined with the significant attenuation within the stormwater drainage network, hydrocarbons will dilute to background levels with no likely impact above water quality objectives as outlined in S.I. No. 272 of 2009, S.I. No. 386 of 2015 and S.I. No. 77 of 2019 at any Natura 2000 sites.

4.3 Pollution Prevention Measures

This section outlines the pollution prevention measures in place to mitigate negative effects on surface water and groundwater quality and flow during construction and operation.

Construction Phase

The following design and pollution prevention measures will be in place to ensure surface water quality is met with no resulting impacts on receiving water quality:

(i) Surface water management infrastructure is in place and maintained during construction works. As a minimum, a CEMP will be a live document, and it will go through a number of iterations before works commence and during the works. These include management of soils, re-fuelling of machinery off site and chemical handling, control of water during the construction phase and treatment of discharge water where required.

(ii) The contractor will be obliged to operate in compliance with the Construction Environmental Management Plan which includes measures for management of runoff water quality, avoidance controls (e.g. management of water from cement works areas, working only in appropriate weather conditions and suspending works in heavy rainfall conditions to avoid silty runoff, and emergency response measures for any localised spills, managing of soil stockpiles).

(iii) Sequencing of works will be undertaken to ensure that the proposed development is constructed in managed stages.

Operation Phase

The Proposed Development is designed to ensure the protection of the hydrological and hydrogeological environment such as no bulk fuel storage on site, use of oil interceptors on the stormwater system and the use of SuDS techniques. In order to limit the surface water discharge from the site to pre-development (operational phase), greenfield rates, and to ensure improvement in the overall surface water quality before ultimate discharge the principles of Sustainable Drainage Systems, (SuDS) are to be implemented.

The foul water drainage strategy for the proposed development includes the development of a gravity flow system which will be collected by this network of drains and will flow to the Clongriffin Wastewater Pumping Station (WwPS) located adjacent to the Mayne River before being finally treated at Ringsend Wastewater Treatment Plant (WwTP) (D0034-02) for full Treatment. Ringsend WwTP will have sufficient

operational capacity to accommodate the projected additional load from the proposed development. It should be noted that the peak foul effluent discharge, calculated for the Proposed Development as 10.94 l/s, would equate to 0.09% of Ringsend WwTP peak hydraulic capacity.

5. NO DETERIORATION ASSESSMENT

5.1 Hydrological Environment

As stated above, the Proposed Development has an 'indirect' hydrological connection with the Mayne River and Mayne Estuary River and Transitional Waterbodies, respectively and the Irish Sea Dublin WFD Coastal Waterbody (located c. 0.2 km, 0.8 km and 2.7 km downstream of the subject site, respectively) through the stormwater drainage.

This is hydrological pathway allows for significant time for settlement and dilution, should an accidental release (even without mitigation) to surface water occur. Therefore, no potential impacts are anticipated during construction and operation in the receiving waterbodies.

There is also an 'indirect' hydrological connection/pathway with the Liffey Estuary Lower Transitional Waterbody and Dublin Bay Coastal Waterbody through the proposed foul sewer connection to Ringsend WWTP (Reg: D0034-02), c. 2.7 km downstream of the subject site. This plant has capacity to treat the foul water from the development, and no potential impacts are anticipated on the receiving waterbodies.

During construction, there are mitigation and design measures which will be implemented to protect the hydrological (and hydrogeological) environment. There is a potential of accidental discharges should mitigation fail during the construction phase, however these are temporary short-lived events that will not impact on the water status of waterbodies long-term and as such will not impact on trends in water quality and overall status assessment. This is based on the low permeability overburden underlying the area, low expected loading of any potential contaminant, natural attenuation in the subsoils, and the high level of dilution in the downstream waterbodies. As such, there is no potential for any accidental release into the aforementioned waterbodies, and the Proposed Development will not cause any significant deterioration or change in water quality status or prevent attainment, or potential to achieve the WFD objectives or to meet the requirements and/or objectives in the third cycle river basin management plan (2022-2027) i.e. Water Action Plan 2025 - A River Basin Management Plan for Ireland.

Nevertheless, the project-specific Construction and Environmental Management Plan (CEMP) which the works contractor will develop will implement strict mitigation measures to ensure the protection of the hydrological (and hydrogeological) environment during construction which will ensure that there will be no negative impact on the quantitative or qualitative or morphology of the nearby watercourses.

During operation, in the scenario of an unmitigated leak of fuel from car park areas and roads, these are temporary short-lived events that will not impact on the status of the waterbodies mentioned above in the long-term. This is based on the low permeability overburden underlying the area, low expected loading of any potential contaminant, the significant distance to these waterbodies, natural attenuation in the subsoils, and the high level of dilution in the downstream waterbodies.

However, to mitigate potential contamination from surface water runoff, which may originate from roads, car parks and hardstanding areas, a sustainable urban drainage system (SuDS) will be implemented. This system is designed to minimize the risk of contaminants, such as hydrocarbons, entering the stormwater drainage network and subsequently impacting surface waterbodies downstream (Mayne River, Mayne Estuary and Irish Sea) as well as groundwater bodies i.e. the Dublin GWB underlying the site.

The surface water drainage strategy integrates various SuDs measures, including attenuation tanks, green roofs, permeable paving and petrol interceptors. These features will effectively manage surface water flows, directing them to the attenuation system to maximize their storage potential. The flow control devices will be installed downstream of the system to ensure the surface water runoff is stored maximising storage potential, prior to entering the network downstream i.e. the Mayne River waterbody located 0.1km downstream of the Proposed Development.

The SuDS and proposed measures have been designed in detail with the ultimate aim of protecting the hydrological (& hydrogeological) environment.

There are no proposed diversions of any drainage ditches or waterbodies as part of the proposed development.

Overall, the potential effects on the current status of the surface waterbodies are considered *no impact i.e. no change to the WFD status or elements in terms of the hydrological environment*.

5.2 Hydrogeological Environment

No significant dewatering is expected. The development site will be excavated to depths typically up to c. X m below present ground level. While significant dewatering is not anticipated across most of the site due to the low-permeability overburden, localised dewatering may be required within the deeper excavation area where groundwater ingress could occur. Bedrock is not expected to be affected by the excavations. However, if dewatering of groundwater or pumping of standing or pooled surface water becomes necessary during and after heavy rainfall events, it will occur via suitably installed dewatering wells/sumps containing pumps to abstract groundwater and surface water (rainfall landing on the site).

In addition, depending on the time of year development works are carried out, local minor dewatering may be required during excavation of topsoil materials associated and groundworks at the proposed development site. This will slightly and temporarily increase the aquifer vulnerability, which is classified by the GSI as having 'Low' vulnerability for the majority of the site. This classification is consistent with the findings of the site investigation carried out by Causeway Geotech in July and August 2025, which found bedrock at depths ranging from 13m BGL.

There is no potential for change in groundwater levels as a result of local changes in the groundwater regime at the site due to the limited extent of the unlikely dewatering activities and given the low permeability overburden underlying the site. In addition, the mitigation measures that will be implemented during construction (as set out in the CEMP) and operational design measures (SuDS) will ensure there are no potential impacts on the hydrogeological and hydrological environment.

Therefore, there is no potential for change in water quality or levels as a result of local changes in the groundwater regime at the site. There are no planned discharges to groundwater during the operational phase and no long-term groundwater dewatering for the project.

During construction, there is limited potential of accidental discharges. However, should these occur they are temporary short-lived events that will not impact on the water status of the underlying bedrock aquifer long-term and as such will not impact on trends in water quality and over all status assessment. The project-specific Construction and Environmental Management Plan (CEMP), which the works contractor will develop will implement strict mitigation measures to ensure the protection of the hydrogeological environment during construction which will ensure that there will be no negative impact on the quantitative or qualitative of the underlying gravel and bedrock aquifers.

In terms of the operational phase, the risk to the aquifer is considered to be low due to the presence of handstand and a drainage system incorporating use of oil / hydrocarbon / petrol interceptors (or equivalent) on the stormwater drainage system prior to discharge from the site.

Overall, the potential effects on the WFD status to the groundwater bodies are considered no impact i.e., no change to the current status *or* elements in terms of the underlying hydrogeological environment.

5.3 Assessment in Terms of Future Good Status

The Mayne_010 WFD Surface Waterbody's for which the Proposed Site's surface water discharges into most recent WFD surface water status (WFD Period: 2019-2024) of "Poor" and its current WFD risk score (3rd risk cycle) is "At Risk" of not achieving good status by 2027, meaning they have not achieved their objectives, and their overall status is considered poor.

Mayne Estuary Transitional Waterbody located c. 0.8 km downstream of the Proposed Development site has a WFD status of "Moderate" (WFD Period: 2019-2024) and a WFD risk score (3rd Cycle) of "Review". This "Moderate" status has been assigned to the Mayne River since 2018; this is due to the transitional waterbodies' Ecological Status.

The Irish Sea Dublin (HA 09) Coastal Waterbody located c. 2.7 km downstream of the Proposed Development has a WFD status of "Good" (WFD Period: 2019-2024) and a WFD risk score (3rd Cycle) of "Not at Risk". This "Good" status has been assigned to the coastal waterbody due to "Good" Phytoplankton Status or Potential.

Dublin Bay WFD Coastal Waterbody located c. 7.3 km of the Proposed Development site WFD status of "Good" (WFD Period: 2019-2024) and a WFD risk score (3rd Cycle) of "Not at Risk". This "Good" status has been assigned to the coastal waterbody due to "High" Phytoplankton Status or Potential and "Good" Hydromorphological Conditions.

With respect to Urban Wastewater, no perceptible risk to the hydrological or hydrogeological environment is foreseen following treatment in the EPA licenced Ringsend WWTP (Reg: D0034-02). The plant has capacity and the peak effluent discharge from the development would equate to 0.09% of the Ringsend WWTP hydraulic capacity.

Presently, the groundwater body in the region of the site (Dublin GWB) for which the site is located entirely within, has a WFD status of 'Good' (WFD Period: 2019-2024) and a WFD risk score (3rd Cycle) currently "Under Review".

At present there are no local targeted measures within the catchment to maintain or achieve improvements to the status of the water bodies. However, the following are some pressures associated with waterbody catchments:

- Physical Modifications.
- Management of pollution from sewage and waste water.
- Management of pollution from urban environments.
- Changes to natural flow and levels of water.

The proposed development will incorporate SuDs measures within the landscape and drainage design in order to manage run-off quality and foul sewers management will be in compliance with UÉ specifications. No dewatering is required during operation. All discharges will be adequately treated through the proposed SuDs measures as outlined in Section **Error! Reference source not found.** above. As such there will be no change to the existing status as a result of the proposed development.

Based on the above information it is *not* considered that any aspects of the proposed development will prevent the WFD objectives from being achieved or to meet the requirements and/or objectives in the Water Action Plan 2024 - A River Basin Management Plan for Ireland (Department of Housing Local Government & Heritage, Sept 2024).

6. CONCLUSIONS

Appendix A presents the methodology for the surface water and groundwater assessments to determine waterbody status. Appendix B contains the background information and the WFD classification elements for surface water and groundwater body status. The colour coded system referred to in Appendix B – Table 1 and Table 2 are used to give a visual impression of the surface water and groundwater assessment, respectively.

The WFD assessment indicates that, based on the current understanding of the Proposed Development, there is no potential for adverse or minor temporary/ long-term or localised effects on the Mayne River, Mayne Estuary and European sites which the estuary hosts. Therefore, it has been assessed that the proposed development will not cause any significant deterioration or change in water body status or prevent attainment, or potential to achieve, future good status or to meet the requirements and/or objectives in the third RBMP 2022-2027 (River Basin Management Plan) and Water Action Plan 2024 - A River Basin Management Plan for Ireland.

The WFD assessment indicates that there is no potential for adverse or minor temporary or localised effects on the Dublin groundwater body (GWB). Therefore, it has been assessed that it is unlikely that the proposed site will cause any significant deterioration or change on its water body status or prevent attainment, or potential to achieve the WFD objectives or to meet the requirements and/or objectives in the third RBMP 2022-2027 (River Basin Management Plan) and Water Action Plan 2024 - A River Basin Management Plan for Ireland.

No further assessment of WFD is recommended given that no significant deterioration or change in water body status is expected based on the current understanding of the proposed development during construction and operation.

APPENDIX A. WFD ASSESMENT MATRIX

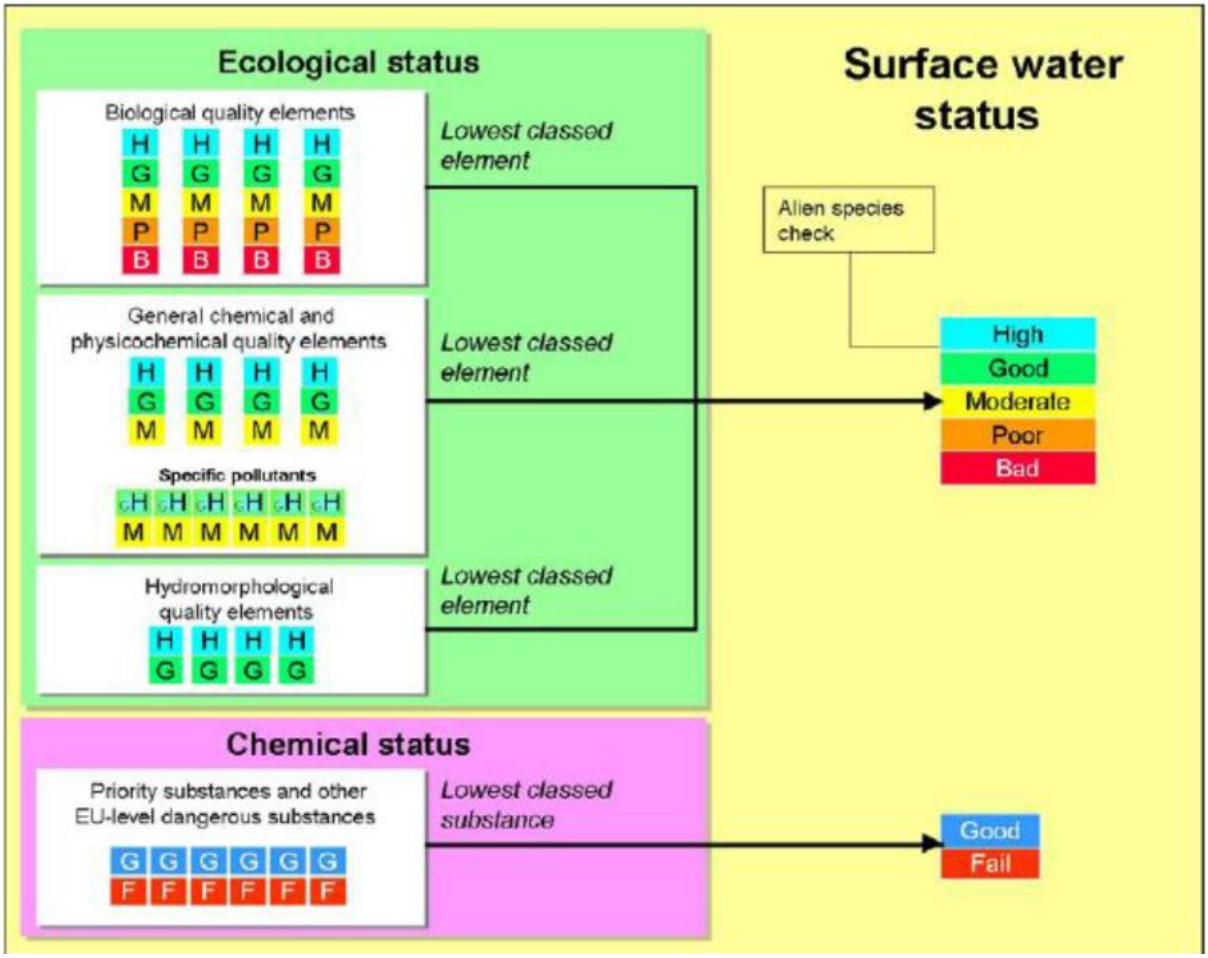
APPENDIX A

WATER FRAMEWORK DIRECTIVE ASSESSMENT MATRIX

1.1 Background to Surface Water Body Status & Groundwater Body Status

Under the WFD, surface water body status is classified on the basis of chemical and ecological status or potential. Ecological status is assigned to surface water bodies that are natural and considered by the EPA not to have been significantly modified for anthropogenic purposes (i.e., culverting). Ecological potential is assigned to artificial and man-made water bodies (such as canals), or natural water bodies that have undergone significant modification. The term 'ecological potential' is used as it may be impossible to achieve good ecological status because of modification for a specific use, such as navigation or flood protection. The ecological potential represents the degree to which the quality of the water body approaches the maximum it could achieve. The worst-case classification is assigned as the overall surface water body status, in a 'one-out all-out' system (i.e., by taking the worst case of all the combined risk outcomes). This system is summarised below in Figure 1.

Figure 1. WFD classification elements for surface water body status (Environmental Agency, 2016)



1.1.2 Chemical Status

Chemical status is defined by compliance with environmental standards for chemicals that are priority substances and/or priority hazardous substances, in accordance with the Environmental Quality

Standards Directive (2008/105/EC). This is assigned on a scale of good or fail. Surface water bodies are only monitored for priority substances where there are known discharges of these pollutants; otherwise, surface water bodies are reported as being at good chemical status.

1.1.3 Ecological Status

Ecological status or potential is defined by the overall health or condition of the watercourse. This is assigned on a scale of High, Good, Moderate, Poor or Bad, and on the basis of four classification elements or 'tests', as follows:

- **Biological:** This test is designed to assess the status indicated by a biological quality element such as the abundance of fish, invertebrates or algae and by the presence of invasive species. The biological quality elements can influence an overall water body status from Bad through to High.
- **Physico-chemical:** This test is designed to assess compliance with environmental standards for supporting physicochemical conditions, such as dissolved oxygen, phosphorus and ammonia. The physicochemical elements can only influence an overall water body status from Moderate through to High.
- **Specific pollutants:** This test is designed to assess compliance with environmental standards for concentrations of specific pollutants, such as zinc, cypermethrin or arsenic. As with the physico-chemical test, the specific pollutant assessment can only influence an overall water body status from Moderate through to High.
- **Hydromorphology:** For natural waterbodies, this test is undertaken when the biological and physicochemical tests indicate that a water body may be of High status. It specifically assesses elements such as water flow, sediment composition and movement, continuity, and structure of the habitat against reference or 'largely undisturbed' conditions. If the hydromorphological elements do not support High status, then the status of the water body is limited to Good overall status. For artificial or highly modified waterbodies, hydromorphological elements are assessed initially to determine which of the biological and physico-chemical elements should be used in the classification of ecological potential. In all cases, assessment of baseline hydromorphological conditions is an important factor in determining possible reasons for classifying biological and physicochemical elements of a water body as less than Good, and hence in determining what pollution prevention measures may be required to address these failing water bodies.

1.2 Background to Groundwater Body Status

Under the WFD, groundwater body status is classified on the basis of quantitative and chemical status. Status is assessed primarily using data collected from the EPA monitoring network; therefore, the scale of assessment means that groundwater status is mainly influenced by larger scale effects such as significant abstraction or widespread/ diffuse pollution. The worst-case classification is assigned as the overall groundwater body status, in a 'one-out all-out' system. This system is summarised in Figure 2 below.

1.2.1 Quantitative Status

Quantitative status is defined by the quantity of groundwater available as baseflow to watercourses and water-dependent ecosystems, and as 'resource' available for use as drinking water and other consumptive purposes. This is assigned on a scale of Good or Poor, and on the basis of four classification elements or 'tests' as follows:

- **Saline or other intrusions:** This test is designed to identify groundwater bodies where the intrusion of poor-quality water, such as saline water or water of different chemical composition, as a result of groundwater abstraction is leading to sustained upward trends in pollutant concentrations or significant impact on one or more groundwater abstractions.
- **Surface water:** This test is designed to identify groundwater bodies where groundwater abstraction is leading to a significant diminution of the ecological status of associated surface water bodies.

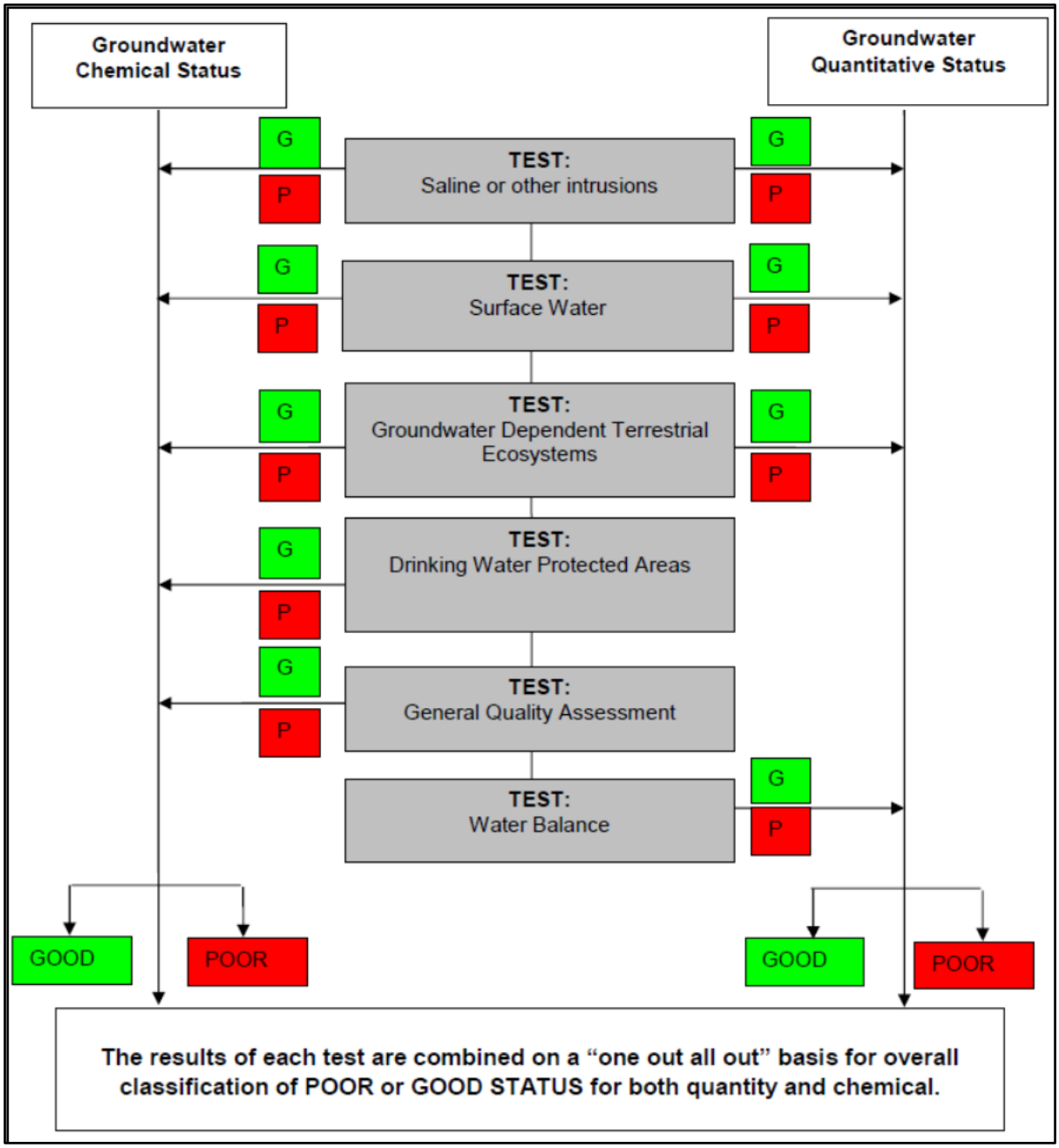
- **Groundwater Dependent Terrestrial Ecosystems (GWDTEs):** This test is designed to identify groundwater bodies where groundwater abstraction is leading to "significant damage" to associated GWDTEs (with respect to water quantity).
- **Water balance:** This test is designed to identify groundwater bodies where groundwater abstraction exceeds the "available groundwater resource", defined as the rate of overall recharge to the groundwater body itself, as well as the rate of flow required to meet the ecological needs of associated surface water bodies and GWDTEs.

1.2.2 Chemical Status

Chemical status is defined by the concentrations of a range of key pollutants, by the quality of groundwater feeding into watercourses and water-dependent ecosystems and by the quality of groundwater available for drinking water purposes. This is assigned on a scale of Good or Poor, and on the basis of five classification elements or 'tests' as follows:

- **Saline or other intrusions:** This test is designed to identify groundwater bodies where the intrusion of poor-quality water, such as saline water or water of different chemical composition, as a result of groundwater abstraction is leading to sustained upward trends in pollutant concentrations or significant impact on one or more groundwater abstractions.
- **Surface water:** This test is designed to identify groundwater bodies where groundwater abstraction is leading to a significant diminution of the chemical status of associated surface water bodies.
- **GWDTEs:** This test is designed to identify groundwater bodies where groundwater abstraction is leading to "significant damage" to associated GWDTE's (with respect to water quality).
- **Drinking Water Protected Areas (DrWPAs):** This test is designed to identify groundwater bodies failing to meet the DrWPA objectives defined in Article 7 of the WFD or at risk of failing in the future.
- **General quality assessment:** This test is designed to identify groundwater bodies where widespread deterioration in quality has or will compromise the strategic use of groundwater.

Figure 2. WFD classification elements for groundwater body status (Environmental Agency, 2015)



APPENDIX B. NON-DETERIORATION ASSESMENT

Table 1 - Risk screening of potential to cause deterioration of current WFD status

	Surface Water	Scheme Elements	**Proposed Development**					Mitigation Measures	Overall Impact with mitgation measures
	Mayne River (European Code: IE_EA_09M030500) **Mayne Estuary (European Code: IE_EA_080_0100)**	Phase (Construction/ Operation)	Construction	Construction	Construction	Operation	Operation		
		Identified Quantitative Impacts	Increased run-off and sediment loading	Temporary land-take during the construction phase	Pollution due to accidential discharges or spillages during the construction phase	Increase in Hardstanding	Pollution due to accidential discharges or spillages from car parks and hardstanding areas during the operation phase		
WFD Status	Macrophytes and phytobenthos - combined	Predicted change to status elements (green = none, amber = possibly, red = likely)	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	**Construction:** The project-specific CEMP will include robust mitigation measures to protect the hydrological environment. The CEMP will be a live document and it will go through a number of iterations before works commence and during the works. It will set out requirements and standards which must be met during the construction stage and will include the relevant mitigation measures outlined in the EIA Report and any subsequent conditions relevant to the proposed development. These include management of soils, re-fuelling machinery and chemical handling and control of water during the construction phase. **Operation:** The proposed development is designed to ensure the protection of the hydrological environment such as delivery and distribution and use of oil interceptors on the stormwater system and the use of SuDS techniques. In order to limit the surface water discharge from the site to pre-development, greenfield rates, and to ensure improvement in the overall surface water quality before ultimate discharge the principles of Sustainable Drainage Systems, (SuDS) are to be implemented. Details are to be agreed with local county council authorities. The proposed foul drainage drainage system will eventually discharge to the licenced Ringsend WWTP.	No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	Macroinvertebrates		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	Fish		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
Physio-Chemical Status	Total Ammonia	Predicted change to status elements (green = none, amber = possibly, red = likely)	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	Total Nitrogen		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	Ortho-Phosphate		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
Hydromorphological Elements	Quantity and dynamics of river flow	Predicted change to status elements (green = none, amber = possibly, red = likely)	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	Connection to Groundwater		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	River continuity		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	River depth and width variation bed		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	Structure and substrate of river bed		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	Structure of riparian zone		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status

Table 2 - Risk screening of potential to cause deterioration of current WFD status

	Groundwater	Scheme Elements	**Proposed Development**					Mitigation Measures	Overall Impact
		Phase (Construction/ Operation)	Construction	Construction	Construction	Operation	Operation		
	Dublin Groundwater Body (GWB) (European Code: IE_EA_G_008)	Identified Quantitative Impacts	Increased run-off and sediment loading	Release of sediments, pollutants and construction material during Bridge construction.	Pollution due to accidential discharges or spillages during the construction phase	Increase in Hardstanding	Pollution due to accidential discharges or spillages from car parks and hardstanding areas during the operation phase		
Quantitative Elements	**Saline or other intrusions.** To identify groundwater bodies where the intrusion of poor quality water as a result of groundwater abstraction is leading to sustained upward trends in pollutant concentrations or significant impact on one or more groundwater abstractions.	Predicted change to status elements (green = none, amber = possibly, red = likely)	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	**Construction:** The project-specific CEMP will include robust mitigation measures to protect the underlying hydrogeological environment. The CEMP will be a live document and it will go through a number of iterations before works commence and during the works. It will set out requirements and standards which must be met during the construction stage and will include the relevant mitigation measures outlined in the EIA Report and any subsequent conditions relevant to the proposed development. These include management of soils, re-fuelling machinery and chemical handling and control of water during the construction phase. No signficant dewatering is required which could impact on quantitaive status. **Operation:** The proposed development is designed to ensure the protection of the underlying hydrogeological environment such as use of oil interceptors on the stormwater system and prior to discharge from the site and the use of SuDS techniques. In order to limit the surface water discharge from the site to pre-development, greenfield rates, and to ensure improvement in the overall surface water quality before ultimate discharge the principles of Sustainable Drainage Systems, (SuDS) are to be implemented. No signficant abstraction is required which could impact on quantitaive status. The proposed foul drainage drainage system will eventually discharge to the licenced Ringsend WWTP.	No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	Surface water. To assess the impact of groundwater abstractions on the ecological status of surface water bodies.		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	Groundwater Dependent Terrestrial Ecosystems (GWDTE's) To assess the impact of groundwater abstractions on the condition of GWDTE'S.		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	Water balance To identify groundwater bodies where abstractions exceed the available resource.		Not Applicable (no dewatering anticipated)	Not Applicable (no dewatering anticipated)	Not Applicable (no dewatering anticipated)	Not Applicable (no water supply from borehole anticipated)	Not Applicable (no water supply from borehole anticipated)		Not Applicable
Chemical Elements	**Saline or other intrusions.** To identify groundwater bodies where the intrusion of poor quality water as a result of groundwater abstraction is leading to sustained upward trends in pollutant concentrations or significant impact on one or more groundwater abstractions.	Predicted change to status elements (green = none, amber = possibly, red = likely)	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	Surface water. To assess the impact of groundwater abstractions on the ecological status of surface water bodies.		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	Groundwater Dependent Terrestrial Ecosystems (GWDTE's) To assess the impact of nutrient concentrations in groundwater (primarily phosphates) on GWDTE's.		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	Drinking Water Protected Areas (DrWPAs) To identify groundwater bodies failing to meet the DrWPA objectives defined in Article 7 of the WFD or at risk of failing in the future.		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status
	General quality assessment To identify groundwater bodies where widespread deterioration in quality has or will compromise the strategic use of groundwater.		No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.	No measurable change anticipated.		No anticipated impacts to the hydrological environment with no deterioration to the WFD Status

Appendix 12.1 Climate Risk and Vulnerability Assessment

REPORT



Clongriffin - Climate Change Risk and Vulnerability Assessment

Climate Change Risk and Vulnerability Assessment – Clongriffin, Dublin 13

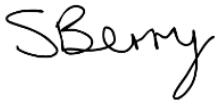
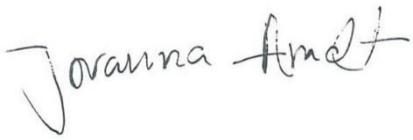
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AWN Consulting Ltd, The Tecpro Building, IDA Business & Technology Park, Clonshaugh, Dublin 17, D17 XD90

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Details	Written by	Approved by
Signature		
Name	Sarah Berry	Dr. Jovanna Arndt
Title	Principal Climate Change Consultant	Principal Air Quality Consultant
Date	14 May 2026	

Disclaimer
This report considers the specific instructions and requirements of our client. It is not intended for third-party use or reliance, and no responsibility is accepted for any third party. The provisions in this report apply solely to this project and should not be assumed applicable to other developments without review and modification.

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EXECUTIVE SUMMARY

This report presents a semi-quantitative climate risk assessment for a proposed residential development at Clongriffin Wider Lands. At the request of the Land Development Agency, the analysis utilises the UK Green Building Council (UKGBC) *A Framework for Measuring and Reporting of Climate-related Physical Risks to Built Assets.*

The methodology aligns with national and international best practice, including the EPA National Climate Change Risk Assessment Guidance, ISO 14091:2021 standards, and the IPCC AR6 Report (2023).

An initial screening of project and location specific physical climate hazards was carried out upon review of the baseline climatology. Future climate scenario analysis, using the latest EPA Climate Ireland CMIP5 projections at a 1.5 km² resolution, for RCP4.5 and RCP8.5 was then conducted, establishing potential impacts on the proposed development in the future (2041-2070).

Based on the results of the initial two assessments, the UKGBC Climate Change Risk Assessment was used to determine a future risk rating for all relevant hazards in relation to built assets (extract in Table 1.1). The assessment also considered interdependent risks and associated cost impact. For completeness, adaptation measures, including those within management and maintenance strategies were set out to reduce the consequence of the climate risks on the proposed development.

Table 1.1: Future risk rating of climate hazards across the medium and long term modelled at RCP4.5 and RCP8.5 using UKGBC framework

Climate hazard	Baseline	Medium term (2030-2050)		Long term (2050-20100)		Future Risk Rating
	RCP4.5	RCP4.5	RCP8.5	RCP4.5	RCP8.5	
Extreme hot temperature	Very low	Low	Moderate/ low	Low	Moderate	**Moderate**
Extreme cold temperature	Very low	Very low	Very low	Very low	Very low	**Low**[1]
Extreme precipitation & pluvial flooding	Low	Moderate/ low	Moderate/ low	Moderate/ low	Moderate/ low	**Moderate/ low**
Storm and winds	Very low	Moderate	Moderate	Moderate	Moderate	**Moderate**
Fluvial flooding	Very low	Very low	Very low	Very low	Very low	**Very low**

Note 1 Table 1.1 omits 'short-term' (2020's) for display purposes. Low temperature was scored as 'low' for the short-term scenario. The future risk rating takes the maximum rating across short, medium and long-term scenarios. Full results tables are presented in Section ***Error! Reference source not found.****.*

The assessment identified high temperature, extreme precipitation and pluvial flooding, storm and winds as the most significant climate risks to the proposed development. Table 1.2 provides a detailed breakdown of vulnerabilities, associated risk levels, and recommended adaptation measures to mitigate impacts and enhance resilience.

Table 1.2 Key climate risks and highlighted adaptation opportunities.

Climate hazard	Risk	Adaptation Opportunities
Extreme hot temperature 	▶ Structure and building: Deterioration of building materials, reducing lifetime development. Ground subsidence due to reduced soil moisture causing settlement and cracking. ▶ Public Realm: Prolonged periods of heat and drought leading to plant stress, reduced vegetation cover, and increased maintenance requirements. ▶ Critical Systems: High ambient temperatures may affect the performance or lifespan of external electrical components.	All building designed with respect to BS5250 and BS EN 15026 for material durability. Thermal performance should be aligned with Part L Building Regulations to prevent overheating in dwellings. Vegetation and landscaping species selection for low maintenance, low water input species. Critical electrical systems to be buried and protected.
Extreme precipitation and pluvial and fluvial flooding 	▶ Building and Structures: Extreme precipitation leading to flooding of dwellings causing damage and reducing integrity of building materials ▶ Public Realm: Intense rainfall causing erosion, surface water accumulation, or displacement of vegetation	Height of minimum finished floor level to be elevated. Site attenuation ponds sized to accommodate 1:100 year rainfall event with additional 20% allowance to accommodate climate change effects. Flood tolerant planting Blue roofs provide attenuation as will other SuDS devices including tree pits, permeable paving and bioretention areas.
Storms and high winds 	▶ Building and Structures: Storm and high-wind events may place significant pressure on buildings, potential damage to roof and balcony finishes from extreme wind, and to façade and windows from debris. ▶ Public Realm: High winds may uproot or damage vegetation, particularly taller species, leading to landscape degradation, debris hazards, and potential obstruction of pedestrian or vehicular routes. ▶ Critical Systems: High winds can damage critical systems such as electricity supply and heating systems. Debris from systems could cause further damage to dwelling or residents..	Within any potential building management plans, scheduled inspections should be included by a building surveyor to confirm no issues or damage related to wind or storms within the building structures including the roof. Trees are proposed to be guyed and anchored in place, to ensure safe placement and reducing risk of movement once planted. Critical Systems: The mechanical strategy is for a decentralised system with all equipment enclosed in each apartment so therefore we will have no mechanical equipment on the roof.

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TABLE OF CONTENTS

1. INTRODUCTION 1
   1.1 Outline of requirements 1
   1.2 Proposed development and Site description 1
   1.3 Policy and Legislative Context 2
      1.3.1 National Climate Policy and Regulation 3
      1.3.2 Local Policy and Action 6
      1.3.3 Project Related Policy and Strategy 6

2. METHODOLGY 8
   2.1 Framework for Measuring and Reporting 8
   2.2 Scope of the assessment and Caveats 8
   2.3 Climate Risk Assessment Approach (Probability and Consequence) 9
      2.3.1 Step 1- Review of the site and Dublin's historical baseline climate & initial screening of climate hazards. 9
      2.3.2 Step 2 - An analysis of future climate projections 9
      2.3.3 Step 3 - Climate Change Risk Assessment 10
   2.4 Criteria for rating of Risk 12
   2.5 HPI Economic Criteria (EC) 6.1 and 6.2 13
   2.6 EU Taxonomy "substantial contribution" and climate hazards 14

3. CLIMATE CHANGE RISK ASSESSMENT 16
   3.1 Step 1- Review of the site and Dublin's historical baseline climate & initial screening of climate hazards 16
      3.1.1 Baseline Climatology 16
      3.1.2 Physical Climate Hazard Initial Screening 19
   3.2 Step 2 - An analysis of future climate projections 20
      3.2.1 Future climate projections 20
      3.2.2 Climate Change Projections and Approach taken 20
      3.2.3 Data Caveats and Uncertainty Across Projections: 21
      3.2.4 Climate Change Projections Summary 24
   3.3 Step 3 - Climate Change Risk Assessment 25
      3.3.1 Risk Assessment for Built Assets 6

4. DEMONSTRATION OF COMPLIANCE A-1
   4.1 Compliance with (EC) 6.1 Level 1 and Level 2: A-1
   4.2 Compliance with (EC) 6.2 Level 1, 2 and 3 ..... A-1

5. CONCLUSION A-4

APPENDIX A. GLOSSARY OF TERMS & DEFINTIONS A-5

LIST OF FIGURES

Figure 1.1: Aerial Image of the site 2

Figure 1.2: Statutory context for climate change adaptation in Ireland. 3

Figure 1.3: Risk is a result of the interaction of climate-related hazards with the vulnerability and exposure of human and natural systems 6

Figure 3.1: Monthly average climatology across the observed baseline period (1991-2020) 16

Figure 3.2: Mean Monthly Windspeed across the observed baseline taken from Dublin Airport 18

Figure 3.3:Tracks of storms with a core mean sea level pressure of <940hPA and with a lifetime of at least 12 hours. (a) Past regional climate model (RCM) 18km simulations (1981-2000) and (b) RCP8.5 RCM 18km simulations (2041-2060). Source: Nolan (2015). 24

Figure 4.1: Pluvial flood risk taken from FRA (CS Consulting) A-1

LIST OF TABLES

Table 1.1: Future risk rating of climate hazards across the medium and long term modelled at RCP4.5 and RCP8.5 using UKGBC framework

Table 1.2 - Key climate risks and highlighted adaptation opportunities. i

Table 2.1 Classification of Probability 10

Table 2.2 Classification of Consequence 11

Table 2.3 Risk Matrix 12

Table 2.4 UKGBC Risk Definition 12

Table 3.1 Notable Historical Climate Events 17

Table 3.2 Physical climate hazards screening 19

Table 3.3 Complete annual temperature variables for both RCP scenarios up to 2100 compared to the Baseline 21

Table 3.4 Complete annual precipitation projection across both RCPs 22

Table 3.5 Climate projections summary table for mid-century epoch (2041-2070). 24

Table 4.1 Section 1 - 3 of the UKGBC Framework Risk Assessment 1

Table 4.2 UKGBC Climate Change Risk Analysis (excluding description of the Risk to Built assets – See Table 4.4) 4

Table 4.3 Overall Risk Rating and Cost Impact 5

Table 4.4 Summary of Section 4 Risk Assessment Template from the UKGBC Framework for Measuring and Reporting of Climate-related Physical Risks to Built Assets 6

Table 4.5 Output from Section 5 of the Risk Assessment Template from the UKGBC Framework for Measuring and Reporting of Climate-related Physical Risks to Built Assets 12

Table 5.1 Confirmation of EU taxonomy Substantial Contribution Requirements A-2

1. INTRODUCTION

1.1 Outline of requirements

This Climate Risk and Vulnerability Assessment (CRVA) has been prepared by AWN Consulting on behalf of the Land Development Agency lands at Clongriffin, Dublin 13 (hereafter referred to as the 'Project' or 'proposed development'). This report assesses the risk of the effects future climate change hazards may have on the proposed development.

This CRVA investigates the overall resilience of the proposed design to physical climate change hazards. The assessment will identify hazards and analyse climate resilience while commenting on recommendations for resilience. The assessment supports the long-term resilience of the proposed design.

1.2 Proposed development and Site description

The proposed development is located at Clongriffin, Dublin 13 in the northern fringe of Dublin city administrative area, within the Clongriffin/Belmayne and Environs Strategic Development Regeneration Area (SDRA). The site is located c. 9.5km north-east of the Dublin City Centre, c. 5km east of the M1/M50 network and adjacent to the administrative boundary with Fingal County Council.

The development will consist of the construction of a residential development set out in 3 no. blocks (identified as Zones 7, 8 & 9), ranging in height from 5 to 10 storeys, to accommodate 711 no. apartments in addition to café/restaurant/retail units, community/cultural spaces, and a standalone creche building. The 3 no. residential buildings are arranged around podium courtyards accommodating communal amenity spaces for future residents.

The terrain around the proposed development is relatively flat with slight with a slight fall to the north. As can be seen in Figure 1.1 the area surrounding the site is urban fabric with a public open space to the west. The site is located approximately 2.5km from the coast and the terrain in all directions is relatively flat with no outstanding topographical influences on the observed weather pattens of the site.

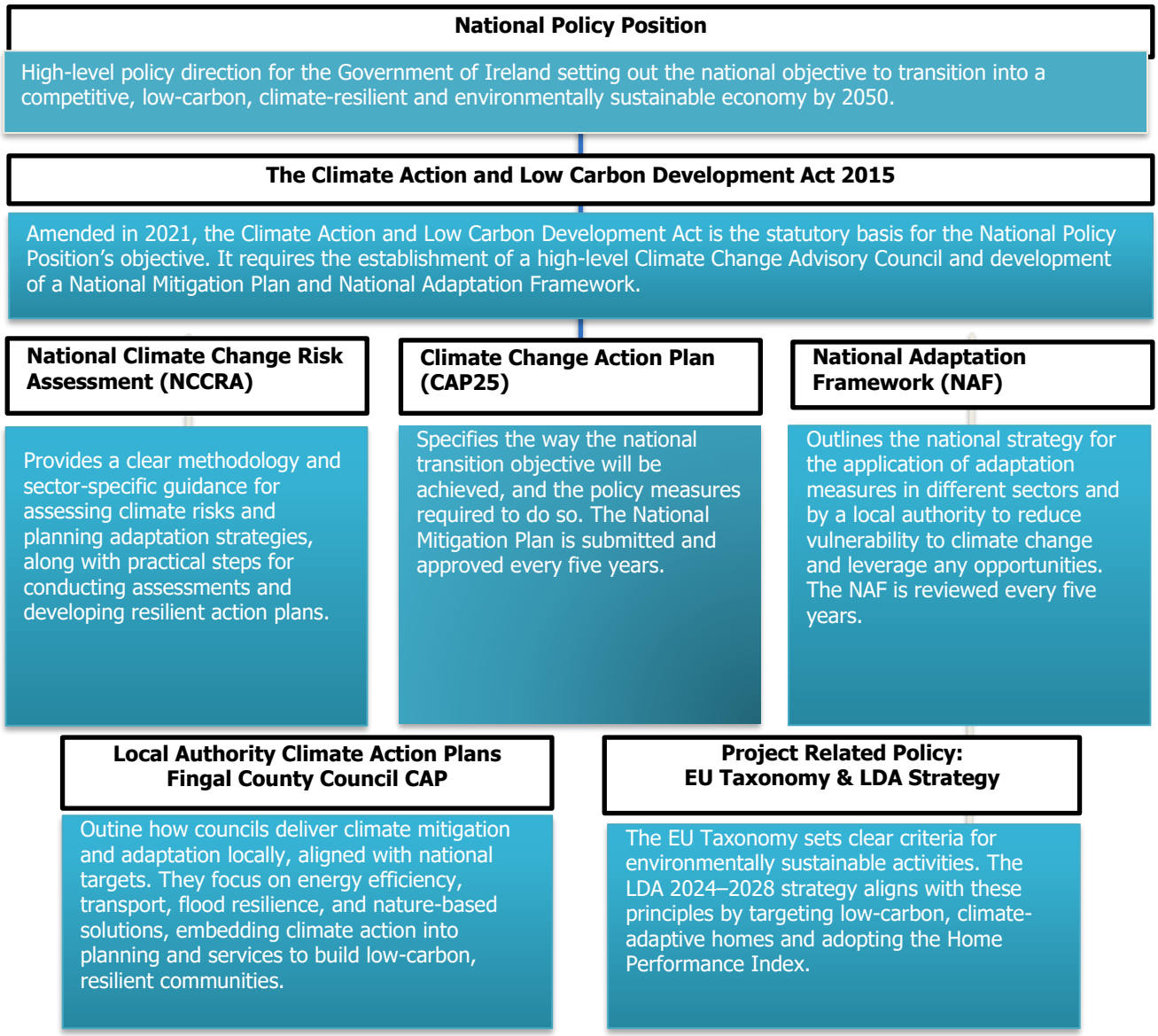
Figure 1.1: Aerial Image of the site



1.3 Policy and Legislative Context

This section provides an overview of the statutory requirements for climate risk assessment in Ireland, summaries of national and regional contexts, and an overview of relevant strategy and policy guiding the risk assessment and its purpose.

Figure 1.2: Statutory context for climate change adaptation in Ireland.



1.3.1 National Climate Policy and Regulation

1.3.1.1 Climate Action and Low Carbon Development Act

The Climate Action and Low Carbon Development Act 2015, as amended (hereafter referred to as 'the 2015 Act') set Ireland's National Transition Objective: to achieve a low-carbon, climate-resilient, and environmentally sustainable economy by 2050. It required the development of a National Mitigation Plan and a National Adaptation Framework and established the Climate Change Advisory Council to advise on these plans and ensure compliance with climate obligations. The act can be seen as Irelands primary legislation an umbrella under which climate risk assessment, action, and future legislative and policy arrangements are built under.

Section 15 of the 2015 Act places a duty on public bodies to perform their functions in line with:

- The most recent Climate Action Plan (CAP): Document setting out climate action for Ireland.
- The national long-term climate strategy
- The National Adaptation Framework and sectoral adaptation plans

- The national climate objective
- Goals for reducing greenhouse gas emissions and adapting to climate impacts

This means consenting authorities (e.g. An Coimisiún Pleanála, local councils) must ensure developments align with adaptation frameworks and consider future climate risks.

1.3.1.2 Climate Action Plans – (CAP25)

Ireland declared a climate and biodiversity emergency in May 2019, with the EU following with a similar resolution in November 2019 and the Government introducing the Climate Action and Low Carbon Development (Amendment) Act 2021 (hereafter referred to as 'the 2021 Act'). The 2021 Act was signed into law on 23 July 2021; it gave statutory effect to the objectives of the first Climate Action Plan.

The 2021 Act commits Ireland to a climate-resilient, biodiversity-rich, and climate-neutral economy by 2050, introduces carbon budgets, and sets sectoral decarbonisation targets. A carbon budget is defined as the total greenhouse gas emissions permitted within a given period.

In April 2025, the latest Climate Action Plan (CAP25) was published. Building on CAP24, it operationalises carbon budgets and sectoral ceilings to achieve a 50% reduction in carbon emissions by 2050 while also directing reform of planning to further drive a sustainable transition economy in key areas of renewables, EV, transport and buildings.

Ireland's annual Climate Action Plans are cornerstones for directing policy and legislation at the actionable upstream level and the measures laid out by these plans, alongside international frameworks such as COP agreements, EU Fit for 55, and the EU Taxonomy, aim to keep emissions on a trajectory that mitigates severe climate impacts while also considering adaptation for climate resilience.

1.3.1.3 National Adaptation Framework

The *National Adaptation Framework* (NAF)[1], first established in 2018 under the 2015 Act sets Ireland's strategy for building a climate-resilient, biodiversity-rich society. It works alongside the Climate Action Plan to guide national and local responses to climate risks such as extreme weather, flooding, drought, biodiversity loss, sea-level rise, and rising temperatures. The second *National Adaptation Framework* (NAF)[2], published in 2024 and updated in June 2025, outlines a comprehensive, whole-of-government and whole-of-society approach to climate adaptation. Its core objective is to enhance Ireland's resilience to a wide range of climate risks, including extreme weather events, flooding, drought, biodiversity loss, sea level rise, and rising temperatures.

Building on the principles of a "Just Transition", the NAF introduces the concept of "Just Resilience", envisioning a climate-resilient Ireland that ensures fairness, equity, and inclusivity in adaptation planning and implementation. It promotes reduced reliance on fossil fuels, the expansion of electrified and accessible public transport, and the integration of sustainability and climate resilience across all sectors. These include energy, water, wastewater, agriculture, transport, health, built environment, and biodiversity, with a strong emphasis on mainstreaming adaptation practices into policy, planning, and operations.

[1] Government of Ireland (2018) First National Adaption Framework (NAF)
[2] Government of Ireland (2025) Second National Adaption Framework (NAF)

1.3.1.4 National Climate Change Risk Assessment[3]

The *National Climate Change Risk Assessment (NCCRA)* is a comprehensive suite of reporting and technical guidance documents developed by the Environmental Protection Agency (EPA) of Ireland, spanning 2024 and 2025, with the main report published in June 2025. It serves as the foundational framework for climate risk assessment, adaptation planning, and implementation across Irish society, and aligns with international best practices, ISO standards, and IPCC methodologies.

As part of the NCCRA, several technical guidance documents and a standardized methodology were released, offering practical tools to support consistent and evidence-based decision-making. The main report delivers a holistic assessment of climate risks across Ireland's society, environment, and economy. It identifies priority risks, evaluates the effectiveness of current adaptation measures, outlines the urgency of required actions, and applies a systems-based approach to classify, assess, and respond to climate-related threats.

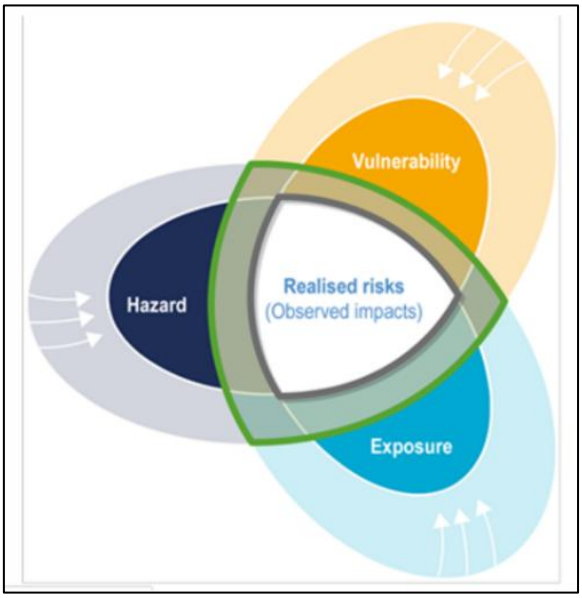
The NCCRA uses definitions of the risk determinants from the *Intergovernmental Panel on Climate Change (IPCC) Assessment Report (AR6)*[4]. This aligns Ireland's risk assessment practices with the latest in international practices recognising 'risk' as a function of climate hazards, exposure to hazards and vulnerability of the system to the effects of the hazards (see Figure 1.3):

- **Hazard** - the potential occurrence of a natural or human-induced physical event or trend or physical impact that may cause loss of life, injury, or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, ecosystems, and environmental resources.
- **Exposure** - the presence of people, livelihoods, species or ecosystems, environmental functions, services, and resources, infrastructure, or economic, social, or cultural assets in places and settings that could be adversely affected.
- **Sensitivity** - refers to the degree to which a system or asset is affected by climate hazards. It reflects how vulnerable something is to changes such as temperature extremes, flooding, or drought, based on its physical, functional, or ecological characteristics.
- **Vulnerability** - the propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts including sensitivity
- **Risk** - the potential for adverse consequences for human or ecological systems.

[3] EPA (2025) National Climate Change Risk Assessment Main Report

[4] IPCC (2023) Climate Change 2023: Synthesis Report. Available at: https://www.ipcc.ch/report/ar6/syr/

Figure 1.3: Risk is a result of the interaction of climate-related hazards with the vulnerability and exposure of human and natural systems[5]



1.3.2 Local Policy and Action

1.3.2.1 Dublin City Council Climate Action Plan 2024–2029 (DCC) [6]

The *Dublin City Council Climate Action Plan 2024–2029* sets out a clear pathway toward a climate-resilient and carbon-neutral city by 2050. The plan combines ambitious emissions reduction targets with adaptation measures to address key climate risks such as flooding, heatwaves, and severe windstorms.

Six core theme areas, which include transport, energy, buildings and others, embed climate action across council operations while fostering collaboration with communities, businesses, and stakeholders to deliver a just and inclusive transition.

The plan identifies priority climate hazards for Dublin City, including fluvial, coastal, and pluvial flooding, rising temperatures, heatwaves, and extreme wind events. Other hazards remain under review, and resilience measures are integrated into objectives to reduce vulnerability across the city's infrastructure, services, and communities.

1.3.3 Project Related Policy and Strategy

1.3.3.1 EU Taxonomy National Energy and Climate Plan (NECP) 2021-2030

The EU Taxonomy Regulation, introduced on 12 July 2020, establishes a classification system to identify environmentally sustainable economic activities. It aims to channel investment toward activities that support the EU's climate and environmental objectives.

Six Environmental Objectives

1. Climate change mitigation
2. Climate change adaptation
3. Sustainable use and protection of water and marine resources

[5] EPA (2025) National Climate Change Risk Assessment Main Report.
[6] DCC (2024) Dublin City Council Climate Action Plan 2024–2029

4. Transition to a circular economy
5. Pollution prevention and control
6. Protection and restoration of biodiversity and ecosystems

Conditions for Sustainability

To qualify as environmentally sustainable, an activity must:

1. Make a substantial contribution to at least one objective
2. Do No Significant Harm (DNSH) to the other objectives
3. Comply with minimum social safeguards (OECD, UN, ILO standards)
4. Meet technical screening criteria set in delegated acts

Purpose

The Taxonomy provides clear, measurable standards to classify sustainable activities, ensuring transparency and comparability in reporting and guiding capital flows toward genuine environmental impact.

1.3.3.2 Land Development Agency Sustainable Development Strategy[7]

The Land Development Agency (LDA) *Sustainable Development Strategy 2024–2028* sets out plans to deliver affordable, low-carbon, climate-adaptive homes. It identifies six strategic objectives: Reduce Carbon; Promote Water Stewardship; Optimise Sustainable Land Use; Enhance Biodiversity and Climate Resilience; Promote Circularity; and Support Social Value. For biodiversity and climate resilience, the focus is on developing the LDA's approach to climate adaptation. Since November 2021, the LDA has adopted the Irish Green Building Council's Home Performance Index (HPI) as its primary sustainability assessment method, with all projects targeting HPI certification.

To reduce embodied carbon, the LDA will develop a Climate Action Plan with 2030 and 2050 reduction targets and specify low-carbon, bio-based materials. For operational carbon, it aims to adopt the Zero Emission Building (ZEB) standard ahead of the 2027 EU deadline. ZEB, introduced in the March 2024 revision of the Energy Performance of Buildings Directive, replaces NZEB and requires very high energy performance, zero on-site fossil fuel emissions, and near-zero operational greenhouse gas emissions.

[7] The Land Development Agency (LDA) Sustainable Development Strategy 2024–2028 LDA-Sustainable-Development-Strategy-2024-2028.pdf

2. METHODOLGY

This climate risk and vulnerability assessment is designed to align with international and national guidance and best practice for climate risk assessment and to integrate key national and international approaches, such as those from the following guidance documents:

- UK Green Building Council (UKGBC) A Framework for Measuring and Reporting of Climate-related Physical Risks to Built Assets[8]
- National Climate Change Risk Assessment Methodology (2024)[9]
- National Climate Change Risk Assessment (2024) Technical Guidance for Sectoral Assessment[10]
- Risk Assessments International Standards Organisation (ISO): ISO 14091:2021 Adaptation to climate change – Vulnerability, impacts and risk assessment[11]
- Transport Infrastructure Ireland (TII) PE-ENV-01104: Climate Guidance for National Roads, Light Rail and Rural Cycleways (Offline & Greenways) – Overarching Technical Document[12]

A full glossary of terms used in this assessment can be found in Section 5.Appendix A.

2.1 Framework for Measuring and Reporting

This assessment utilises the UK Green Building Council (UKGBC) *A Framework for Measuring and Reporting of Climate-related Physical Risks to Built Assets* hereafter called "the Framework". The Framework provides a reporting template which has been completed and is provided within Section 3.3 of this CRVA.

In line with recommendations from the LDA, Client, Royal Institution of Chartered Surveyors (RICS) guidance[13] and the UKGBC Framework[14], a 50-year lifespan of the proposed development is considered for this assessment which include the lifespan of the proposed design and components and the extension of the investment.

The Framework provides three-time periods for assessment. The following have been considered as per the Framework recommendation:

- Short term: within the current decade (2020s)
- Medium term: within the next three decades (2030s–2050s)
- Long term: within the second half of this century (2050s–2100).

2.2 Scope of the assessment and Caveats

When considering direct risks, the redline boundary is considered the area within the assessment scope. Direct risks from physical climate hazards include but are not limited to flood risk, wind and storm damages.

Indirect risks are considered within a wider Zone of Influence, generally regionally. Indirect risks include damage to utility services, public roads and transport infrastructure and public services. Indirect lists are not the subject of this assessment as they fall outside the scope and boundary of

[8] UKGBC (2022) *A Framework for Measuring and Reporting of Climate-related Physical Risks to Built Assets*
[9] EPA (2024) Climate Risk Assessment Methodology. National Climate Change Risk Assessment Methodology Report | Environmental Protection Agency
[10] EPA (2024) Technical sectorial guidance: EPA Climate Ireland | Sectoral adaptation guidance
[11] ISO (2021) ISO 14091:2021 Adaptation to climate change – Vulnerability, impacts and risk assessment.
[12] Transport Infrastructure Ireland (TII) (2022) PE-ENV-01104: Climate Guidance for National Roads, Light Rail and Rural Cycleways (Offline & Greenways) – Overarching Technical Document.
[13] RICS (2024) Whole life carbon assessment for the built environment
[14] UKGBC (2022) *A Framework for Measuring and Reporting of Climate-related Physical Risks to Built Assets*

the proposed development. Only physical hazards resulting in elevated risks such as flooding, extreme heat and wind among others will be assessed based on the design provided by the client.

2.3 Climate Risk Assessment Approach (Probability and Consequence)

As detailed in Section 2.1 above, this semi quantitative assessment follows the guidance and instruction outlined in the UKGBC Framework and guidance from national (NCCRA, TII) and international (IPCC & ISO 14091:2021) best practice. Below is a brief step-by-step breakdown of the approach.

2.3.1 Step 1- Review of the site and Dublin's historical baseline climate & initial screening of climate hazards.

- **Baseline Climatology Analysis** (Section 3.1): Review of observed weather data taken from Dublin Airport for the period 1991-2020 and records of extreme weather events. This baseline data is derived from the ECMWF[15] ERA5 data reanalysis and includes observational data from meteorological weather stations across Ireland and Dublin from 1950-2023. This data is processed and bias corrected to provide a complete monthly and annual baseline climatology for County Dublin. This method has been chosen to ensure data can be analysed at the daily and monthly level to provide a robust depiction of weather variation across the year.
- **Climate Hazard Screening:** Upon analysis of historical climate events and the baseline climatology, relevant physical climate hazards are screened in or out of the assessment (Section 3.1.2). This is done to identify priority hazards that may result in direct impacts to the proposed development site. Potential climate hazards and their nomenclature vary between guidance. The Climate Hazard Screening is based on the most comprehensive list set out in EU Taxonomy Guidance, Appendix A[16] as this report is compliant with the Home Performance Index (Economic Criteria 6.1 and 6.2) (see Sections 2.5 and 2.6). Only hazards which are relevant to the locality of the site are selected for screening, for example typhoons and hurricanes are not relevant to Ireland so have been omitted from the assessment.

2.3.2 Step 2 - An analysis of future climate projections

- **Future Climatology Analysis** (Section 3.2): This assessment will provide a site-specific analysis of future climate change using the latest EPA Climate Ireland 'Translate' projections[17] using the latest CIMP5[18] climate data modelling. Two contrasting climate scenarios will be assessed (RCP4.5[19] and RCP8.5). The 1.5km^2 resolution of the climate projections allow for a site-specific analysis of future climate change projections.
  - Aligning with best practice as outlined in the UKGBC Framework and EU Taxonomy this assessment will review two-time periods 'Epochs'; the 2050s (2041-2070) and 2100s (2071-2100). There is limited variance between RCPs scenarios and current climate conditions before the 2040 period and any existing development or new developments or alterations are likely to have lifespans which fit within the extended range. Using both a medium 2050s

[15] European Centre for Medium-Range Weather Forecasts (ECMWF) (2023) ERA5 Fifth Generation Atmospheric Reanalysis: Copernicus Climate Change Service - Complete ERA5 global atmospheric reanalysis.

[16] https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800-annex-1_en.pdf

[17] EPA (2025) Climate Ireland: Future climate change Projections. Available at: EPA Climate Ireland | Climate Change Projection Maps

[18] Coupled Model Inter-comparison Projects (CMIPs), overseen by the World Climate Research Program. Data presented is CIMP5, derived from the fifth phase of the CMIPs. The CMIPs form the data foundation of the IPCC Assessment Reports.

[19] RCP (Representation Concentration Pathways): Representation Concentration Pathways (RCPs) are greenhouse gas concentration trajectories developed by the IPCC for climate modelling and scenario analysis.

and long-term analysis across both epochs allows for a better understanding of future climate change hazards, potential impacts, and implementation of appropriate mitigation measures to accommodate climate change.

- Aligned with international best practice, UKGBC guidance and EU Taxonomy climate reporting assumptions. Two contrasting climate change scenarios 'RCPs' have been selected for this assessment:
  - **RCP4.5** is a stabilization scenario where radiative forcing reaches about 4.5 W/m² by 2100. It assumes moderate mitigation efforts, with emissions peaking mid-century and then declining. This pathway is projected to limit global warming to roughly 2.4–3 °C by 2100.
  - **RCP8.5**, in contrast, is a high greenhouse gas concentration scenario often considered a "business-as-usual" or worst-case pathway, leading to radiative forcing of about 8.5 W/m² by 2100 and significantly higher projected global warming of roughly 3.2- 5.4°C.

2.3.3 Step 3 - Climate Change Risk Assessment

Section 3.3 encompasses the climate change risk assessment as outlined in the UKGBC guidance. The hazards which were screened-in during the Climate Hazard Screening in Step 1 are assessed to determine the level of physical climate change hazard and their risk to the proposed development.

Tables 3 and 4 of the Framework provides a basis for classification of probability and consequence. These have been reproduced in Table 2.1 and Table 2.2 and are utilised when completing the assessment in Section **Error! Reference source not found.** of this report. The Framework provides additional quantitative context with respect to the probability of flood risk this assessment has semi quantitatively assessed this probability due to the limited dataset available:

- **High**: each year, the area has a chance of flooding of greater than 1 in 30 (3.3%)
- **Medium**: each year, the area has a chance of flooding between 1 in 100 (1%) and 1 in 30 (3.3%).
- **Low**: each year, the area has a chance of flooding between 1 in 1000 (0.1%) and 1 in 100 (1%).
- **Very low**: each year, the area has a chance of flooding of less than 1 in 1000 (0.1%).

Table 2.1 Classification of Probability

Classification	Definition
High likelihood	The hazard event appears very likely in the short term and almost inevitable over the long term.
Likely	It is probable that an event an event is not inevitable, but possible in the short term and probable over the long term.
Low likelihood	Circumstances are under which an event could occur. However, it is by no means certain that even over a longer period such an event would take place and is less likely in the shorter term.
Unlikely	Circumstances are such that it is improbable that an event would occur even in the very long term.

The UKGBC Framework[20] risk tolerance ranges are a measure of how much risk asset owners, organisations and investors are willing to accept in relation to their built assets. The tolerance may vary depending on mitigation measures which lowers the consequence of an exposure, i.e. a flood barrier. Therefore, the consideration of an asset's risk tolerance to the physical hazard must be undertaken when deciding the consequence of the hazard. Table 2.2 presents the consequence classification of the risk as outlined in the UKGBC Framework, where possible quantitative data

[20] UKGBC (2022) *A Framework for Measuring and Reporting of Climate-related Physical Risks to Built Assets*

was supported by qualitative expert review and used to determine the classification of consequence.

Table 2.2 Classification of Consequence

Classification	Definition	Example
Severe	► Impact to the built asset likely to result in catastrophic damage to buildings/property. ► Built asset has substantial exposure to a potential loss. No or negligible effort to strengthen resilience of built asset. ► Damage to buildings/structures or services or the environment rendering asset unsafe to occupy. ► Asset is stranded. Demolition and full re-build of asset required or total write off of asset value. ► Business interruption or direct damage resulting in total financial loss. ► Asset becomes uninsurable. **££££**	Extreme winds resulting in total structural failure or foundation damage resulting in instability. Extreme flooding resulting in total structural failure. Damage to essential infrastructure that is considered uneconomical to repair.
Medium	► Impact to the built asset likely to result in high levels of damage to buildings/property, substantial re-build or substantial reduction in asset value. ► Built asset has substantial exposure to a potential loss. Limited effort to strengthen resilience of built asset. ► Damage to key buildings/structures/services or the environment rendering asset unsafe to occupy. ► Business interruption or direct damage resulting in substantial financial loss or expenditure to resolve. ► Insurance premiums on asset rises substantially. **£££**	Extreme winds causing full roof replacement. Extreme flooding resulting in partial (e.g. ground floor) refurbishment. Gas infrastructure damage to built asset.
Mild	► Impact to the built asset likely to result in low levels of damage to business/property. ► Built asset has some exposure to a potential loss. Efforts have been made to strengthen resilience of built asset. ► Damage to buildings/structures/services rendering limited areas of the building unsafe to occupy or unsafe on a short-term basis. ► Damage to vulnerable buildings/structures/services or the environment. ► Limited business interruption or direct damage resulting in limited financial loss or expenditure to resolve. **££**	Extreme winds causing broken windows. Extreme flooding resulting in short-term access issues. Loss of plants in a landscaping scheme.
Minor	► Impact to the built asset likely to result in no or very low levels of damage to business/property. ► Built asset has negligible exposure to a potential loss. Efforts have been made to strengthen resilience of built asset.	Extreme winds causing wind-blown debris requiring housekeeping.

Classification	Definition	Example
	► Damage to buildings/structures/services or the environment rendering limited areas of the building unsafe to occupy or unsafe on a very short-term basis. ► Damage to vulnerable buildings/structures services or the environment. ► No or limited business interruption that may result in no or negligible financial loss or expenditure to resolve. **£**	Extreme flooding resulting in water driven debris requiring housekeeping.

2.4 Criteria for rating of Risk

The assessment of risk is determined by combining the consequence and the probability of the proposed development to various climate hazards.

Risk = Consequence x Probability

The climate change risk assessment takes any proposed mitigation into account. Table 2.3 details the Risk matrix; identified risks as a result of direct physical hazards (e.g., increased rainfall causing an increase in flood risk) are scored from very high to very low risk.

Table 2.4 describes what a very high to a very low risk is defined by the UKGBC Framework criteria. Where a high-level assessment has identified moderate to high risks for any physical hazards, the UKGBC recommend undertaking a detailed risk assessment at the built asset level.

Table 2.3 Risk Matrix

		Consequence			
		Severe	**Medium**	**Mild**	**Minor**
Probability	**High likelihood**	Very high risk	High risk	Moderate risk	Moderate/low risk
	Likely	High risk	Moderate risk	Moderate/low risk	Low risk
	Low likelihood	Moderate risk	Moderate/low risk	Low risk	Very low risk
	Unlikely	Moderate/low risk	Low risk	Very low risk	Very low risk

Table 2.4 UKGBC Risk Definition

Risk Classification	Definition of Risk
Very high risk	► Catastrophic impacts to the built asset are highly likely to occur from an identified hazard, OR, these impacts have already occurred. ► Realisation of the risk is likely to result in substantial liability. ► Urgent assessment (if not undertaken already) is required to clarify the risk and to determine the potential liability, likely followed by implementation of adaptation measures for the built asset
High risk	► Substantial impacts to the built asset are likely or highly likely to occur from an identified hazard. ► Realisation of the risk is likely to present a substantial liability.

Risk Classification	Definition of Risk
	► Urgent assessment (if not undertaken already) is required to clarify the risk and to determine the potential liability. Implementation of adaptation measures for the built asset may be necessary in the short term and likely over the longer term
Moderate risk	► It is possible that impacts could arise to the built asset from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that the harm would be relatively mild. ► Assessment (if not already undertaken) is normally required to clarify the risk and to determine the potential liability. ► Implementation of adaptation measures may be required in the longer term.
Low Risk	► It is possible that impacts could arise to the built asset from an identified hazard, but it is likely that this impact, if realised, would at worst be relatively mild. ► Further assessment is not normally required and, although possible, it is unlikely that adaptation measures will be required.
Very low risk	► There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe. ► Further assessment is not normally required and, although possible, it is unlikely that adaptation measures will be required.

2.5 HPI Economic Criteria (EC) 6.1 and 6.2

The report has been completed to show compliance with the Irish Green Building Council's (IGBC) Home Performance Index (HPI)[21] economic criteria (EC) 6.1 and 6.2.

There are three levels to criteria (EC) 6.1:

- **Level 3:** Not identified on www.floodinfo.ie for Coastal and Fluvial flood events
- **Level 2**: Low probability of Coastal and Fluvial flood events occurring as identified on www.floodinfo.ie
- **Level 1**: Minimum Requirement Medium probability or High probability of Coastal and Fluvial flood events occurring as identified on www.floodinfo.ie Sites with high probability must have mitigation measures implemented and installed in their design

Evidence required to demonstrate compliance consists of:

- **Level 1–3:** Evidence of sites classification on www.floodinfo.ie
- **Level 1:** For high-risk areas, civil engineering flood report describing the measures undertaken to mitigate against flooding is submitted. Photographic evidence is required for installed mitigation measures

There are two levels to criteria (EC) 6.2:

- **Level 1**: Assessment in accordance with Appendix A of EU Taxonomy Annex satisfies the requirements of Do No Significant Harm (DNSH) - climate change adaptation to take place

[21] Government of Ireland (2021) Climate Action and Low Carbon Development (Amendment) Act 2021 (the 2021 Climate Act) (No. 32 of 2021)
IGBC (2022) Home Performance Index (HPI) Technical Manual V3.0

early in the design process (post stage 1a) and mitigation measures to be integrated into design process. Further details are provided in the EU Taxonomy Annex 1 - *7.0 Construction* and *Real Estate activities – 7.1 Construction of New Buildings* or Appendix G of the HPI Technical Manual (IGBC, 2022).

- **Level 2:** Align with EU Taxonomy Climate Change Adaptation – Substantial Contribution. The economic activity has implemented physical and non-physical solutions ("adaptation solutions") that substantially reduce the most important physical climate risks that are material to that activity. Further details are provided in the EU Taxonomy *Annex 1 - 7.0 Construction* and *Real Estate activities – 7.1 Construction of New Buildings* or Appendix E of the HPI Technical Manual (IGBC, 2022).

Evidence required to demonstrate compliance consists of:

- Climate Risk and Vulnerability Assessment Report is signed by relevant design team members and developer and submitted to IGBC.
- Evidence of implementation of adaptation solutions outlined in the CRVA Report. Photographic evidence is required for physical solution

2.6 EU Taxonomy "substantial contribution" and climate hazards

When considering what qualifies as a Substantial Contribution under HPI (EC) 6.2 Level 2 (detailed in Appendix E of the HPI Technical Manual), EU Taxonomy[22] states that the proposed development must show it has:

- Implemented physical and non-physical solutions ("adaptation solutions") that substantially reduce the most important physical climate risks that are material to that activity.
  - The physical climate risks that are material to the activity have been identified from those listed in Appendix A to this Annex[23] by performing a robust climate risk and vulnerability assessment with the following steps:
    - screening of the activity to identify which physical climate risks from the list in Appendix A to this Annex may affect the performance of the economic activity during its expected lifetime;
    - where the activity is assessed to be at risk from one or more of the physical climate risks listed in Appendix A to this Annex, a climate risk and vulnerability assessment is required to assess the materiality of the physical climate risks on the economic activity;
    - an assessment of adaptation solutions that can reduce the identified physical climate risk.
- The climate risk and vulnerability assessment is proportionate to the scale of the activity and its expected lifespan, such that:
  - for activities with an expected lifespan of less than 10 years, the assessment is performed, at least by using climate projections at the smallest appropriate scale;
  - for all other activities, the assessment is performed using the highest available resolution, state-of-the art climate projections across the existing range of future scenarios consistent with the expected lifetime of the activity, including, at least, 10-to-30-year climate projections scenarios for major investments.
- The adaptation solutions implemented:

[22] European Commission (2021) Document C (2021)2800 Annex 1 Appendix A supplementing Regulation (EU) 2020/852

[23] https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800-annex-1_en.pdf

- do not adversely affect the adaptation efforts or the level of resilience to physical climate risks of other people, of nature, of cultural heritage, of assets and of other economic activities;
- favour nature-based solutions or rely on blue or green infrastructure to the extent possible;
- are consistent with local, sectoral, regional or national adaptation plans and strategies;
- are monitored and measured against pre-defined indicators and remedial action is considered where those indicators are not met;
- where the solution implemented is physical and consists in an activity for which technical screening criteria have been specified in this Annex, the solution complies with the Do No Significant Harm technical screening criteria for that activity.

The physical climate change hazards listed in Appendix A of the Annex (referenced in the text above) have been reviewed and the most relevant are discussed by the Climate Hazard Initial Screening in Section 3.1.2.

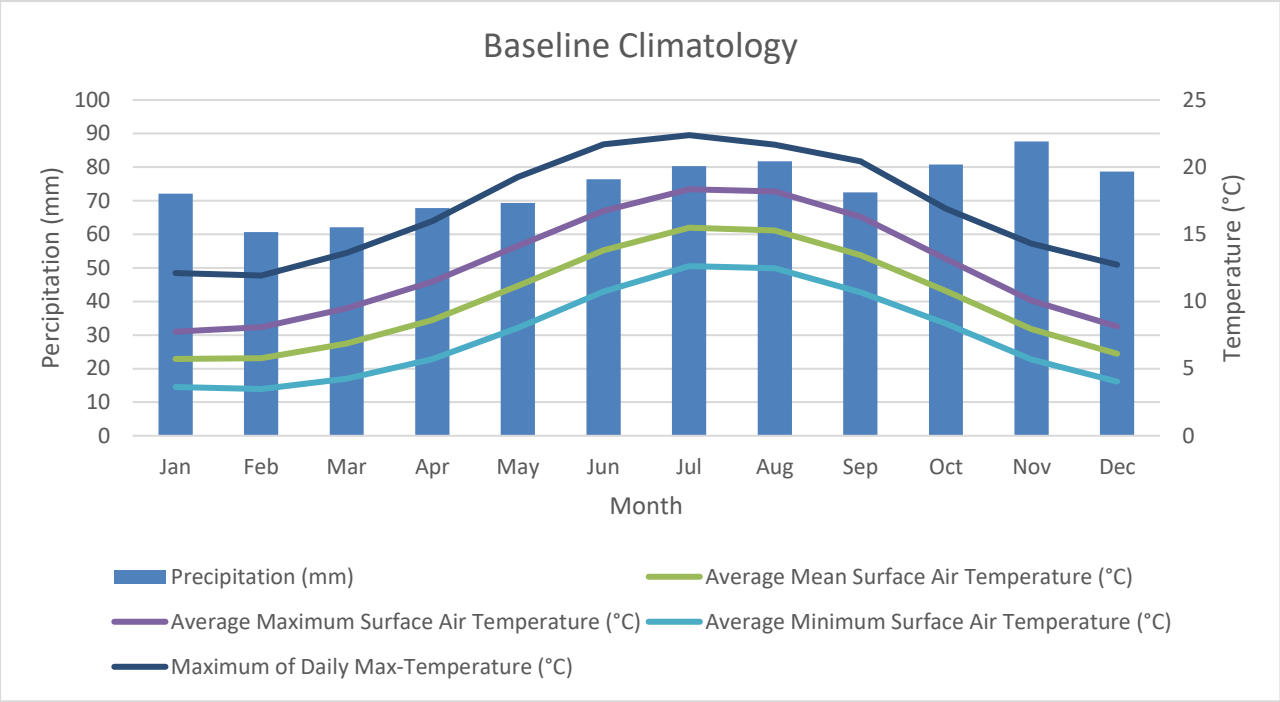
3. CLIMATE CHANGE RISK ASSESSMENT

3.1 Step 1- Review of the site and Dublin's historical baseline climate & initial screening of climate hazards

3.1.1 Baseline Climatology

The baseline climate data (Figure 3.1) is taken from a historical observation across Dublin from 1991 – 2020. A summary of notable events that have impacted the area around the site and surrounding region is provided in Table 3.1 with further detailed provided. It should be noted that local authorities in the wider Dublin region have raised drought and climate concerns over the last two decades relating to changing climate conditions.

Figure 3.1: Monthly average climatology across the observed baseline period (1991-2020)



3.1.1.1 Historical Events (1980-present)

Since the 1980s Dublin and the proposed site area have been exposed to several significant hazards most notably storms which have combined high winds and large volumes of precipitation leading to flooding. Most recently extreme temperatures are occurring, increasing the risk of water scarcity as referenced in Ireland's *National Climate Change Risk Assessment* (2025)[24].

[24] EPA (2025) National Climate Change Risk Assessment. Available at: EPA Climate Ireland | National Climate Change Risk Assessment

Table 3.1 Notable Historical Climate Events[25]

Year	Hazard type	Period	Description
2018	Cold Snap and Storms *('Beast from the East' & Storm Emma)*	Early 2018 (Feb-March)	Severe cold snap with significant snowfall and freezing temperatures
2018	Drought	Summer 2018	Dry summer in the region led to water scarcity across reservoirs[26]
2018	Heatwave	May – July	Extended periods of temperatures exceeding 25°C and maximum of 32°C recorded in
2022	Heatwave	July	The highest temperature recorded in Dublin 33°C lasting for 24 days.
2025	Storm Éowyn	January	Large violent storm which significantly impacted all of Ireland including Dublin. Red weather warnings were issued across several regions in Ireland and Orange for the Dublin region[27].

3.1.1.2 Temperature

June, July and August are the warmest months with average mean temperatures of 13-15°C and maximum mean daily temperatures above 22°C (Figure 3.1). There has been a trend of increasing maximum and mean temperatures across Ireland and Dublin during the observed baseline period, with the top twenty hottest days occurring in the last twenty years from 2003-2023.

The maximum daily air temperature was recorded in July 2022 reaching 33°C, which coincided with the 2022 heatwave and Ireland's hottest year on record.[28] There have been three notable high temperature events that have impacted Dublin and the proposed development site across the observed baseline period, including a Yellow High Temperature warning issued by Met Éireann for July 2022 and a heatwave event in August 2022 and August 2025.[29]

December to February are the coldest months with mean temperatures of 5-6°C and minimum mean daily temperatures of -1°C each month. The annual average number of frost days (days <0°C) across the baseline are 12.1 days with several years having notable cold spells and low temperature with snow recorded across the observed baseline period most notable in 2018 during the 'Beast from the East'.

3.1.1.3 Precipitation

The Dublin region receives a lower than average volume of rainfall annually across the baseline (average ~800mm) when compared with other regions in Ireland. November is the wettest month on average with 87.6mm of rainfall across the baseline (Figure 3.1). The remaining months are also notably high with average precipitation ranging from 72mm in September to 81mm in August.

[25] World Bank Climate Data (2025) Historical Events Record. Available at: IrelandIRL - Historical Natural Disasters | Climate Change Knowledge Portal
[26] O'Halloran, T et al. (2023) 'Compound climate events in Ireland: The Beast from the East and the summer drought of 2018', *Weather*, 78(1), pp. 2–8. Available at: https://rmets.onlinelibrary.wiley.com/doi/am-pdf/10.1002/wea.4586.
[27] Irish Time (2024) Storm Éowyn Dublin update: Extensive damage in the capital as shops, transport and services begin to return – The Irish Times
[28] Met Éireann (2022) 2022: Provisionally Ireland's Warmest Year on Record - Met Éireann - The Irish Meteorological Service
[29] RTE New (2025) High temperature warning issued for Ireland tomorrow

Large winter rainfall often coincides with large low pressure Atlantic systems moving eastwards over the Irish coast across the winter period.

Across the baseline February is the driest month with 61mm and spring the driest season with monthly averages ranging from 62-69mm (Figure 3.1). Summer while the warmest months are also markedly wet with monthly average precipitation ranging from 76-81mm. These high averages also correspond with the highest daily averages received during the summer months ranging from 24-26mm. This summer rainfall high is suggestive of summer thunderstorms or convectional rainfall and not associated with Atlantic storm activity.

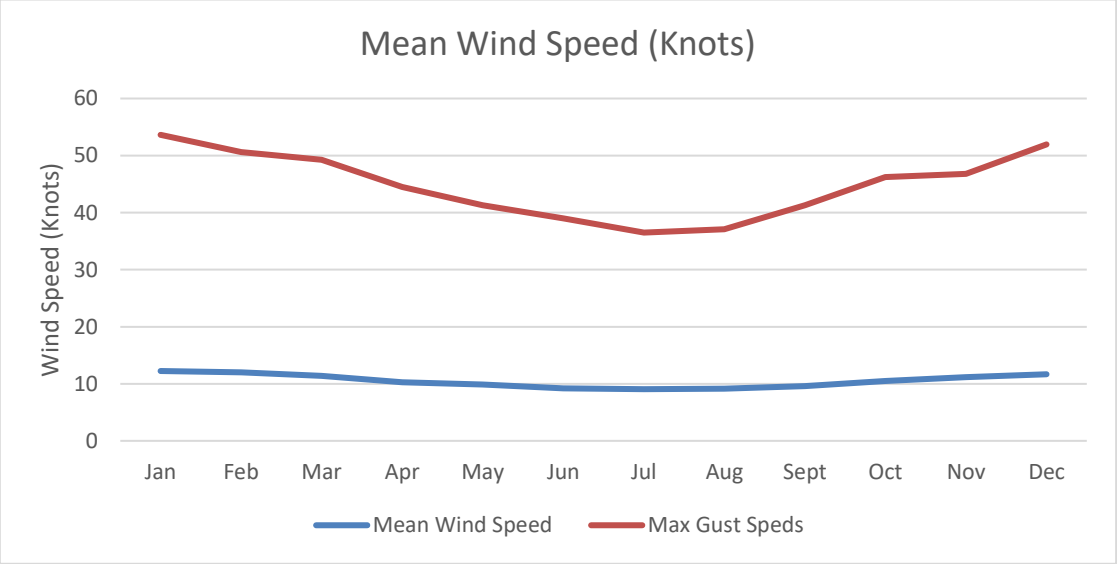
3.1.1.4 Wind and Storms

Winter is markedly the windiest season (Figure 3.2), with an average monthly wind speed of 11 knots (22 km/hr). January is the windiest month with an average wind speed of 12 knots (22.7 km/hr). During the winter and late autumn season (November-February) increases in average windspeed coincide with increased likelihood of storms aligning with historical records of storm activity across the North Atlantic and Irish Coast.

Across the observed baseline the maximum daily gust speeds across the 90th percentile is 56 knots (103km/hr), with the highest ever recorded daily gust was 80 knots (148 km/hr). This was recorded in January 2007 and coincided with the Cyclone Kyrill[30].

There have been seven notable storm and high wind events that have occurred during the observed baseline period including Storm Isha (21st January 2024) and Storm Ophelia (16th October 2017) during which Red Wind Warnings[31] were issued by Met Éireann. Orange Wind Warnings[32] were issued 18th-19th February 2022 for Storm Eunice, 7th-8th December 2021 for Storm Barra, 19th-20th August 2020 for Storm Ellen and 12th February 2014 for Storm Darwin.

Figure 3.2: Mean Monthly Windspeed across the observed baseline taken from Dublin Airport[33]



[30] Met Éireann (2018) Violent storm Eleanor.
[31] Issued when widespread mean speeds exceed 80km/hr and widespread gusts exceed 130km/hr.
[32] Issued when widespread mean speeds are between 65 and 80km/hr and widespread gusts are between 110 and 130km/hr.
[33] Met Éireann (2025) Dublin Airport – Historical Dataset

3.1.2 Physical Climate Hazard Initial Screening

Table 3.2 provides a screening of relevant physical climate hazards as identified in the EU Taxonomy Appendix A[34]. An initial review of EU Taxonomy Appendix A screened out climate hazards which are irrelevant to the specific location, for example cyclones, hurricanes and typhoons. This screening exercise has therefore assessed the key physical climate hazards identified as relevant to the proposed development and design upon review of the baseline climatology.

Table 3.2 Physical climate hazards screening

Climate-related Hazard	Hazard Screening Rationale	Screening
High and Extreme temperatures and Heat Stress	Historical data shows rising temperatures in Ireland, particularly around Dublin. Heat and thermal expansion can damage buildings, materials, and road surfaces, and affect the lifecycle of critical assets while also impact worker's health and safety.	Screen in
Low and extreme cold temperature events	Snow and ice events pose significant risks to health, safety, and asset lifecycle. Road access may be disrupted, and low temperatures can affect assets such as workers, and infrastructure. Freeze-thaw cycles may cause cracking in concrete, burst pipes, and deterioration in road and buildings surfaces, requiring snow clearance and ice management.	Screen in
High precipitation and surface water (Pluvial) flooding	No surface water flood events have been reported on-site, nor have any major incidents been identified for this assessment. A review of the OPW Flood Maps (2025) [35]. A Site-Specific Flood Risk Assessment was carried in 2025 by CS consulting[36] the site was determined the majority of the subject site is unlikely to experience significant pluvial flooding. However, the southern portion of the site may be subject to pluvial flooding with depths exceeding approximately 2m. The topology of the site falls to the north therefore the FRA deems there to be no significant risk of pluvial flooding. Nevertheless, flooding remains a critical hazard to key components within the proposed development and has been addressed in this assessment.	Screen in
Fluvial flooding	A river runs approximately 450m north of the proposed development. The Site-Specific Flood Risk assessment shows low risk of fluvial flooding for the proposed site.	Screen in
Drought & Water Scarcity	Droughts are rare in Ireland and are categorised as ≥15 consecutive days with <0.2mm of rainfall per day. However, dry spells have occurred in Ireland and across County Dublin. Incidents of prolonged dry spells are unlikely to influence or impact the proposed development	Screen out
Wildfire	The area surrounding the site is largely developed and in close proximity to urban centres. The site is located at a reasonable distance from unmonitored land for this assessment to not view wildfire as potential climate hazard for the proposed development.	Screen out

[34] https://ec.europa.eu/finance/docs/level-2-measures/taxonomy-regulation-delegated-act-2021-2800-annex-1_en.pdf

[35] Office of Public Works (2025) Flood Mapping (CFRAM Pluvial and fluvial flooding). Available at: Flood Maps - Floodinfo.ie

[36] CS Consulting (2025) SITE SPECIFIC FLOOD RISK ASSESSMENT CLONGRIFFIN WIDER LANDS – PHASE 2

Climate-related Hazard	Hazard Screening Rationale	Screening
High winds and storms	While the site itself isn't significantly elevated, design assets (buildings and structures) may be exposed to adverse wind loads which directly impact site safety and operational efficiency. Dublin has a history of severe wind events, including Storm Éowyn and Storm Darragh (2024), which caused widespread damage across Ireland. These storms often bring heavy rainfall and flood warnings, increasing overall risk.	Screen in
Lightning	The proposed development is not elevated nor at significant risk of lighting.	Screen out
Mass Movement *(Landslides and Subsidence)*	The Geological Society of Ireland (GSI) landslide susceptibility mapping database[37] was reviewed. The area of the proposed development is categorised as Low for landslide susceptibility and has been screened out of this assessment.	Screen out
Sea level rise and coastal flooding	Not a coastal location. Approximately 1.5km from the coast.	Screen out

3.2 Step 2 - An analysis of future climate projections

3.2.1 Future climate projections

This chapter beings the analysis and review of future climate projections identified as 'Step 2' and detailed under the methodology (See Section 2.3.2).

Ireland is already experiencing increased annual rainfall in the north and west, with more variable patterns in the south and east including the area of the proposed development. Key risks identified by the EPA relevant to the proposed development include:

- Increased likelihood of more frequent and intense North Atlantic low-pressure systems bringing high rainfall and high winds.
- More intense rainfall periods which may lead to pluvial flooding and elevated fluvial levels.
- Longer dry spells and increased temperatures, increasing the risk to operations and workers and drought while reducing the likelihood of cold and ice.

3.2.2 Climate Change Projections and Approach taken

International best practice and national policy such as the IPCC[38], EU Taxonomy (2021), NCCRA[39], and Transport Infrastructure Ireland[40] recommends using two contrasting emission scenarios to project future climate change. This includes a moderate and high emission scenarios (RCP4.5 and RCP8.5) for future planning.

This climate change assessment uses the latest climate change projections standardised and bias corrected for Ireland available through the EPA and the TRANSLATE project[41]. The approach

[37] Geological Survey of Ireland (2025) Landslide Susceptibility Mapping. Available at: Geological Survey Ireland Spatial Resources
[38] Intergovernmental Panel on Climate Change (IPCC) (2023) 6th Synthesis report. Available at: AR6 Synthesis Report: Climate Change 2023 — IPCC
[39] EPA (2024) NCCRA, Technical Guidance on Sectorial Risk Assessment: EPA Climate Ireland | Sectoral adaptation guidance
[40] Transport Infrastructure Ireland (TII) (2022) PE-ENV-01104: Climate Guidance for National Roads, Light Rail and Rural Cycleways (Offline & Greenways) – Overarching Technical Document.
[41] Environmental Protection Agency (2025) Climate Ireland Data Explorer. O'Brien, E. and Nolan, P., 2023. TRANSLATE: standardized climate projections for Ireland.

followed for this assessment is further explained in Section 2.3.2 of the Methodology.

3.2.3 Data Caveats and Uncertainty Across Projections:

This assessment uses the latest Ireland CIMP5 climate projections downscaled and bias corrected for Ireland. Providing site specific projections within a 1.5km^2. Whilst there is clear evidence indicating rising temperatures, changes to precipitation and flood risk, there is uncertainty regarding the pace of change due to both the implementation of greenhouse gas emission reduction targets and the response of the climate system.

This uncertainty is reduced by assessing future climate change under two future climate change pathways (scenarios) as has been the approach of this assessment. However, it is important to recognise that projection data cannot be taken as an exact representation of the future and rather should be interpreted as an indication of trends in the area.

3.2.3.1 Temperature (Hot and Cold) and extremes

	Annual and monthly mean temperatures are projected to increase although lengthy heatwaves remain unlikely, hot spells lasting several days to over a week are likely with the number of summer days (>25°C) increasing across the century. Temperature extreme (90th percentile range) project a +2°C by 2050 compared to the baseline suggesting hotter summers, however the occurrence of ≥30°C remains very low.
	Annual mean and daily temperatures are projected to increase across both RCPs throughout the century. The number of frost days per year is projected to decrease significantly by over 50% under RCP4.5 by mid-century. Suggesting more mild winters and less exposure to significantly impactful cold snaps. Extreme heat (≥30°C) is not projected however, higher temperatures above 25°C is projected through the century as mean and daily maximums increase

Table 3.3 Complete annual temperature variables for both RCP scenarios up to 2100 compared to the Baseline

Variable	Baseline	RCP4.5		RCP8.5	
	1976-2005	2041-2070	2071-2100	2041-2070	2071-2100
Mean Values (°C)					
Mean Temperature	10.2	11.3	11.8	11.8	13
Mean Maximum	13	14	15	15	16
Mean Minimum	7.1	8.2	8.6	8.7	9
Daily Extremes (°C)					
Daily Maximum	24	26	26	26	27
90th Percentile Extreme[42]	-	27	27	27	28
Daily Minimum	-3	-2	-1	-3	-0.6
10th Percentile Extreme	-	-3	-2	-4	-1
Occurrence (Annually)					

[42] The 90th and 10th percentile ranges represent the more extreme ranges of the projection but not anomalies. This ranges provide insight into less frequent events.

Variable	Baseline	RCP4.5		RCP8.5	
	1976-2005	2041-2070	2071-2100	2041-2070	2071-2100
No. Summer Days[43]	1.5	2	3	4	11
No. Frost Days [44]	16	8	5	5	2

Table 3.3 above presents a summary of the extreme value ranges of the projection (90th and 10th percentile). These provide insight into the less frequent but still likely events which may impact the proposed development. On review of temperature extremes which often are the most disruptive and impactful to materials, infrastructure, and safety, projected changes show increasing daily maximum temperatures with +27°C more likely, however still not projected within the extreme ranges.

The occurrence of ≥25°C 'summer days' is projected to gradually increase across the century with summer season temperatures likely to exceed 25°C across both the mean and 90th percentile projections suggestion a regular occurrence of greater than 25°C. The number of hot days (>30°C) is not projected to occur however is more likely given this increasing trend.

3.2.3.2 Precipitation and Flooding

	Annual mean rainfall is projected to increase by approximately 40 mm (RCP4.5) and 60mm (RCP8.5) by mid-century. While the number of rainfall days remains relatively unchanged, overall increases are driven by higher rainfall intensity and greater winter volumes. Maximum one-day rainfall is expected to rise under both RCPs, increasing the risk of pluvial flooding and pressure on drainage systems.

Table 3.4 Complete annual precipitation projection across both RCPs

Variable	Baseline	RCP4.5		RCP8.5	
	1976-2005	2041-2070	2071-2100	2041-2070	2071-2100
Precipitation (mm)					
Annual Precipitation	708	748	766	768	800
Max 1 Day	34	40	40	42	45
Max 5 Day	60	63	64	66	69
Occurrence (Annually)					
No. Wet Days[45]	133	131	132	131	130
No. Days ≥20mm	3	3	3.8	4	4
No. Very Wet Days (≥30mm)	0.6	1	1	1	1.5

[43] Number of days with maximum temperature >25°C.
[44] Number of days when minimum temperatures are <0°C.
[45] Number of days with daily precipitation amount ≥1 mm

3.2.3.3 Storms and high winds

	Mean 10m wind speeds are projected to decrease marginally. Maximum gust speeds are to remain consistent with historical data while more frequent Atlantic storm events may elevate exposure to such high winds. Summer wind speeds are projected to decrease on average but with more variability due to storm events.

There is a high degree of uncertainty associated with projections for wind speed due to the complex nature of underlying dynamics such as temperature, pressure and local topography that make it difficult to capture small-scale wind events. At the time of writing this assessment, wind projections for Ireland and from the EPA translate project - Climate Ireland - remain in development[46].

Climate Ireland and the EPA do identify several key points regarding projected future wind speed which this report has used in its analysis.

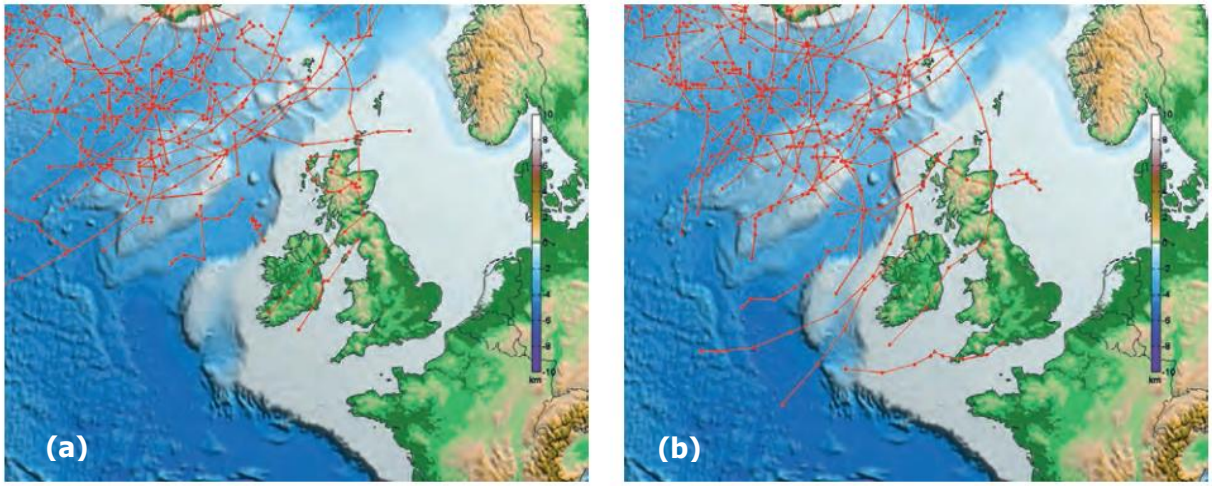
- Projections at a European scale suggest a reduction in mean wind speed over Ireland but an increase in variability.
- Clustering of windstorms will increase in many areas of Europe over coming decades.
- Projections indicate a decrease in the number of less intense storms for Ireland with an increase in more intense storms which are rare events. However, due to a limited number of studies, these projections should be considered with a high level of caution.[47]

Figure 3.3 (a) below presents historical storm paths across Ireland from 1981-2000 while comparing to future projected storm tracks for 2041-2060 under RCP8.5 (Figure 3.3 (b)).

There is a clear pattern of large low pressure storm systems extending further south over Ireland potentially impacting the proposed development in the future. Extreme storm events comparable to Storm Éowyn are identified to occur predominately over winter which aligns with the projected increases in mean winter wind speeds discussed above. Increases in sea surface temperature and wind patterns across the Atlantic may increase the intensity of such storms, increasing the likelihood of violent storms (≥100km/h) in the future however these are expected to remain rare events. On average Ireland experiences 8 named storms annually[48], an alteration of the storm tracks due to climate change will increase this number and ultimately lead to increased exposure to high winds and storm force gusts.

[46] Copernicus (2019) Copernicus Interactive Climate Atlas.
[47] Climate Ireland (2025) EPA Climate Ireland | Future Climate of Ireland
[48] Data from combined Met Éireann, UK Met Office and Dutch Meteorological services

Figure 3.3:Tracks of storms with a core mean sea level pressure of <940hPA and with a lifetime of at least 12 hours. (a) Past regional climate model (RCM) 18km simulations (1981-2000) and (b) RCP8.5 RCM 18km simulations (2041-2060). Source: Nolan (2015). [49]



3.2.3.4 Drought and Dry Spell

	The occurrence of dry spells is projected to increase, however the occurrence of a meteorological drought (≥15 days or more with <1mm precipitation) remains unlikely.

A meteorological drought is defined as a period of ≥15 consecutive days with less than 0.2mm rainfall each day[50]. Historically, this is rare across the region, yet dry spells (consecutive days with minimal levels of rainfall) are more common during the summer months.

Future projections provide insight in the likelihood of drought, dry spell and hydrological drought as the factors causing such events are more likely such as:

i. Elevated temperatures (+1-2°C Mean temperature by 2050) and more likely extremes (~28-30°C),
ii. Combined with decreasing summer rainfall.

These conditions together factor into an increased probability of hydrological drought whereby reduced rainfall, elevated temperature, and reduced evaporation impact water supply into the environment and critically groundwater recharge.

3.2.4 Climate Change Projections Summary

Table 3.5 Climate projections summary table for mid-century epoch (2041-2070).

Climate Hazard	Indicator	Baseline (1976-2005)	RCP4.5 (2041-2070)	RCP8.5 (2041-2070)
Temperature	*Mean temp (°C)*	10.2	11.3	11.8
	Mean Max temp (°C)	13	14	15

[49] Nolan, P. (2015) Ensemble of regional climate model projections for Ireland.
[50] Met Éireann (2024) Drought description.

Climate Hazard	Indicator	Baseline (1976-2005)	RCP4.5 (2041-2070)	RCP8.5 (2041-2070)
	Mean Min temp (°C)	7.1	8.2	8.7
	Mean Daily Max temp (°C)	24	26	26
	Daily Max Temp 90th percentile (°C)	-	27	27
	Frost Days annually (no. of days)	16	8	5
Precipitation and Flooding	*Annual precipitation (mm)*	708	748	768
	Max 1-day (mm)	34	40	42
	No. Days ≥20mm	3	3	4
Storms and high winds	*Number of Storms Qualitative (Description)*	On Average 8 named storms annually with speeds exceeding 100km/hr (N.1)	Overall 10m mean windspeed is projected to decrease marginally (~<1%) across all seasons of the year with a high degree of certainty. Winter storm frequency is projected to increase, with a possible extension of the storm season. While the intensity of individual storms cannot be accurately projected, storm wind speeds are likely to remain above 100 km/hr. Meaning the current impacts are likely to remain as such without mitigation and adaptation (EPA, 2024c).	
	Max Gust Speed 90th percentile (Knots)	56 (N.2)		
Drought	*Dry Spell (≥5 days with less than 1mm)*	Not Often occurrence but not causing significant impact	Increasing occurrence may lead to great impact on water availability. This is less so a result of drought but of hydrological drought and reduced water recharge into reservoirs.	
Note-1: Data from combined Met Éireann, UK Met Office and Dutch Meteorological services.				
Note-2: Data from Dublin Airport approximately 6km from the site. Met Éireann Dataset (2025)				

3.3 Step 3 - Climate Change Risk Assessment

This section initiates the climate change risk assessment process, as outlined in Section 2.3. The baseline climatology provided in Section 3.1 will be evaluated against the projected future climate changes detailed in Section 3.2. Using the classification of probability and consequence of impact outlined in Section 2.3.2. a final risk assessment using the UKGBC Framework will be presented in the following section.

To determine the potential vulnerability and risk of the proposed development to physical climate change hazards the assessment as utilised as instructed by the LDA - the UK Green Building Council (UKGBC) *A Framework for Measuring and Reporting of Climate-related Physical Risks to Built Assets*[51].

A risk register of climate-related hazards for the proposed development has been completed utilising the Frameworks downloadable template which has been amended by the LDA and provided to AWN.

Where moderate or above risks are identified, adaptative measures are required to be implemented. The Framework states that where physical risks to the asset classified as moderate,

[51] UKGBC (2022) LDA Adapted Excel framework: UKGBC Framework for Measuring and Reporting of Climate-related Physical Risks to Built Assets. Available at: Measuring & Reporting Physical Risks to Built Assets | UKGBC

high, or very high, these signal that adaptation measures should be adopted on the following timescales:

- **Very High**: Urgent implementation of adaptation measures for the built asset.
- **High Risk**: Implementation of adaptation measures may be necessary in the short term and likely over the longer term.
- **Moderate Risk**: Some implementation of adaptation measures may be required in the longer term.

The full Risk Assessment Template accompanies this report. This data is extracted directly from the completed risk assessment using the Framework and formatted for readability in the following tables:

- Table 3.6 – Contains Sections 1-3 of the completed Risk Assessment Template
- Table 3.7 – Provides the summary of the probability and consequence and overall risk
- Table 3.8 – Shows a breakdown of the overall risk and cost of impact
- Table 3.9 - Shows a summary of Section 4 (Table 2) of the completed Risk Assessment Templatet
-
- Table 3.10 – Contains Section 5 of the completed Risk Assessment Template

Table 3.6 Section 1 - 3 of the UKGBC Framework Risk Assessment

Section 1: Initial Information

Name of asset	Clongriffin Wider Lands
Date of assessment	04/02/2026
Asset type	Residential Project
Asset location	Clongriffin Wider Lands, Dublin
Expected duration of asset life	50 years
Define timeline of interest for risk assessment:	50 years
Short-term:	2020s
Medium-term:	2030s–2050
Long-term:	2050s–2100
Define boundaries of risk assessment:	
Boundary for direct risks	Project redline boundary
Boundary for indirect risks	Greater Dublin Area or Ireland
Identify any indirect risks to consider	Utilities, road and public transport infrastructure
Identify physical hazards to be assessed in **Table 2**.	
Have you excluded any physical hazards from the risk assessment? If yes, record reasons behind this decision.	Following an initial Climate Hazard Screening the following hazards were excluded: cold and frost waves (included within extreme cold temperatures); mass movement; Water scarcity; and Sea level rise
Identify chosen climate scenarios	RCP4.5 & RCP8.5
Identify datasets and tools to be used:	
Baseline assessment	World Bank ERA5 Climatology Dataset for Dublin Ireland, Met Eireann, Climate Ireland, Think Hazard, OPW Flood Risk, Geological Survey Ireland
Future assessment	Met Eireann, Climate Ireland, Think Hazard, OPW Flood Risk, Geological Survey Ireland

Section 2: Assessing Baseline Risk from Physical Hazards

Has a physical risk assessment been undertaken for the asset previously? If yes, provide details here.	No this is a proposed asset. Review of historical flood events from OPW has been conducted and site has no history of flood events. A review of the GSI dataset for landslide events also indicates no history of events within the local area.
Has the asset been impacted by any physical hazards historically? If yes, provide details in **Table 1** below.	

Table 1 - Historical impact from physical hazards					
Description of physical hazard	n/a	n/a	n/a	n/a	n/a
Date of occurrence	n/a	n/a	n/a	n/a	n/a
Impact to asset	n/a	n/a	n/a	n/a	n/a
Adaptation measures incorporated as a result of impact	n/a	n/a	n/a	n/a	n/a

Describe how any inherent vulnerabilities or resilience the asset has to this physical hazard has been incorporated into the assessment of consequence.	There are no known baseline physical hazards at this site.

For this section, consider each physical hazard in turn and provide answers in the baseline section of **Table 2** below.

Assess the likelihood of the physical hazard occurring in the current time period (probability).

Assess the impact of the physical hazard occurring in the current time period (consequence).

Use **Figure 1** to assess the overall risk to the built asset from the physical hazard

Figure 1		Consequence			
		Severe	Medium	Mild	Minor
Probability	High Likelihood	Very high risk	High risk	Moderate risk	Moderate / low risk
	Likely	High risk	Moderate risk	Moderate / low risk	Low risk
	Low Likelihood	Moderate risk	Moderate / low risk	Low risk	Very low risk
	Unlikely	Moderate / low risk	Low risk	Very low risk	Very low risk

Describe any assumptions made or limitations of the methodology used.	Design and management mitigation has been put in place when assessing the consequence magnitude.

Section 3: Assessing Future Risk from Physical Hazards

For this section, consider each physical hazard in turn and provide answers in the short, medium and long term sections of **Table 2** below.

Assess the likelihood of the physical hazard occurring in the short, medium and long term (probability).

Assess the impact of the physical hazard occurring (consequence).

Use Figure 1 to assess the future risk to the built asset from the physical hazard.

Describe any assumptions made or limitations of the methodology used.	This Assessment has used the latest CIMP5 Ireland projections and so assumes the assumptions and limitations associated with these climate projections.

Table 3.7 UKGBC Climate Change Risk Analysis (excluding description of the Risk to Built assets – See Table 3.9)

Description of physical hazard	Baseline			Future										
	Probability of risk occurring	Consequence of risk occurring	Baseline Risk Rating	Chosen Climate Scenario	Probability of risk occurring	Consequence of risk occurring	Short Term Risk	Probability of risk occurring	Consequence of risk occurring	Medium Term Risk	Probability of risk occurring	Consequence of risk occurring	Long Term Risk	Future Risk Rating
Extreme hot temperature	Unlikely	Mild	Very low risk	RCP4.5	Unlikely	Medium	Low risk	Low Likelihood	Mild	Low risk	Low Likelihood	Mild	Low risk	Moderate risk
				RCP8.5	Unlikely	Medium	Low risk	Likely	Mild	Moderate / low risk	Likely	Medium	Moderate risk	
Extreme cold temperature & frost	Unlikely	Mild	Very low risk	RCP4.5	Unlikely	Medium	Low risk	Unlikely	Mild	Very low risk	Unlikely	Mild	Very low risk	Low risk
				RCP8.5	Unlikely	Medium	Low risk	Unlikely	Mild	Very low risk	Unlikely	Mild	Very low risk	
Extreme precipitation	Low Likelihood	Mild	Low risk	RCP4.5	Low Likelihood	Medium	Moderate / low risk	Likely	Mild	Moderate / low risk	Likely	Mild	Moderate / low risk	Moderate / low risk
				RCP8.5	Low Likelihood	Medium	Moderate / low risk	Likely	Mild	Moderate / low risk	Likely	Mild	Moderate / low risk	
Storm and wind events	Low Likelihood	Minor	Very low risk	RCP4.5	Low Likelihood	Minor	Very low risk	Likely	Medium	Moderate risk	Likely	Medium	Moderate risk	Moderate risk
				RCP8.5	Low Likelihood	Minor	Very low risk	Likely	Medium	Moderate risk	Likely	Medium	Moderate risk	
				RCP8.5	Unlikely	Minor	Very low risk	Unlikely	Mild	Very low risk	Unlikely	Mild	Very low risk	
Fluvial flood	Unlikely	Minor	Very low risk	RCP4.5	Unlikely	Minor	Very low risk	Unlikely	Minor	Very low risk	Unlikely	Minor	Very low risk	Very low risk
				RCP8.5	Unlikely	Minor	Very low risk	Unlikely	Minor	Very low risk	Unlikely	Minor	Very low risk	
Pluvial flood	Low Likelihood	Minor	Very low risk	RCP4.5	Low Likelihood	Minor	Very low risk	Low Likelihood	Mild	Low risk	Low Likelihood	Mild	Low risk	Low risk
				RCP8.5	Low Likelihood	Minor	Very low risk	Low Likelihood	Mild	Low risk	Low Likelihood	Mild	Low risk	
				RCP8.5	Unlikely	Minor	Very low risk	Low Likelihood	Minor	Very low risk	Low Likelihood	Minor	Very low risk	

Table 3.8 Overall Risk Rating and Cost Impact

Description of physical hazard	Overall Risk			
	Probability of risk occurring	Interdependencies of risks	Cost Impact	Overall Risk Rating
Extreme hot temperature	Unlikely	Infrastructural damage and energy loss to grid. Likelihood of increased energy and water demand which may increase water scarcity risk.	**Minor**	Moderate / low risk
Extreme cold temperature	Unlikely	Increased heating demand; risk of burst pipes leading to water supply issues.	**Negligible**	Low risk
Extreme precipitation	Low Likelihood	Elevated flood risk; potential landslides impacting transport and utilities.	**Minor**	Moderate / low risk
Storm and wind events	Low Likelihood	Damage to power lines and transport networks; cascading effects on emergency services.	**Minor**	Moderate / low risk
Fluvial flood	Unlikely	Disruption to transport and energy infrastructure; contamination of water supplies.	**Negligible**	Very low risk
Pluvial flood	Low Likelihood	Urban drainage overload; increased pressure on emergency response systems.	**Minor**	Low risk

3.3.1 Risk Assessment for Built Assets

The Climate Change Risk Assessment in shows the primary risks are extreme hot temperatures, extreme precipitation and wind and storms. However, considering the consequence and probability of these physical hazards on the built assets listed in Table 3.9 across both RCP scenarios (4.5 and 8.5), overall risk rating is moderate/low risk. For completeness, adaptation measures have been included for each physical hazard which is screened in based on the Physical Climate Hazard Screening (Section 3.1.2). Integrated and proposed design mitigation and measures addressed via management and maintenance strategies will further reduce the consequence of these risks resulting in no residual risks noted and therefore no associated costs.

Table 3.9 Summary of Section 4 Risk Assessment Template from the UKGBC Framework for Measuring and Reporting of Climate-related Physical Risks to Built Assets

Description of physical hazard	Description of the risks to the built asset	Overall Risk Rating	Adaptation Measures (for moderate and high risks)			Residual Risk & Cost	
			What adaptation measures are already incorporated into the design work?	What adaptation measures are to be incorporated into the design proposal?	What adaptation measures are to be addressed via management and maintenance strategy?	Residual risk, if any, following adaptation measures?	Cost of residual risk, if any?
Extreme hot temperature	**Structure and building:** Deterioration of building materials, reducing lifetime development. **Public Realm:** Prolonged periods of heat and drought may lead to plant stress, reduced vegetation cover, and increased maintenance requirements, potentially impacting the visual quality and microclimatic function of landscaped areas. **Transport:** High temperatures could result in ground subsidence due to reduced soil moisture causing settlement and cracking of the pavement. Additionally, high temperatures could damage on roads/pavement, e.g. softening, traffic-related rutting, migration of liquid asphalt, roadway buckling. This is generally considered applicable above 32 degrees. **Critical Systems:** High ambient temperatures may affect the performance or lifespan of external electrical components, potentially leading to overheating, equipment failure, or increased maintenance requirements if not adequately protected.	Moderate / low risk	**Building and Structures:** The development has been designed as outlined in Part L 2022 (Dwellings). Masonry Construction: Brick and blockwork are designed to BS EN 771: Part 1, BS EN 1996 (Eurocode 6: Design of masonry structures), and BS EN 1991: Parts 1-5 (thermal actions). Movement joints accommodate thermal expansion/contraction per manufacturer recommendations. Environmental Design: Surface temperatures and condensation risk have been assessed per BS 5250 and BS EN 15026 to ensure material durability under varying temperature and humidity. conditions. Thermal bridge-free construction detailed in accordance with BS EN ISO 6946, BS EN ISO 10077-1 and BS EN ISO 10077-2. Part L Quality assurance protocols will be implemented throughout construction to verify thermal performance. Building materials have been selected to withstand extreme temperatures in accordance with current standards. **Public Realm:** Landscaping and public	**Building and Structures:** The Climate, Energy and Action Statement written by EDC explains dynamic thermal modelling will be carried out at detailed design stage to analyse selected worst-case dwellings for overheating risk, and to propose design changes to mitigate that risk, if required.	**Building and Structure:** Within building any potential management plans, scheduled inspections should be included by a building surveyor to confirm no subsidence or other heat stress related issues. **Public Realm:** Maintenance plan for landscaping to include for consideration of design change where heat stress is causing chronic disturbance, changes should be in line with best practice and with consideration of water requirements as heat stress may be linked to water shortage. **Critical Systems:** Electrical building standards will be monitored on a regular basis to ensure operational efficiency.	N/A	**Negligible**

Description of physical hazard	Description of the risks to the built asset	Overall Risk Rating	Adaptation Measures (for moderate and high risks)			Residual Risk & Cost	
			What adaptation measures are already incorporated into the design work?	**What adaptation measures are to be incorporated into the design proposal?**	**What adaptation measures are to be addressed via management and maintenance strategy?**	**Residual risk, if any, following adaptation measures?**	**Cost of residual risk, if any?**
			realm design will consider elevated temperatures such as those projected and extreme temperatures ≥30C will be accommodated by the design. Through selection of species that will not demand excessive water input. **Transport: S**ubstantial planting incorporated in the landscape plan, reduces risk of heat island effect and risk to road infrastructure. **Critical Systems:** Electrical equipment including boards, cabling etc are either buried, internal or suitably I.P rated and protected and therefore mitigated against extreme temperatures.		Any potential management plans to include for annual reviews of maintenance and effectiveness of mechanical and electrical equipment with regards heat stress risk. Upgrades will be budgeted for where equipment is considered no longer fit for purpose or at risk from heat stress.		
Extreme cold temperature	**Structures and building:** The temperature ranges in the Translate data set produced by Met Eireann consider to -10 degrees Celsius. In future scenarios the impact of climate change is such that ice, frost and snow events are significantly reduced. **Public Realm:** Extreme cold may cause frost damage to vegetation, soil heaving, and root dieback, reducing plant survival rates and affecting the visual amenity and biodiversity function of landscaped areas. **Transport:** Extreme cold could impact pavement deterioration through freeze-thaw impacts. At 0 degrees C, a threshold on roads with related to slipperiness (ice formation, form of precipitation:	Low risk	**Structures and Building:** Thermal Performance: The building envelope is designed to achieve specified U-values in accordance with BS EN ISO 6946, BS EN ISO 10077-1 and BS EN ISO 10077-2, and Technical Guidance Document Part L. Target values are defined in the Building Energy Performance Schedule to minimise heat loss/gain during temperature extremes. Glazed elements, external windows, rooflights will be designed to U-Value of 1.4 W/m2.K to mitigate impacts of extreme cold. **Public Realm:** The design also uses self-seeding plants within the landscape design which will naturally regrow if	**Structures and Building:** Air Source Heat Pump systems could be installed. EDC's Site Energy and Heating Strategy assessed several heating options and concluded centralised ASHP with Heating Interface Units (HIU) would be the most effective option.	**Transport:** Management of such temperatures through salting/gritting of the internal pavements/roads will be required to reduce risks.	N/A	**Negligible**

Description of physical hazard	Description of the risks to the built asset	Overall Risk Rating	Adaptation Measures (for moderate and high risks)			Residual Risk & Cost	
			What adaptation measures are already incorporated into the design work?	**What adaptation measures are to be incorporated into the design proposal?**	**What adaptation measures are to be addressed via management and maintenance strategy?**	**Residual risk, if any, following adaptation measures?**	**Cost of residual risk, if any?**
	rain/sleet/snowfall) is applicable. Low temperature (below 0 degrees C) combined with precipitation and wind can have a disruptive effect on traffic due to this slipperiness. **Critical Systems:** Extreme cold may impact the performance of external electrical components, leading to increased risk of brittleness, condensation-related faults, or temporary failure of exposed cabling and connections.		during a significant drought they were impacted in the short term due to extreme cold. **Critical systems:** Electrical systems including boards, cabling etc are either buried, internal or suitably I.P rated and protected.				
Extreme precipitation	**Building and Structures:** Extreme precipitation may lead to flooding of dwellings causing damage and reducing integrity of building materials **Public Realm:** Intense rainfall may cause erosion, surface water accumulation, or displacement of vegetation, potentially reducing the functionality and visual quality of landscaped areas and increasing maintenance needs. **Drainage:** The development site is within Flood Zone C, which is outside 1-in-1000-year Flood event including for RCP8.5 or High-End Future scenario.	Moderate / low risk	**Structures and Building:** Minimum Finished Floor level is anticipated to be 7.9m at this stage. A Site Specific Flood Risk Assessment carried out by CS Consulting notes risks from fluvial flooding and is discussed in fluvial flooding risk below. The development attenuation volume has been sized to accommodate the 1:100 year rainfall event with an additional 20% allowance to accommodate climate change effects. **Public Realm:**The planting design considers risks of future climate change. Flood tolerant planting has been utilised which increases the resilience of the landscaping. The design also uses self-seeding plants which will naturally regrow if during a significant rainfall/flood they were impacted in the short term. **Drainage:** The blue roofs shall provide attenuation for each block. The storm water for the proposed development has been designed for 1-in-100-year storm event. Blue roofs attenuate rainfall and can control the release of	**Drainage:** From a SuDs perspective, it is proposed to provide Blue Roofs to the development podium areas. These shall be supplemented by SuDS devices such as tree pits, permeable paving and bioretention areas at street level.	**Drainage and blue roofs:** Any potential management plans to include for annual reviews of maintenance and effectiveness of drainage systems including blue/green roof	N/A	**Negligible**

Description of physical hazard	Description of the risks to the built asset	Overall Risk Rating	Adaptation Measures (for moderate and high risks)			Residual Risk & Cost	
			What adaptation measures are already incorporated into the design work?	**What adaptation measures are to be incorporated into the design proposal?**	**What adaptation measures are to be addressed via management and maintenance strategy?**	**Residual risk, if any, following adaptation measures?**	**Cost of residual risk, if any?**
			water to the drainage system. This can prevent flash flooding during heavy precipitation and pollution of watercourses from overloading of sewers.				
Storm and wind events	**Building and Structures:** Storm and high-wind events may place significant pressure on buildings, potential damage to roof and balcony finishes from extreme wind, and to façade and windows from debris. **Public Realm:** High winds may uproot or damage vegetation, particularly taller species, leading to landscape degradation, debris hazards, and potential obstruction of pedestrian or vehicular routes. **Critical Systems:** High winds can damage critical systems such as electricity supply and heating systems. Debris from systems could cause further damage to dwelling or residents.	Moderate / low risk	**Building and Structure:** The scheme is designed with techniques to withstand severe weather. Façades and roofs are durable, reducing risks of damage during high winds. **Public Realm**: Tree planting considers specification of vegetation in the context of specific locations across site: low, small and robust trees are proposed at podium (mutli-stem Betula populifolia, Amelenchier lamarckii) - allowing for screening without significant impact from height or large rootball, while compact species with a raised canopy are generally proposed strategically at ground level, allowing for safe sight lines and maintenance	**Critical Systems:** There will be a PV system - The PV specialist will conduct winds calculations to determine the ballast systems required. At present there is no proposal to fix or anchor to the roof.	**Building and Structures:** Within any potential building management plans, scheduled inspections should be included by a building surveyor to confirm no issues or damage related to wind or storms within the building structures including the roof. Where maintenance is deemed required, it must be promptly completed to ensure the building is resilient to future storm events. **Public Realm:**	N/A	**Negligible**

Description of physical hazard	Description of the risks to the built asset	Overall Risk Rating	Adaptation Measures (for moderate and high risks)			Residual Risk & Cost	
			What adaptation measures are already incorporated into the design work?	**What adaptation measures are to be incorporated into the design proposal?**	**What adaptation measures are to be addressed via management and maintenance strategy?**	**Residual risk, if any, following adaptation measures?**	**Cost of residual risk, if any?**
			without the tree becoming a major hazard. Trees are proposed to be guyed and anchored in place, so as to ensure safe placement and reducing risk of movement once planted. **Critical Systems:** The mechanical strategy is for a decentralised system with all equipment enclosed in each apartment so therefore we will have no mechanical equipment on the roof.		Landscaping maintenance will review vulnerable planting annually. Removing planting that has the potential to cause damage during a storm due to previous weakening or removal of leaves which have fallen and may result in blocked drains.		
Fluvial flood	**Building and Structure:** The development site is within Flood Zone C, which is outside 1-in-1000-year Flood event including for RCP8.5 or High-End Future scenario, which accounts for the potential effects of climate change reflecting an increase in rainfall of 30%. CS Consulting SSFRA states worst-case joint probability design even of sluvial and tidal influences will not cause damage as peak water level is 5.557m AOD and finished floor level is 7.400m AOD.	Very low risk	**Building and Structure:** Minimum Finished Floor level is anticipated to be 7.9m at this stage. No further mitigation required.	N/A	N/A	N/A	**Negligible**
Pluvial flood	**Building and Structure:** CS Consulting SSFRA shows the majority of the site is	Low risk	**Building and Structure:** In discussions with DCC Drainage Division, it has been	**Building and Structure:** It is proposed to provide Blue	**Building and Structure:** Within any potential	N/A	**Negligible**

Description of physical hazard	Description of the risks to the built asset	Overall Risk Rating	Adaptation Measures (for moderate and high risks)			Residual Risk & Cost	
			What adaptation measures are already incorporated into the design work?	What adaptation measures are to be incorporated into the design proposal?	What adaptation measures are to be addressed via management and maintenance strategy?	Residual risk, if any, following adaptation measures?	Cost of residual risk, if any?
t	unlikely to experience significant pluvial flooding. However, the southern portion of the site may be subject to pluvial flooding with depths exceeding approximately 2m. In view of the local topography, which is characterised by a general slight fall to the north, the subject site is deemed to be at no significant risk of pluvial flooding. **Drainage**: Increased surface run-off caused by intense rainfall (pluvial flooding) could overwhelm drainage systems deeming them ineffective. **Public Realm:** Pluvial flooding from intense rainfall may lead to waterlogging, erosion, or displacement of planting, reducing landscape functionality and increasing the risk of localised surface water accumulation. **Critical Systems:** Heavy rainfall events may cause surface water flooding, increasing the risk of water ingress into electrical infrastructure if not sufficiently elevated or sealed, which could lead to service interruptions or equipment damage.		discussed that surface water runoff from the proposed development shall be attenuated separate to existing local surface water drainage network, this shall provide additional resilience and attenuation capacity. the proposed development shall outfall to Mayne River similar to the existing attenuation ponds. The development attenuation volume has been sized to accommodate the 1:100 year rainfall event with an additional 20% allowance to accommodate climate change effects. Public Realm: The planting design considers risks of future climate change. Flood tolerant planting has been utilised which increases the resilience of the landscaping. The design also uses self-seeding plants which will naturally regrow if during a significant rainfall/flood they were impacted in the short term. The design also acts to reduce hard standing areas which improves the ability of the development to absorb high volumes of rain during severe rain events. **Critical Systems:** Most of the cabling and electrical infrastructure is internal, buried or suitably I.P rated, and the electrical boards will sit on a plinth or contain a base that ensures the busbar/mains supply sits above finished floor level.	Roofs to the development podium areas. These shall be supplemented by SuDS devices such as tree pits, permeable paving and bioretention areas at street level.	building management plans, scheduled inspections should be included by a building surveyor to confirm no water ingression issues or damage related issues within the building structures. Where maintenance is deemed required, it must be promptly completed. Detailed design will include for further consideration of the most recent design recommendations with respect to adaptation to climate change.		

Table 3.10 Output from Section 5 of the Risk Assessment Template from the UKGBC Framework for Measuring and Reporting of Climate-related Physical Risks to Built Assets

	Section 5: Using the Framework to Disclose Physical Risk	
5.1	Describe the organisation's ongoing risk management plan including board oversight, management's role in assessing and managing climate-related risks and opportunities, and timeframe for the ongoing risk management plan.	The bord of the proposed development will identify new, emerging, and changing risks that may affect the proposed development to ensure physical and financial risks are mitigated. Risk exposure and management processes must be reviewed and updated periodically. Where multiple future risks are predicted, they must be prioritised and their potential severity assessed based on the most recent knowledge of climate change and design standards. The updates are at minimum every 5-year timescale as outlined in the EU Taxonomy, however where required updates may be more frequent. This will be done in line with the recommended IFRS S2 climate-related disclosures which superseded the Financial Disclosures (TCFD) recommendations. The implemented risk responses may involve accepting, avoiding, pursuing, reducing, or sharing risk based on results of the risk prioritisation.
5.2	Describe any quantified targets set by the organisation for physical risk reduction.	Detailed design to consider up to and including RCP8.5 and be informed by the most recent climate adaptation guidance and technical standards published.

4. DEMONSTRATION OF COMPLIANCE

The report has been completed in order to show compliance with the Irish Green Building Council's (IGBC) Home Performance Index (HPI) (IGBC, 2022) economic criteria (EC) 6.1 and 6.2:

4.1 Compliance with (EC) 6.1 Level 1 and Level 2:

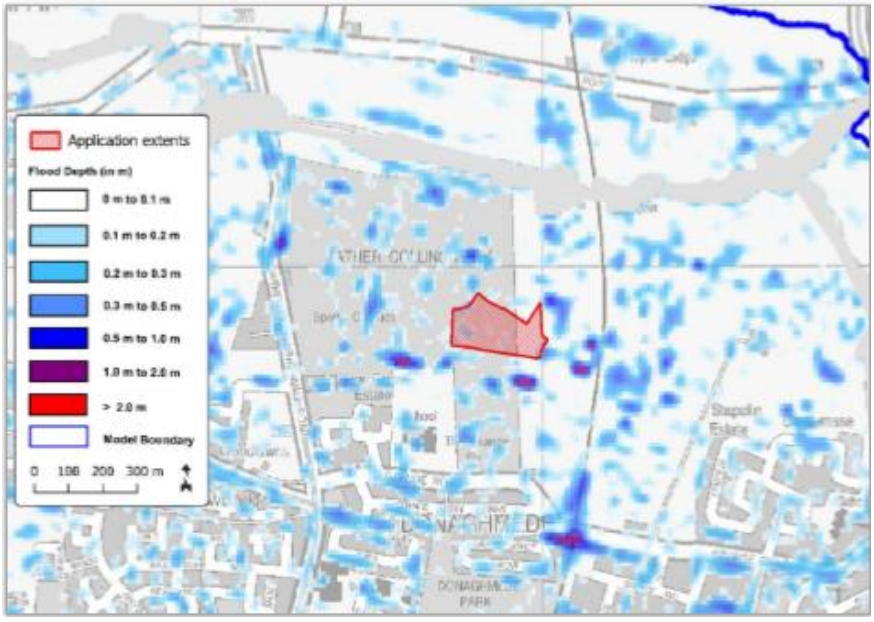
The evidence for (EC) 6.1 of the HPI (IGBC, 2022) consists of:

- Evidence of sites classification on www.floodinfo.ie.
- For high-risk areas civil engineering flood report describing the measures undertaken to mitigate again flooding is submitted. Photographic evidence required for installed mitigation measures.

The development site is located in Flood Zone C, which is outside 1-in-1000-year flood event, including for RCP8.5 or High-End Future scenario. Figure 4.1 is taken from the FRA (CS Consulting) and illustrates pluvial risk at the proposed development.

None of the OPW flood risk mapping indicates inundation of the proposed development in the above scenarios. the model indicates that the majority of the subject site is unlikely to experience significant pluvial flooding. However, the southern portion of the site may be subject to pluvial flooding. The proposed development shall be fitted with an attenuation storage system limiting storm water run-off and shall incorporate SuDS features that allow for rainwater retention and evaporation. These measures are expected to significantly mitigate the risk of pluvial flooding. As previously described (see Section 4.0), the OPW database of previous flooding events includes no records of flood events on or near the subject site. In view of the local topography, which is characterised by a general slight fall to the north, the subject site is deemed to be at no significant risk of pluvial flooding.

Figure 4.1: Pluvial flood risk taken from FRA (CS Consulting)



4.2 Compliance with (EC) 6.2 Level 1, 2 and 3

The evidence for (EC) 6.2 of the HPI (IGBC, 2022) consists of:

- A Climate Risk and Vulnerability Assessment Report is signed by relevant design team members and developer and submitted to IGBC; and
- Evidence of measures outlined in CRVA Report. Photographic evidence is required for physical solution.

The proposed development has completed the UK Green Building Council (UKGBC) *A Framework for Measuring and Reporting of Climate-Related Physical Risks to Built Assets* (UKGBC, 2022) reporting template as detailed in Section **Error! Reference source not found.**. This is recommended by the HPI Technical Manual (IGBC, 2022) to fulfil the requirements for EC 6.2: Climate Risk Level 2, which must illustrate a Substantial Contribution as per EU Taxonomy (see Table 4.1).

This CRVA has received input from the following experts working on the proposed development: Civil Engineers, Structural Engineers, Electrical Engineers, Architects, Landscape designer and Climate Consultant, and has been reviewed by the LDA as the developer of the project.

Climate adaptation has been considered throughout the design process, including additional allowances for climate change within drainage design and use of blue and green roofs. Guidelines and procedures for assessing the climate risks is being continually developed along with the associated future weather files for modelling future scenarios and therefore the assessment recommends review and updating of risk exposure and management processes periodically.

The LDA have their own *Sustainability Strategy for 2024 - 2029* (LDA 2024), which is aligned with the UN Sustainable Development Goals, European legislation, directives and ambitions, national strategic and policy objectives in the National Planning Framework, the Climate Action and Low Carbon Development Act, the Energy Efficiency Directive and the LDA Act. The LDA's Chairman foreword within the Sustainability strategy states:

"We will get ahead of the legislation and ensure that the homes and communities which we are designing and building today meet the needs of our homeowners and tenants into the future."

This CRVA has been submitted to the IGBC for review and approval as per the HPI Level 2 requirements.

Table 4.1 Confirmation of EU taxonomy Substantial Contribution Requirements

EU taxonomy - Substantial Contributions Requirements		Confirmed Completed
Implemented physical and non-physical solutions ('adaptation solutions') that substantially reduce the most important physical climate risks that are material to that activity.		Yes
The physical climate risks that are material to the activity have been identified from those listed in Appendix A to this Annex by performing a robust climate risk and vulnerability assessment with the following steps:	A. screening of the activity to identify which physical climate risks from the list in Appendix A to this Annex may affect the performance of the economic activity during its expected lifetime	Yes
	B. where the activity is assessed to be at risk from one or more of the physical climate risks listed in Appendix A to this Annex, a climate risk and vulnerability assessment to assess the materiality of the physical climate risks on the economic activity	Yes
	C. an assessment of adaptation solutions that can reduce the identified physical climate risk	Yes
	A. for activities with an expected lifespan of less than 10 years, the assessment is performed, at least by using climate projections at the smallest appropriate scale	Yes

EU taxonomy - Substantial Contributions Requirements		Confirmed Completed
The climate risk and vulnerability assessment are proportionate to the scale of the activity and its expected lifespan, such that:	B. for all other activities, the assessment is performed using the highest available resolution, state-of-the art climate projections across the existing range of future scenarios consistent with the expected lifetime of the activity, including, at least, 10-to-30-year climate projections scenarios for major investments	Yes
The adaptation solutions implemented:	A. do not adversely affect the adaptation efforts or the level of resilience to physical climate risks of other people, of nature, of cultural heritage, of assets and of other economic activities	Yes
	B. favour nature-based solutions or rely on blue or green infrastructure to the extent possible	Yes
	C. are consistent with local, sectoral, regional or national adaptation plans and strategies	Yes
	D. are monitored and measured against pre-defined indicators and remedial action is considered where those indicators are not met	Yes
	E. where the solution implemented is physical and consists in an activity for which technical screening criteria have been specified in this Annex, the solution complies with the do no significant harm technical screening criteria for that activity	Yes

5. CONCLUSION

This Climate Risk and Vulnerability Assessment (CRVA) has assessed the projected change in climate for the proposed development at Clongriffin Wider Lands and identified key climate hazards and risks it may face under both a RCP4.5 scenario and a 'worst case' high emission scenario (RCP8.5). The climate risk assessment has identified that the proposed development will be under moderate low risk from three climate hazards (extreme hot temperatures, extreme precipitation and increased frequency and magnitude of storms and winds) which are likely across both RCP4.5 and RCP8.5 scenarios, over the expected lifetime of the proposed design. The proposed development is at low or very low risk from all other climate hazards.

Adaptation opportunities have been identified to support climate resilience for the built assets. It is expected that engineers, operators and administrative teams consider the risks identified, alongside listed adaptations, and consider how to incorporate further resilience into the operations as required.

The finding of this report is that the proposed development under the existing design is resilient to projected levels of climate change across RCP4.5 and RCP8.5 scenarios.

This report demonstrates the proposed development's compliance with HPI Economic Criteria 6.1 and 6.2 and therefore makes a substantial contribution to EU Taxonomy.

APPENDIX A. GLOSSARY OF TERMS & DEFINTIONS

- **Hazard:** The potential occurrence of a natural or human-induced physical event or trend or physical impact that may cause loss of life, injury, or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, ecosystems, and environmental resources.
- **Consequence** refers to the severity of potential impacts from climate variability or change. It considers effects on people, ecosystems, species, and economic, social, and cultural assets, reflecting the magnitude of harm or benefit if a climate-related event occurs.
- **Probability** indicates the likelihood that a climate-related event or impact will occur. It is based on observed trends, climate projections, and associated uncertainties, expressing how plausible it is that a given hazard or scenario will materialize within a defined timeframe.
- **Risk:** The potential for adverse consequences for human or ecological systems, recognising the diversity of values and objectives associated with such systems. In the context of climate change, risks can arise from potential impacts of climate change, as well as human responses to climate change.
- **Sensitivity:** The degree to which people, ecosystems and species, economic, social and cultural assets, and services are affected, either negatively or positively, by climate variability or change.
- **Exposure:** The presence of people, livelihoods, species or ecosystems, environmental functions, services, and resources, infrastructure, or economic, social, or cultural assets in places and settings that could be adversely affected.
- **Vulnerability:** The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts including sensitivity or susceptibility to harm and lack of capacity to cope and adapt.
- **CIMP5 (Coupled Model Intercomparison Project Phase 5):** This phase was a major international effort to improve understanding of past, present, and future climate change through coordinated climate model experiments. CMIP5 data informed the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report and remain a key source for regional climate projections, including those used in this assessment.

Appendix 16.1 Daylight Results for Dwellings within the Proposed Development

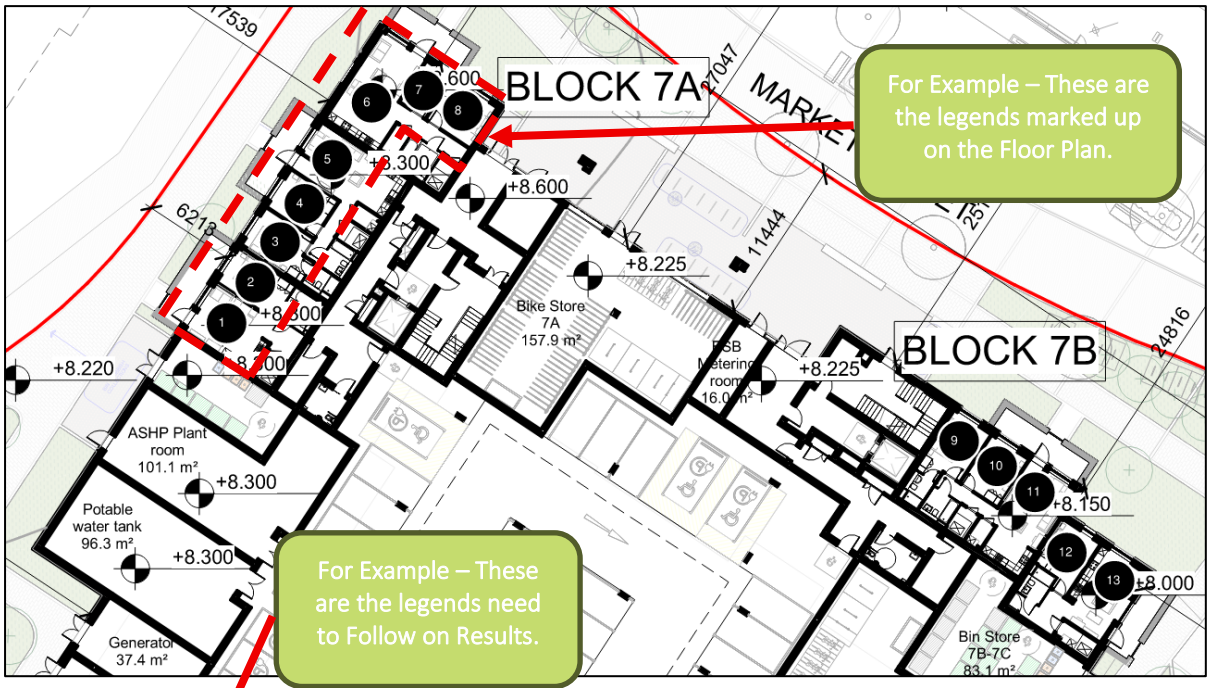
Microclimate – Daylight & Sunlight Appendix

Appendix 16.1 : Daylight Results for Dwellings within the Proposed Development

The following images illustrate the rooms assessed for internal daylight performance within the proposed development, with the corresponding results presented in the accompanying tables.

Legends

Figure 16.15 Zone 07 A & B Ground Floor Legend



Results

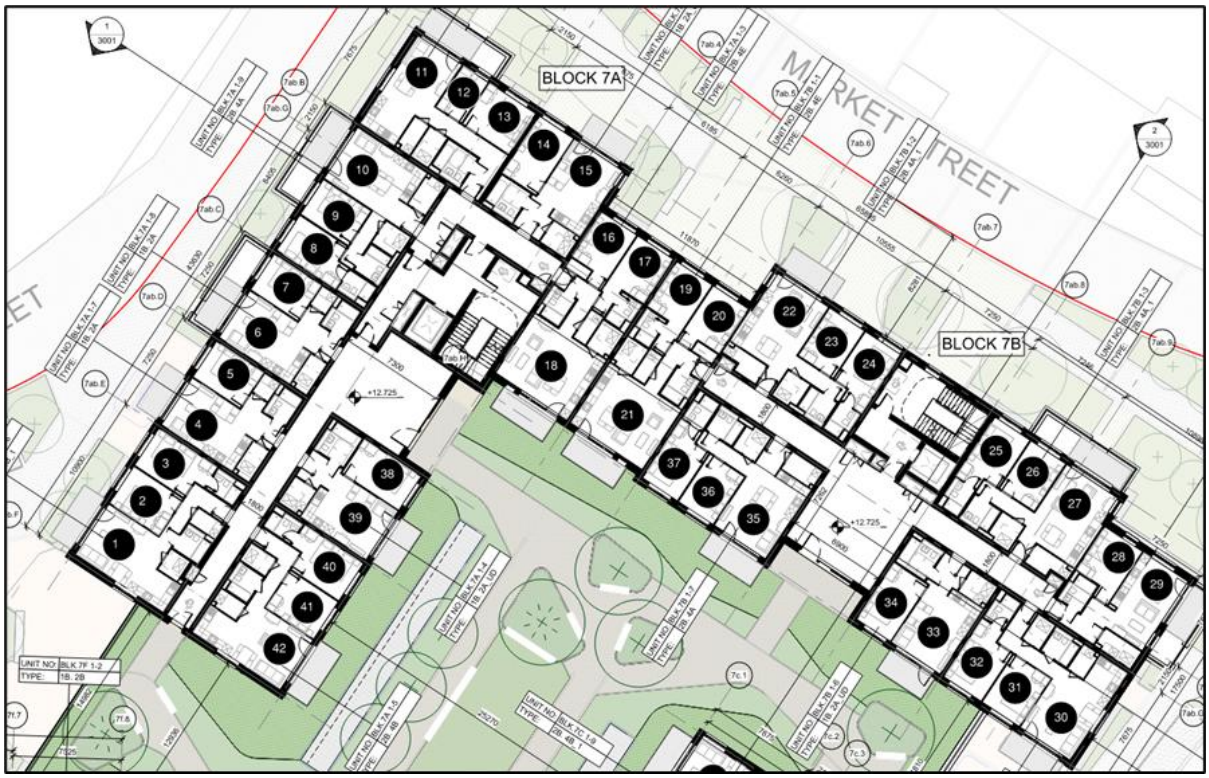
Table 16.16 BR209 Methodology Results (Zone 07 A & B Ground Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Bedroom	100%	Y	100%	Y
5	Liv/Din	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Bedroom	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Bedroom	100%	Y	100%	Y
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	96%	Y
13	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.16 Zone 07 A & B First Floor Legend



Results

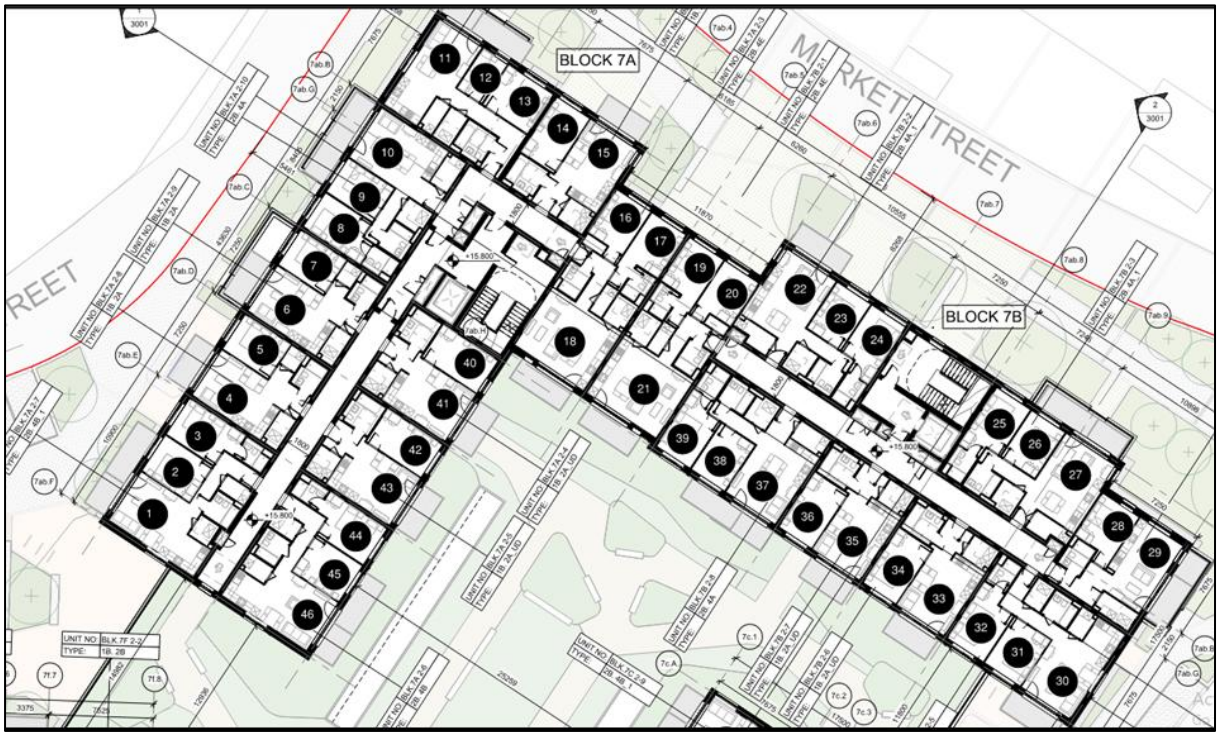
Table 16.17 BR209 Methodology Results (Zone 07 A & B First Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Bedroom	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	100%	Y	100%	Y
11	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Bedroom	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Bedroom	100%	Y	97%	Y
17	Bedroom	100%	Y	100%	Y
18	Liv/Din	100%	Y	89%	Y
19	Bedroom	100%	Y	96%	Y
20	Bedroom	100%	Y	100%	Y
21	Liv/Din	100%	Y	97%	Y
22	Liv/Din	100%	Y	100%	Y
23	Bedroom	100%	Y	98%	Y
24	Bedroom	100%	Y	97%	Y
25	Bedroom	100%	Y	100%	Y
26	Bedroom	100%	Y	99%	Y
27	Liv/Din	100%	Y	100%	Y
28	Bedroom	100%	Y	97%	Y
29	Liv/Din	100%	Y	100%	Y
30	Liv/Din	100%	Y	100%	Y
31	Bedroom	100%	Y	92%	Y
32	Bedroom	100%	Y	57%	Y
33	Liv/Din	100%	Y	57%	Y
34	Bedroom	100%	Y	61%	Y
35	Liv/Din	100%	Y	88%	Y
36	Bedroom	100%	Y	93%	Y
37	Bedroom	100%	Y	89%	Y
38	Bedroom	100%	Y	93%	Y
39	Liv/Din	100%	Y	88%	Y
40	Bedroom	100%	Y	96%	Y
41	Bedroom	100%	Y	99%	Y
42	Liv/Din	100%	Y	98%	Y

Legends

Figure 16.17 Zone 07 A & B Second Floor Legend



Results

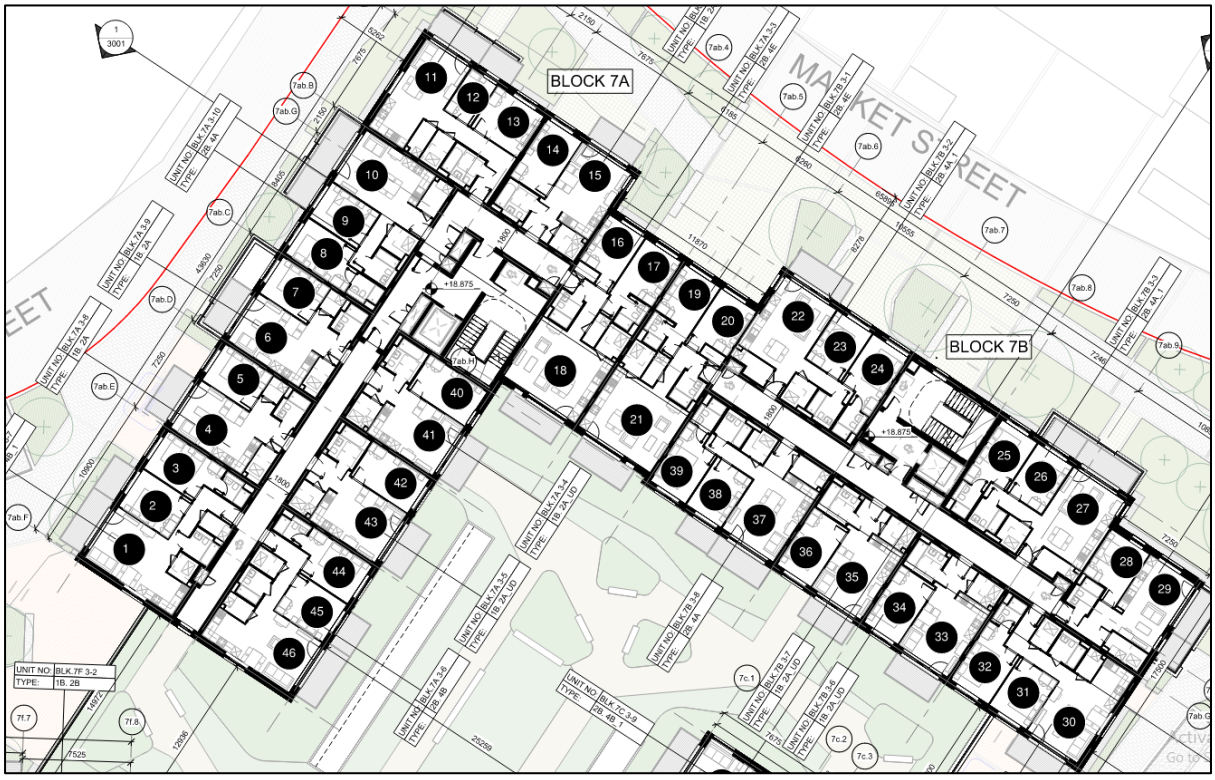
Table 16.18 BR209 Methodology Results (Zone 07 A & B Second Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Bedroom	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	100%	Y	100%	Y
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
15	Liv/Din	100%	Y	100%	Y
16	Bedroom	100%	Y	96%	Y
17	Bedroom	100%	Y	100%	Y
18	Liv/Din	100%	Y	98%	Y
19	Bedroom	100%	Y	100%	Y
20	Bedroom	100%	Y	100%	Y
21	Liv/Din	100%	Y	99%	Y
22	Liv/Din	100%	Y	100%	Y
23	Bedroom	100%	Y	100%	Y
24	Bedroom	100%	Y	98%	Y
25	Bedroom	100%	Y	100%	Y
26	Bedroom	100%	Y	100%	Y
27	Liv/Din	100%	Y	100%	Y
28	Bedroom	100%	Y	98%	Y
29	Liv/Din	100%	Y	100%	Y
30	Liv/Din	100%	Y	100%	Y
31	Bedroom	100%	Y	96%	Y
32	Bedroom	100%	Y	92%	Y
33	Liv/Din	100%	Y	69%	Y
34	Bedroom	100%	Y	56%	Y
35	Liv/Din	100%	Y	62%	Y
36	Bedroom	100%	Y	85%	Y
37	Liv/Din	100%	Y	92%	Y
38	Bedroom	100%	Y	96%	Y
39	Bedroom	100%	Y	99%	Y
40	Bedroom	100%	Y	100%	Y
41	Liv/Din	100%	Y	90%	Y
42	Bedroom	100%	Y	98%	Y
43	Liv/Din	100%	Y	94%	Y
44	Bedroom	100%	Y	100%	Y
45	Bedroom	100%	Y	99%	Y
46	Liv/Din	100%	Y	99%	Y

Legends

Figure 16.18 Zone 07 A & B Third Floor Legend



Results

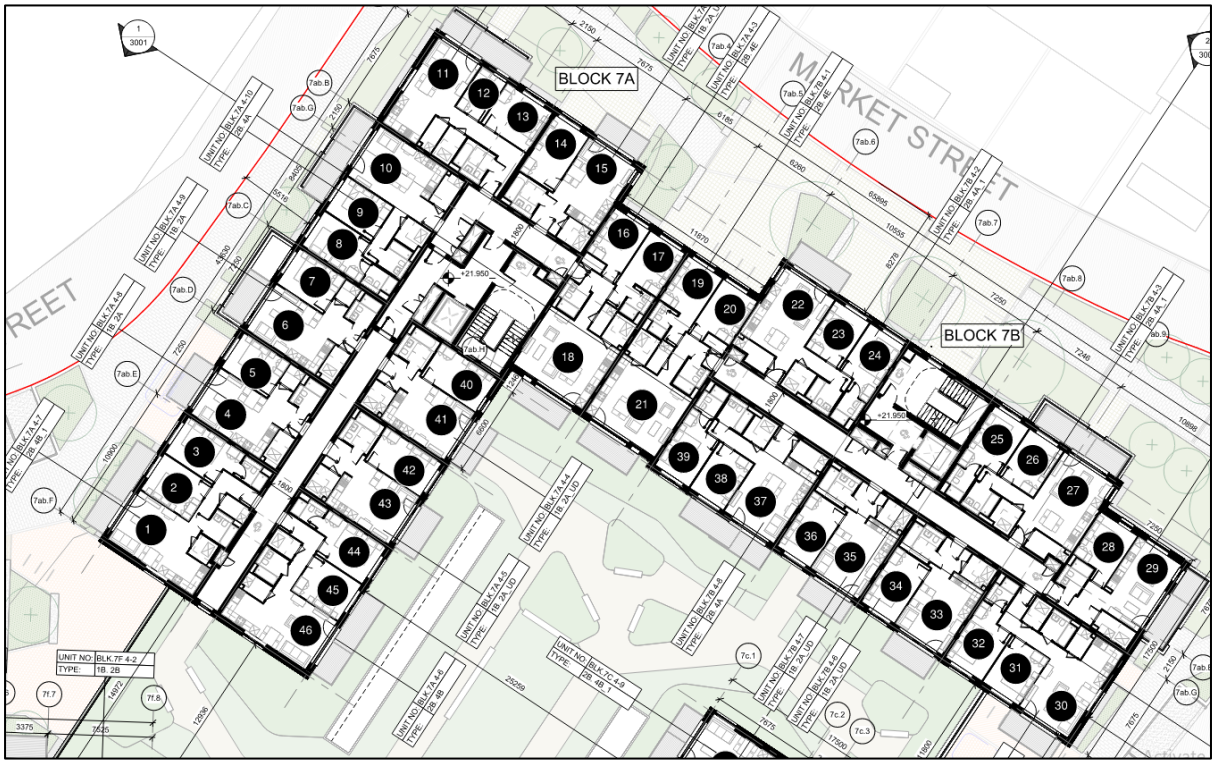
Table 16.19 BR209 Methodology Results (Zone 07 A & B Third Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Bedroom	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	100%	Y	100%	Y
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Bedroom	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Liv/Din	100%	Y	97%	Y
19	Bedroom	100%	Y	100%	Y
20	Bedroom	100%	Y	100%	Y
21	Liv/Din	100%	Y	100%	Y
22	Liv/Din	100%	Y	100%	Y
23	Bedroom	100%	Y	100%	Y
24	Bedroom	100%	Y	100%	Y
25	Bedroom	100%	Y	100%	Y
26	Bedroom	100%	Y	100%	Y
27	Liv/Din	100%	Y	100%	Y
28	Bedroom	100%	Y	91%	Y
29	Liv/Din	100%	Y	100%	Y
30	Liv/Din	100%	Y	100%	Y
31	Bedroom	100%	Y	95%	Y
32	Bedroom	100%	Y	96%	Y
33	Liv/Din	100%	Y	70%	Y
34	Bedroom	100%	Y	68%	Y
35	Liv/Din	100%	Y	69%	Y
36	Bedroom	100%	Y	86%	Y
37	Liv/Din	100%	Y	92%	Y
38	Bedroom	100%	Y	95%	Y
39	Bedroom	100%	Y	100%	Y
40	Bedroom	100%	Y	89%	Y
41	Liv/Din	100%	Y	97%	Y
42	Bedroom	100%	Y	100%	Y
43	Liv/Din	100%	Y	97%	Y
44	Bedroom	100%	Y	100%	Y
45	Bedroom	100%	Y	100%	Y
46	Liv/Din	100%	Y	99%	Y

Legends

Figure 16.19 Zone 07 A & B Fourth Floor Legend



Results

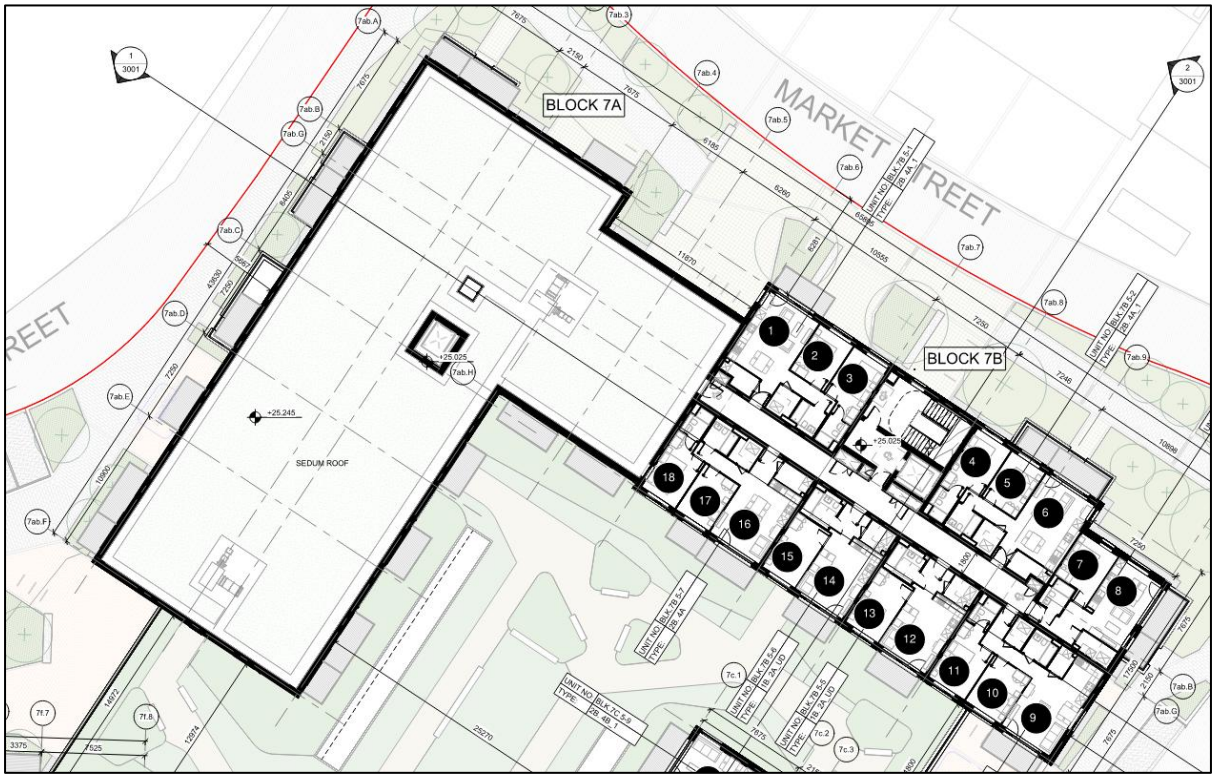
Table 16.20 BR209 Methodology Results (Zone 07 A & B Fourth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Bedroom	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	100%	Y	100%	Y
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Liv/Din	100%	Y	100%	Y
19	Bedroom	100%	Y	100%	Y
20	Bedroom	100%	Y	100%	Y
21	Liv/Din	100%	Y	100%	Y
22	Liv/Din	100%	Y	100%	Y
23	Bedroom	100%	Y	100%	Y
24	Bedroom	100%	Y	100%	Y
25	Bedroom	100%	Y	100%	Y
26	Bedroom	100%	Y	100%	Y
27	Liv/Din	100%	Y	100%	Y
28	Bedroom	100%	Y	96%	Y
29	Liv/Din	100%	Y	100%	Y
30	Liv/Din	100%	Y	100%	Y
31	Bedroom	100%	Y	97%	Y
32	Bedroom	100%	Y	100%	Y
33	Liv/Din	100%	Y	86%	Y
34	Bedroom	100%	Y	74%	Y
35	Liv/Din	100%	Y	71%	Y
36	Bedroom	100%	Y	96%	Y
37	Liv/Din	100%	Y	97%	Y
38	Bedroom	100%	Y	100%	Y
39	Bedroom	100%	Y	100%	Y
40	Bedroom	100%	Y	100%	Y
41	Liv/Din	100%	Y	100%	Y
42	Bedroom	100%	Y	100%	Y
43	Liv/Din	100%	Y	100%	Y
44	Bedroom	100%	Y	100%	Y
45	Bedroom	100%	Y	100%	Y
46	Liv/Din	100%	Y	99%	Y

Legends

Figure 16.20 Zone 07 A & B Fifth Floor Legend



Results

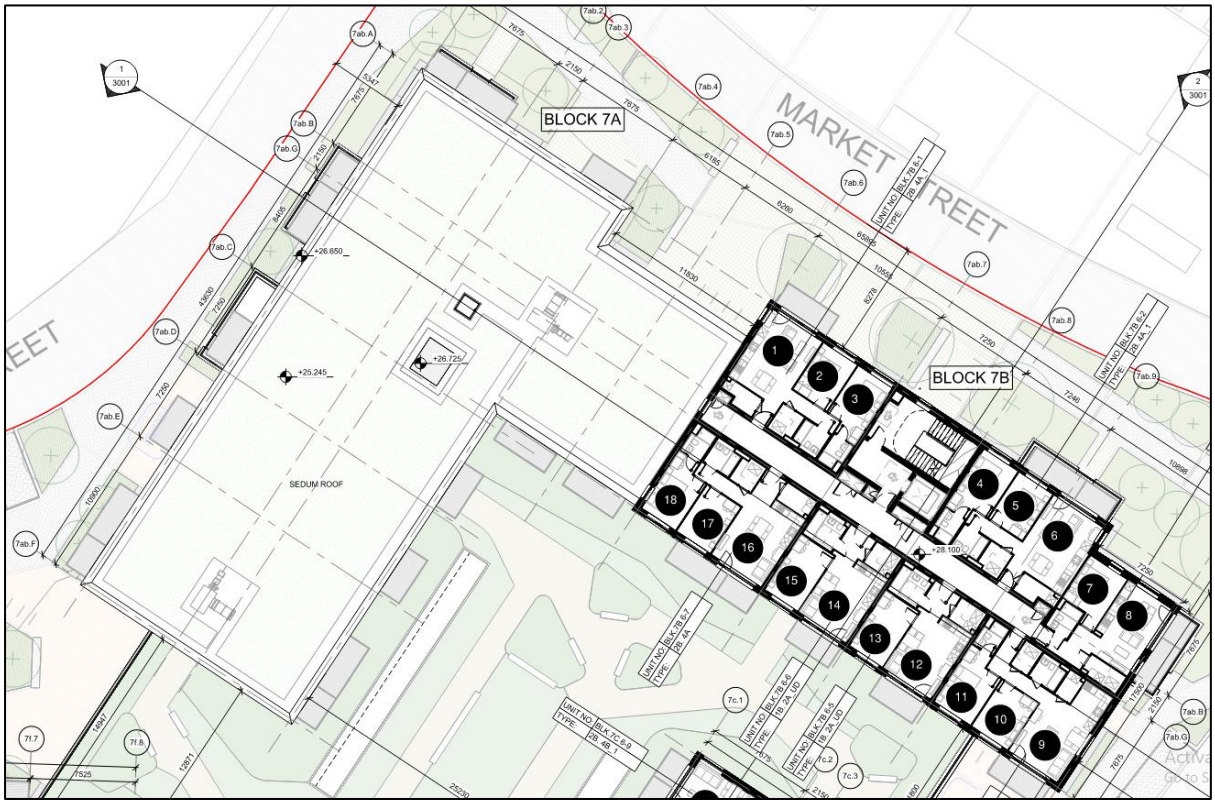
Table 16.21 BR209 Methodology Results (Zone 07 A & B Fifth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	96%	Y
8	Liv/Din	100%	Y	100%	Y
9	Liv/Din	100%	Y	100%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Liv/Din	100%	Y	99%	Y
13	Bedroom	100%	Y	100%	Y
14	Liv/Din	100%	Y	97%	Y
15	Bedroom	100%	Y	100%	Y
16	Liv/Din	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y

Legends

Figure 16.21 Zone 07 A & B Sixth Floor Legend



Results

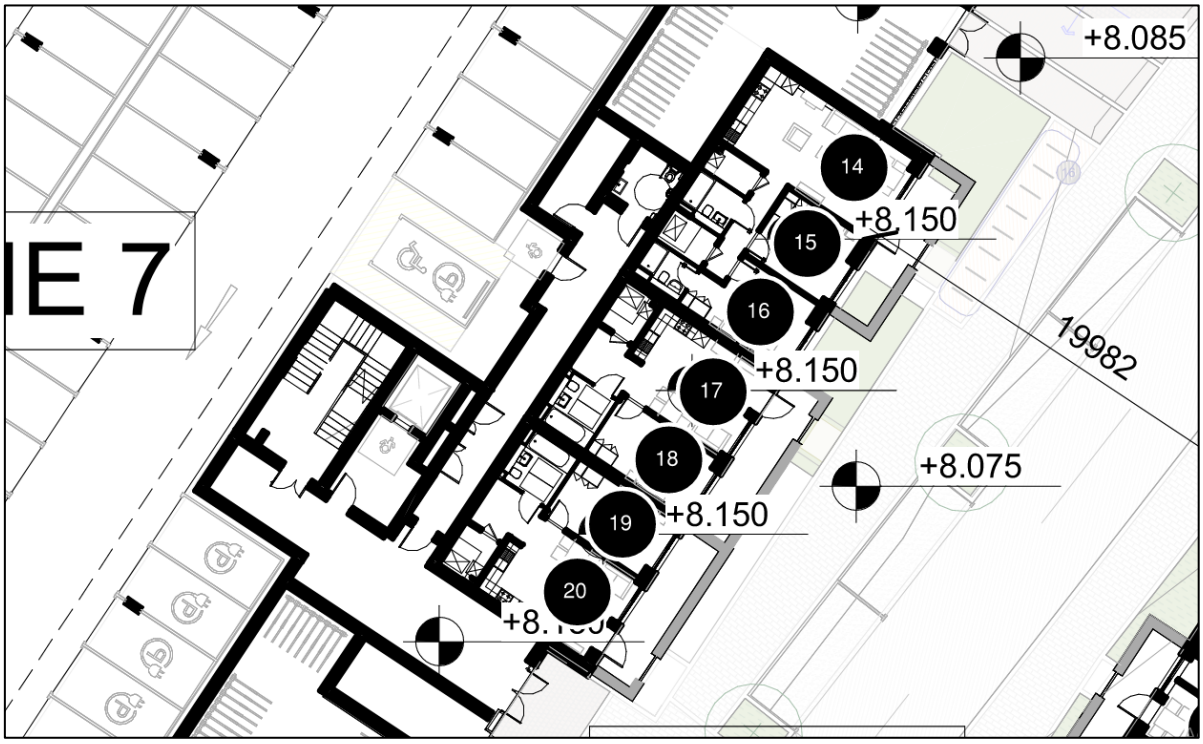
Table 16.22 BR209 Methodology Results (Zone 07 A & B Sixth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	98%	Y
8	Liv/Din	100%	Y	100%	Y
9	Liv/Din	100%	Y	100%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Liv/Din	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Liv/Din	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y

Legends

Figure 16.22 Zone 07 C Ground Floor Legend



Results

Table 16.23 BR209 Methodology Results (Zone 07 C Ground Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Liv/Din	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Bedroom	100%	Y	100%	Y
20	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.23 Zone 07 C First Floor Legend



Results

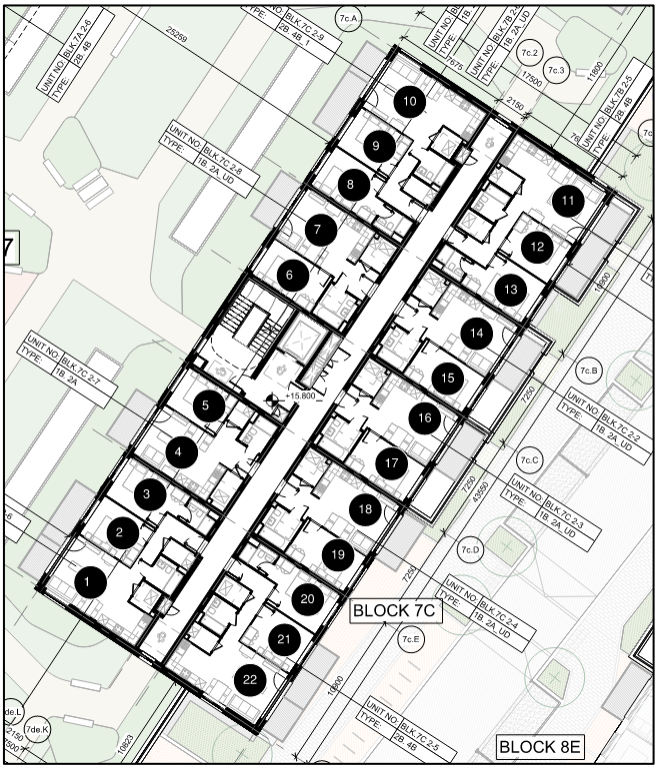
Table 16.24 BR209 Methodology Results (Zone 07 C First Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	90%	Y
4	Liv/Din	100%	Y	90%	Y
5	Bedroom	100%	Y	97%	Y
6	Bedroom	100%	Y	97%	Y
7	Liv/Din	100%	Y	78%	Y
8	Bedroom	100%	Y	94%	Y
9	Bedroom	100%	Y	93%	Y
10	Liv/Din	100%	Y	88%	Y
11	Liv/Din	100%	Y	86%	Y
12	Bedroom	100%	Y	67%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Bedroom	100%	Y	76%	Y
14	Liv/Din	100%	Y	52%	Y
15	Bedroom	95%	Y	87%	Y
16	Bedroom	100%	Y	74%	Y
17	Liv/Din	100%	Y	95%	Y
18	Bedroom	100%	Y	98%	Y
19	Liv/Din	100%	Y	77%	Y
20	Bedroom	100%	Y	100%	Y
21	Bedroom	100%	Y	99%	Y
22	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.24 Zone 07 C Second Floor Legend



Results

Table 16.25 BR209 Methodology Results (Zone 07 C Second Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	98%	Y
4	Liv/Din	100%	Y	97%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Liv/Din	100%	Y	92%	Y
8	Bedroom	99%	Y	98%	Y
9	Bedroom	100%	Y	99%	Y
10	Liv/Din	100%	Y	91%	Y
11	Liv/Din	100%	Y	86%	Y
12	Bedroom	100%	Y	99%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Bedroom	100%	Y	95%	Y
14	Liv/Din	100%	Y	76%	Y
15	Bedroom	95%	Y	91%	Y
16	Bedroom	100%	Y	96%	Y
17	Liv/Din	100%	Y	68%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	81%	Y
20	Bedroom	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.25 Zone 07 C Third Floor Legend



Results

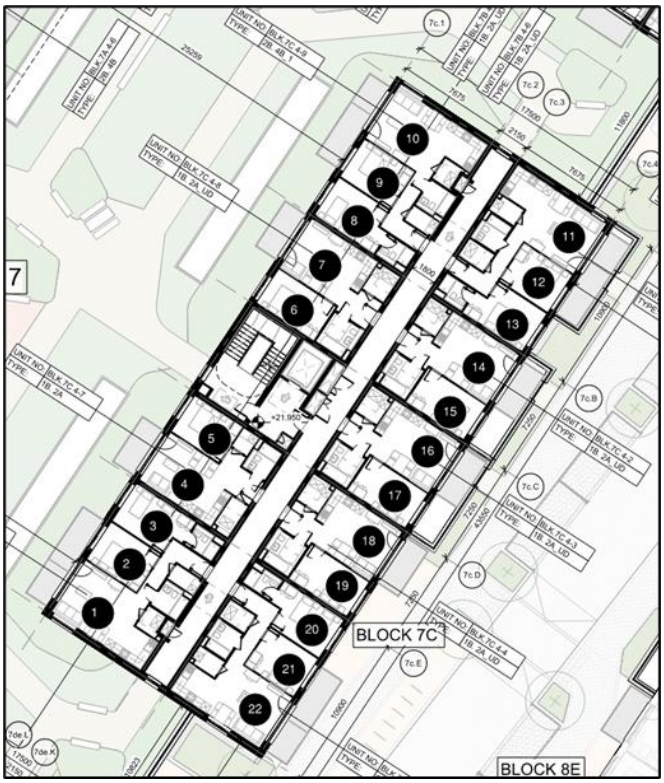
Table 16.26 BR209 Methodology Results (Zone 07 C Third Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Liv/Din	100%	Y	99%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Liv/Din	100%	Y	97%	Y
8	Bedroom	99%	Y	98%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	100%	Y	100%	Y
11	Liv/Din	100%	Y	88%	Y
12	Bedroom	100%	Y	82%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Bedroom	100%	Y	84%	Y
14	Liv/Din	100%	Y	79%	Y
15	Bedroom	95%	Y	94%	Y
16	Bedroom	100%	Y	100%	Y
17	Liv/Din	100%	Y	76%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	92%	Y
20	Bedroom	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.26 Zone 07 C Fourth Floor Legend



Results

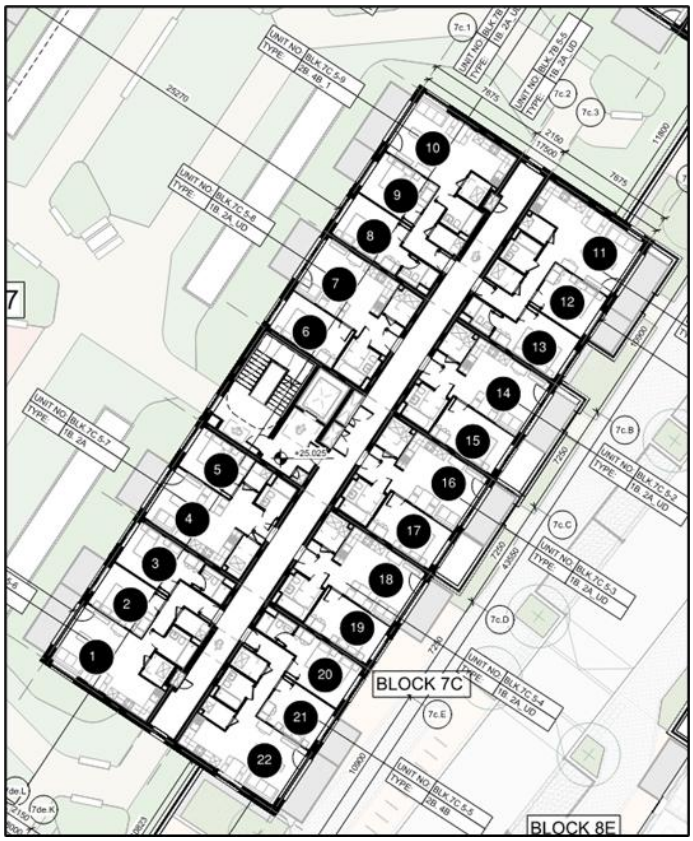
Table 16.27 BR209 Methodology Results (Zone 07 C Fourth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Liv/Din	100%	Y	100%	Y
8	Bedroom	100%	Y	98%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	100%	Y	95%	Y
11	Liv/Din	100%	Y	93%	Y
12	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Bedroom	100%	Y	100%	Y
14	Liv/Din	100%	Y	82%	Y
15	Bedroom	95%	Y	93%	Y
16	Bedroom	100%	Y	100%	Y
17	Liv/Din	100%	Y	87%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	90%	Y
20	Bedroom	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.27 Zone 07 C Fifth Floor Legend



Results

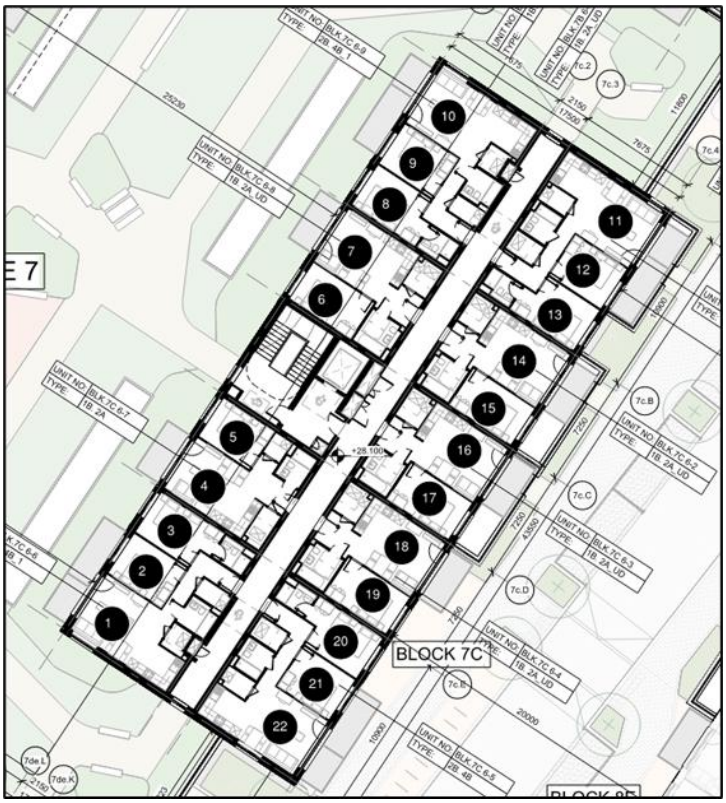
Table 16.28 BR209 Methodology Results (Zone 07 C Fifth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Liv/Din	100%	Y	100%	Y
8	Bedroom	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	100%	Y	100%	Y
11	Liv/Din	100%	Y	96%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Bedroom	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	95%	Y	95%	Y
16	Bedroom	100%	Y	100%	Y
17	Liv/Din	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	100%	Y
20	Bedroom	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.28 Zone 07 C Sixth Floor Legend



Results

Table 1.29 BR209 Methodology Results (Zone 07 C Sixth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Liv/Din	100%	Y	100%	Y
8	Bedroom	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	100%	Y	100%	Y
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Bedroom	100%	Y	100%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	95%	Y	95%	Y
16	Bedroom	100%	Y	100%	Y
17	Liv/Din	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	100%	Y
20	Bedroom	100%	Y	100%	Y
21	Bedroom	100%	Y	99%	Y
22	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.29 Zone 07 D & E Ground Floor Legend



Results

Table 16.30 BR209 Methodology Results (Zone 07 D & E Ground Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
22	Bedroom	100%	Y	100%	Y
23	Liv/Din	100%	Y	100%	Y
24	Bedroom	100%	Y	100%	Y
25	Liv/Din	100%	Y	100%	Y
26	Bedroom	100%	Y	100%	Y
27	Bedroom	100%	Y	100%	Y
28	Liv/Din	100%	Y	100%	Y
29	Liv/Din	100%	Y	100%	Y
30	Bedroom	100%	Y	96%	Y
31	Liv/Din	100%	Y	99%	Y
32	Bedroom	100%	Y	92%	Y
33	Bedroom	100%	Y	94%	Y

Legends

Figure 16.30 Zone 07 D & E First Floor Legend



Results

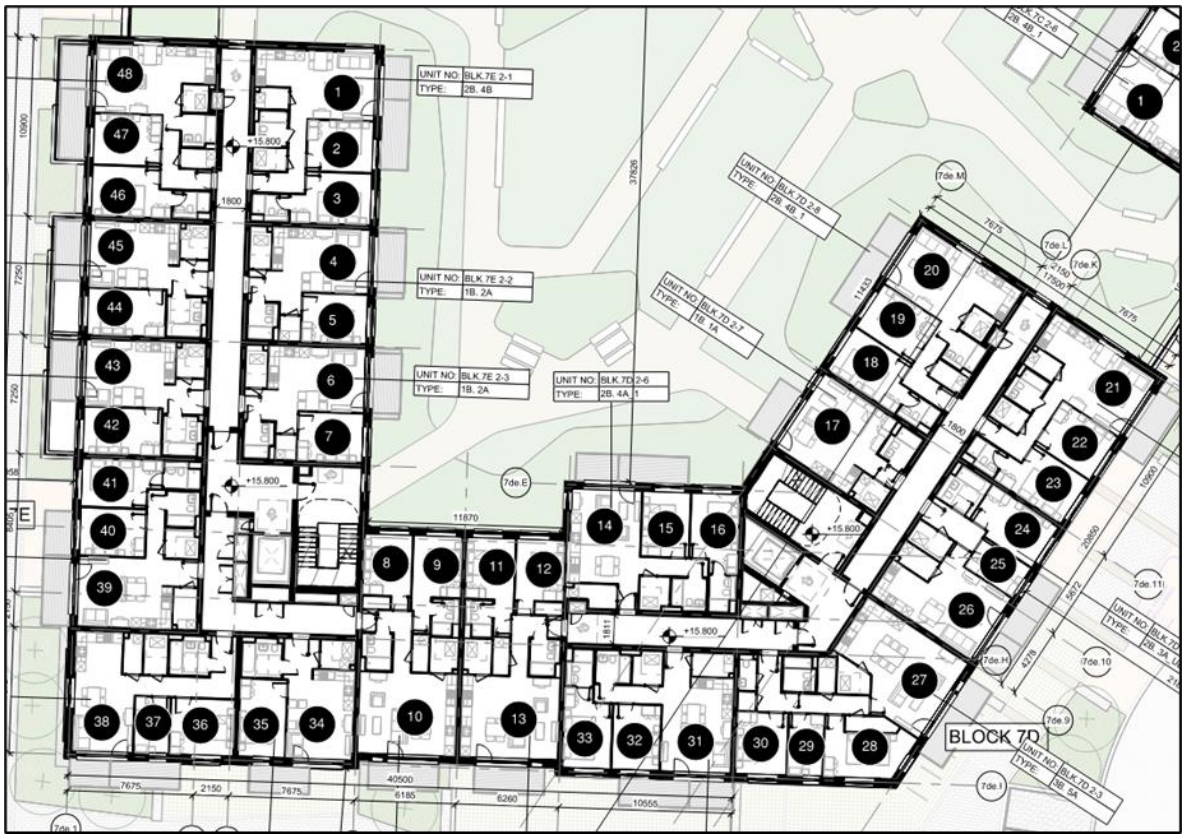
Table 16.31 BR209 Methodology Results (Zone 07 D & E First Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	79%	Y
2	Bedroom	100%	Y	81%	Y
3	Bedroom	100%	Y	88%	Y
4	Liv/Din	100%	Y	60%	Y
5	Bedroom	100%	Y	75%	Y
6	Liv/Din	100%	Y	49%	N
7	Bedroom	95%	Y	51%	Y
8	Bedroom	97%	Y	56%	Y
9	Bedroom	100%	Y	75%	Y
10	Liv/Din	98%	Y	98%	Y
11	Bedroom	100%	Y	78%	Y
12	Bedroom	100%	Y	80%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Liv/Din	100%	Y	100%	Y
14	Liv/Din	100%	Y	62%	Y
15	Bedroom	100%	Y	73%	Y
16	Bedroom	98%	Y	67%	Y
17	Bedroom	100%	Y	79%	Y
18	Bedroom	100%	Y	83%	Y
19	Liv/Din	100%	Y	95%	Y
20	Liv/Din	100%	Y	94%	Y
21	Bedroom	100%	Y	84%	Y
22	Bedroom	100%	Y	86%	Y
23	Bedroom	100%	Y	77%	Y
24	Bedroom	100%	Y	50%	Y
25	Liv/Din	100%	Y	82%	Y
26	Liv/Din	100%	Y	82%	Y
27	Bedroom	100%	Y	100%	Y
28	Bedroom	100%	Y	100%	Y
29	Bedroom	100%	Y	100%	Y
30	Liv/Din	100%	Y	100%	Y
31	Bedroom	100%	Y	100%	Y
32	Bedroom	100%	Y	100%	Y
33	Liv/Din	100%	Y	100%	Y
34	Bedroom	100%	Y	98%	Y
35	Bedroom	100%	Y	100%	Y
36	Bedroom	100%	Y	100%	Y
37	Liv/Din	100%	Y	100%	Y
38	Liv/Din	100%	Y	100%	Y
39	Bedroom	100%	Y	100%	Y
40	Bedroom	100%	Y	100%	Y
41	Bedroom	100%	Y	87%	Y
42	Liv/Din	100%	Y	100%	Y
43	Bedroom	100%	Y	100%	Y
44	Liv/Din	100%	Y	90%	Y
45	Bedroom	100%	Y	100%	Y
46	Bedroom	100%	Y	100%	Y
47	Liv/Din	100%	Y	99%	Y

Legends

Figure 16.31 Zone 07 D & E Second Floor Legend



Results

Table 16.32 BR209 Methodology Results (Zone 07 D & E Second Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	95%	Y
2	Bedroom	100%	Y	91%	Y
3	Bedroom	100%	Y	90%	Y
4	Liv/Din	100%	Y	64%	Y
5	Bedroom	100%	Y	74%	Y
6	Liv/Din	100%	Y	50%	Y
7	Bedroom	100%	Y	62%	Y
8	Bedroom	100%	Y	92%	Y
9	Bedroom	100%	Y	94%	Y
10	Liv/Din	98%	Y	98%	Y
11	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Bedroom	100%	Y	99%	Y
13	Liv/Din	100%	Y	100%	Y
14	Liv/Din	100%	Y	80%	Y
15	Bedroom	100%	Y	93%	Y
16	Bedroom	98%	Y	95%	Y
17	Studio	100%	Y	75%	Y
18	Bedroom	100%	Y	92%	Y
19	Bedroom	100%	Y	97%	Y
20	Liv/Din	100%	Y	99%	Y
21	Liv/Din	100%	Y	98%	Y
22	Bedroom	100%	Y	100%	Y
23	Bedroom	100%	Y	100%	Y
24	Bedroom	100%	Y	100%	Y
25	Bedroom	100%	Y	80%	Y
26	Liv/Din	100%	Y	89%	Y
27	Liv/Din	100%	Y	91%	Y
28	Bedroom	100%	Y	100%	Y
29	Bedroom	100%	Y	100%	Y
30	Bedroom	100%	Y	100%	Y
31	Liv/Din	100%	Y	100%	Y
32	Bedroom	100%	Y	100%	Y
33	Bedroom	100%	Y	100%	Y
34	Liv/Din	100%	Y	100%	Y
35	Bedroom	100%	Y	99%	Y
36	Bedroom	100%	Y	100%	Y
37	Bedroom	100%	Y	100%	Y
38	Liv/Din	100%	Y	100%	Y
39	Liv/Din	100%	Y	100%	Y
40	Bedroom	100%	Y	100%	Y
41	Bedroom	100%	Y	100%	Y
42	Bedroom	100%	Y	96%	Y
43	Liv/Din	100%	Y	100%	Y
44	Bedroom	100%	Y	100%	Y
45	Liv/Din	100%	Y	93%	Y
46	Bedroom	100%	Y	100%	Y
47	Bedroom	100%	Y	100%	Y
48	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.32 Zone 07 D & E Third Floor Legend



Results

Table 16.33 BR209 Methodology Results (Zone 07 D & E Third Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	97%	Y
2	Bedroom	100%	Y	95%	Y
3	Bedroom	100%	Y	96%	Y
4	Liv/Din	100%	Y	88%	Y
5	Bedroom	100%	Y	90%	Y
6	Liv/Din	100%	Y	57%	Y
7	Bedroom	100%	Y	67%	Y
8	Bedroom	100%	Y	94%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	98%	Y	98%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Bedroom	100%	Y	97%	Y
15	Bedroom	100%	Y	96%	Y
16	Liv/Din	98%	Y	95%	Y
17	Studio	100%	Y	87%	Y
18	Bedroom	100%	Y	96%	Y
19	Bedroom	100%	Y	94%	Y
20	Liv/Din	100%	Y	99%	Y
21	Liv/Din	100%	Y	100%	Y
22	Bedroom	100%	Y	100%	Y
23	Bedroom	100%	Y	100%	Y
24	Bedroom	100%	Y	100%	Y
25	Bedroom	100%	Y	98%	Y
26	Liv/Din	100%	Y	98%	Y
27	Liv/Din	100%	Y	92%	Y
28	Bedroom	100%	Y	100%	Y
29	Bedroom	100%	Y	100%	Y
30	Bedroom	100%	Y	100%	Y
31	Liv/Din	100%	Y	100%	Y
32	Bedroom	100%	Y	100%	Y
33	Bedroom	100%	Y	100%	Y
34	Liv/Din	100%	Y	100%	Y
35	Bedroom	100%	Y	99%	Y
36	Bedroom	100%	Y	100%	Y
37	Bedroom	100%	Y	100%	Y
38	Liv/Din	100%	Y	100%	Y
39	Liv/Din	100%	Y	100%	Y
40	Bedroom	100%	Y	100%	Y
41	Bedroom	100%	Y	100%	Y
42	Bedroom	100%	Y	100%	Y
43	Liv/Din	100%	Y	100%	Y
44	Bedroom	100%	Y	100%	Y
45	Liv/Din	100%	Y	98%	Y
46	Bedroom	100%	Y	100%	Y
47	Bedroom	100%	Y	100%	Y
48	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.33 Zone 07 D & E Fourth Floor Legend



Results

Table 16.34 BR209 Methodology Results (Zone 07 D & E Fourth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	99%	Y
4	Liv/Din	100%	Y	97%	Y
5	Bedroom	100%	Y	97%	Y
6	Liv/Din	100%	Y	88%	Y
7	Bedroom	100%	Y	90%	Y
8	Bedroom	100%	Y	99%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	98%	Y	98%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Liv/Din	100%	Y	88%	Y
15	Bedroom	100%	Y	96%	Y
16	Bedroom	98%	Y	95%	Y
17	Studio	100%	Y	98%	Y
18	Bedroom	100%	Y	97%	Y
19	Bedroom	100%	Y	99%	Y
20	Liv/Din	100%	Y	99%	Y
21	Liv/Din	100%	Y	100%	Y
22	Bedroom	100%	Y	100%	Y
23	Bedroom	100%	Y	100%	Y
24	Bedroom	100%	Y	100%	Y
25	Bedroom	100%	Y	96%	Y
26	Liv/Din	100%	Y	100%	Y
27	Liv/Din	100%	Y	99%	Y
28	Bedroom	100%	Y	100%	Y
29	Bedroom	100%	Y	100%	Y
30	Bedroom	100%	Y	100%	Y
31	Liv/Din	100%	Y	100%	Y
32	Bedroom	100%	Y	100%	Y
33	Bedroom	100%	Y	100%	Y
34	Liv/Din	100%	Y	100%	Y
35	Bedroom	100%	Y	99%	Y
36	Bedroom	100%	Y	100%	Y
37	Bedroom	100%	Y	100%	Y
38	Liv/Din	100%	Y	100%	Y
39	Liv/Din	100%	Y	100%	Y
40	Bedroom	100%	Y	100%	Y
41	Bedroom	100%	Y	100%	Y
42	Bedroom	100%	Y	100%	Y
43	Liv/Din	100%	Y	100%	Y
44	Bedroom	100%	Y	100%	Y
45	Liv/Din	100%	Y	100%	Y
46	Bedroom	100%	Y	100%	Y
47	Bedroom	100%	Y	100%	Y
48	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.34 Zone 07 D & E Fifth Floor Legend



Results

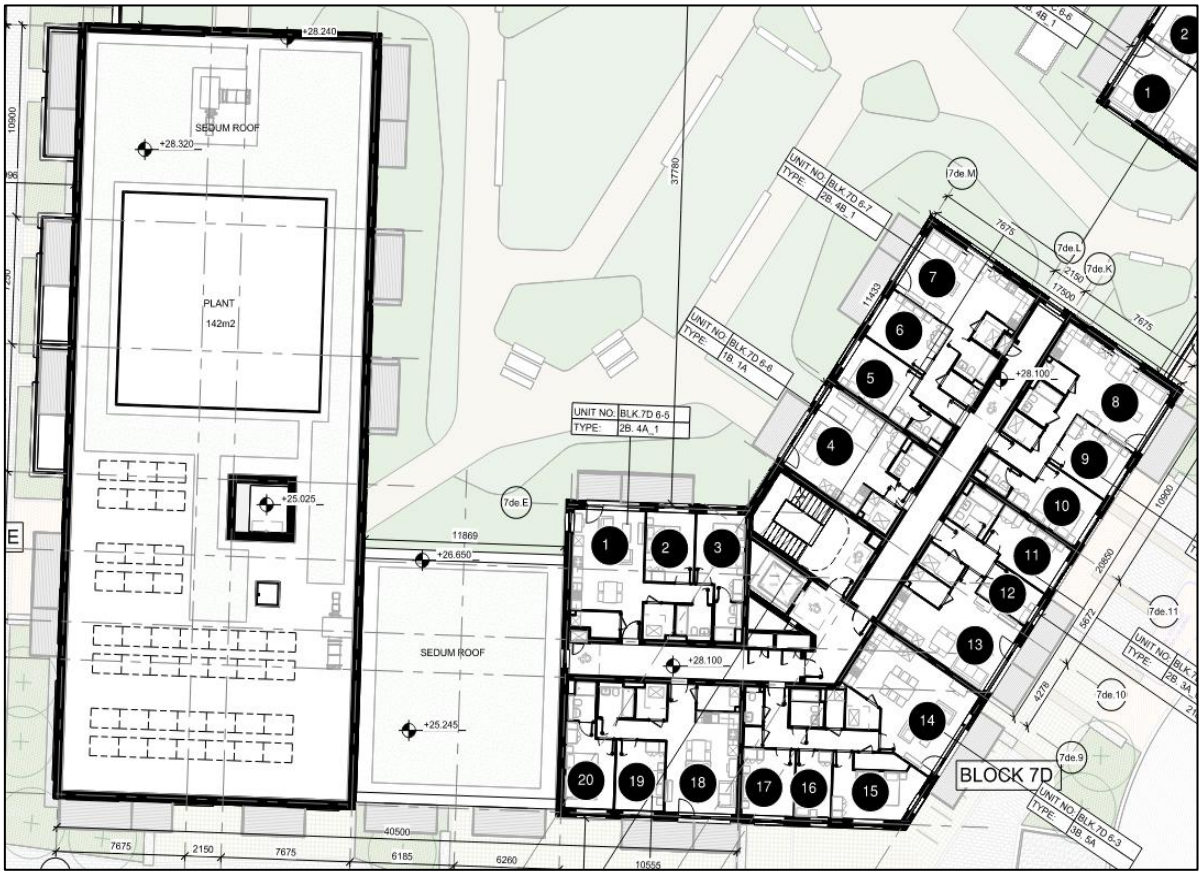
Table 16.35 BR209 Methodology Results (Zone 07 D & E Fifth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	96%	Y
10	Bedroom	100%	Y	96%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Studio	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Liv/Din	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Bedroom	100%	Y	100%	Y
20	Liv/Din	100%	Y	100%	Y
21	Liv/Din	100%	Y	100%	Y
22	Bedroom	100%	Y	100%	Y
23	Bedroom	100%	Y	100%	Y
24	Bedroom	100%	Y	100%	Y
25	Liv/Din	100%	Y	100%	Y
26	Bedroom	100%	Y	100%	Y
27	Bedroom	100%	Y	100%	Y
28	Liv/Din	100%	Y	100%	Y
29	Bedroom	100%	Y	100%	Y
30	Bedroom	100%	Y	100%	Y
31	Bedroom	100%	Y	100%	Y
32	Liv/Din	100%	Y	100%	Y
33	Liv/Din	100%	Y	100%	Y
34	Bedroom	100%	Y	100%	Y
35	Bedroom	100%	Y	100%	Y
36	Bedroom	100%	Y	100%	Y
37	Liv/Din	100%	Y	100%	Y
38	Bedroom	100%	Y	100%	Y
39	Liv/Din	100%	Y	100%	Y
40	Bedroom	100%	Y	100%	Y
41	Bedroom	100%	Y	100%	Y
42	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.35 Zone 07 D & E Sixth Floor Legend



Results

Table 16.36 BR209 Methodology Results (Zone 07 D & E Sixth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	100%	Y
2	Bedroom	100%	Y	98%	Y
3	Liv/Din	100%	Y	97%	Y
4	Studio	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Liv/Din	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Liv/Din	100%	Y	100%	Y
19	Bedroom	100%	Y	100%	Y
20	Bedroom	100%	Y	100%	Y

Legends

Figure 16.36 Zone 07 F First Floor Legend



Results

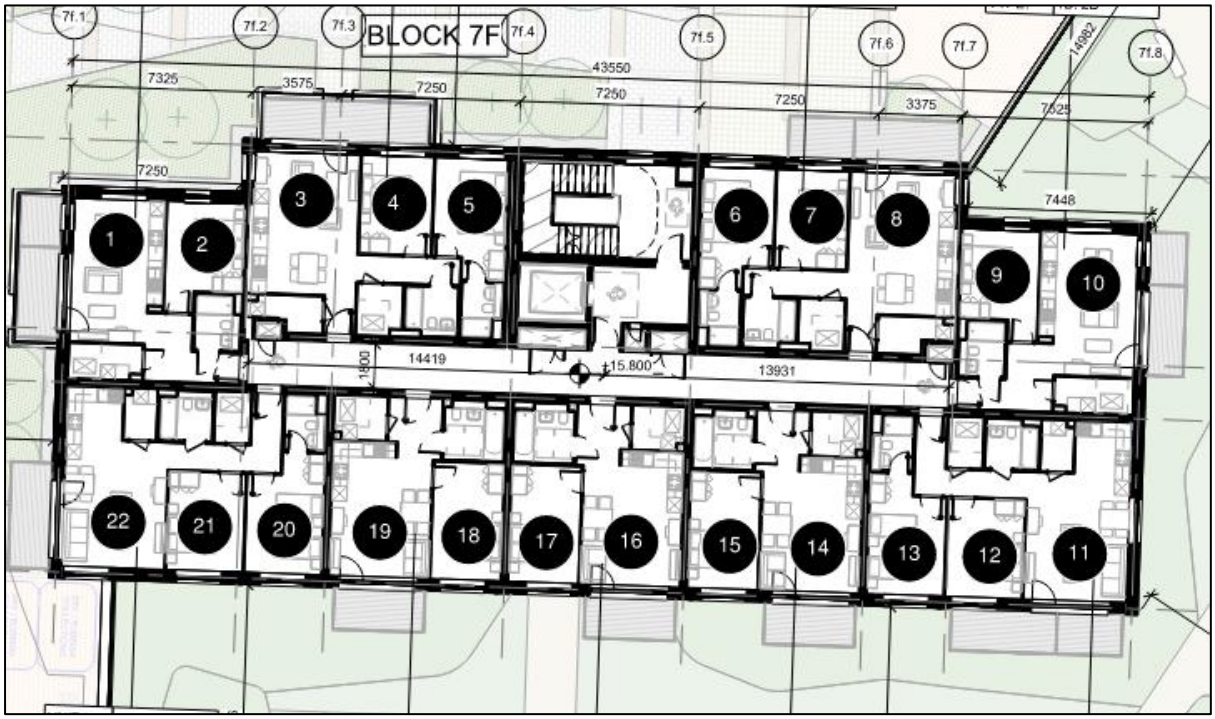
Table 16.37 BR209 Methodology Results (Zone 07 F First Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	97%	Y
3	Liv/Din	100%	Y	90%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	96%	Y
8	Liv/Din	100%	Y	83%	Y
9	Bedroom	100%	Y	55%	Y
10	Liv/Din	100%	Y	98%	Y
11	Liv/Din	100%	Y	89%	Y
12	Bedroom	100%	Y	88%	Y
13	Bedroom	100%	Y	87%	Y
14	Liv/Din	100%	Y	74%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
15	Bedroom	100%	Y	94%	Y
16	Bedroom	100%	Y	70%	Y
17	Liv/Din	100%	Y	75%	Y
18	Bedroom	100%	Y	99%	Y
19	Bedroom	100%	Y	100%	Y
20	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.37 Zone 07 F Second Floor Legend



Results

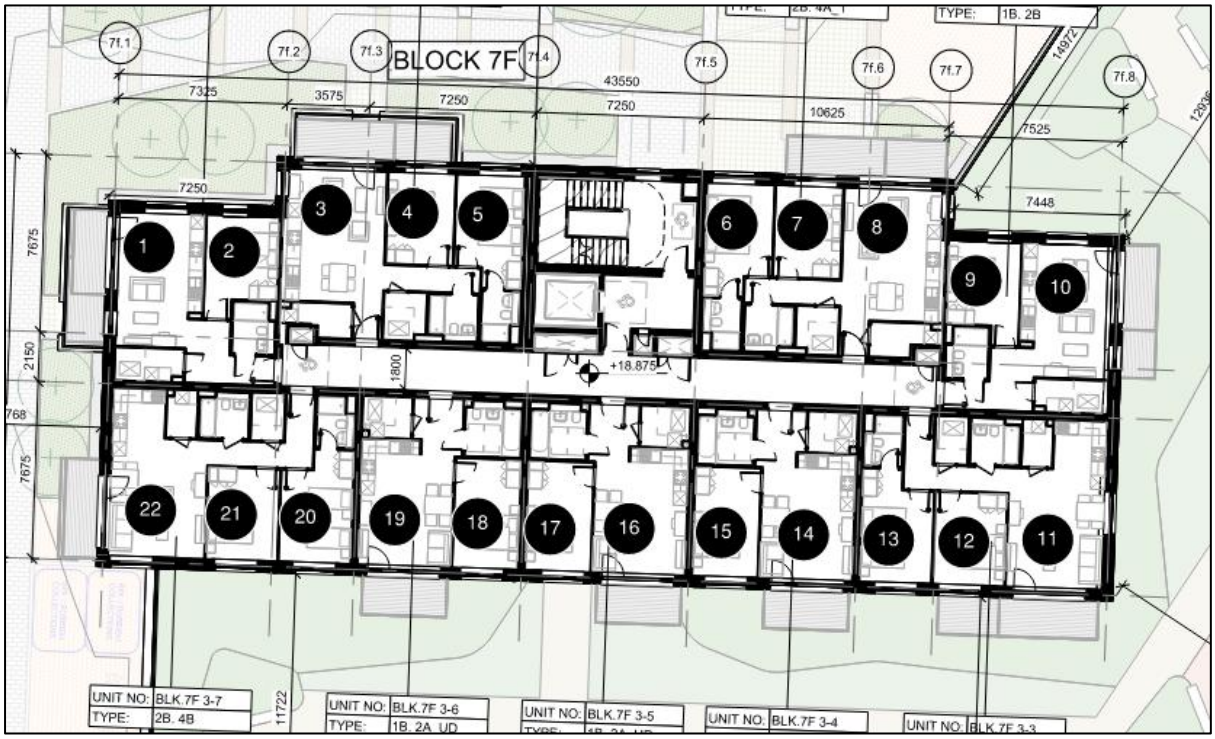
Table 16.38 BR209 Methodology Results (Zone 07 F Second Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	99%	Y
3	Liv/Din	100%	Y	91%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	96%	Y
8	Liv/Din	100%	Y	86%	Y
9	Bedroom	100%	Y	72%	Y
10	Liv/Din	100%	Y	100%	Y
11	Liv/Din	100%	Y	94%	Y
12	Bedroom	100%	Y	100%	Y
13	Bedroom	100%	Y	99%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Liv/Din	100%	Y	98%	Y
15	Bedroom	100%	Y	97%	Y
16	Liv/Din	100%	Y	96%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	70%	Y
20	Bedroom	100%	Y	97%	Y
21	Bedroom	100%	Y	97%	Y
22	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.38 Zone 07 F Third Floor Legend



Results

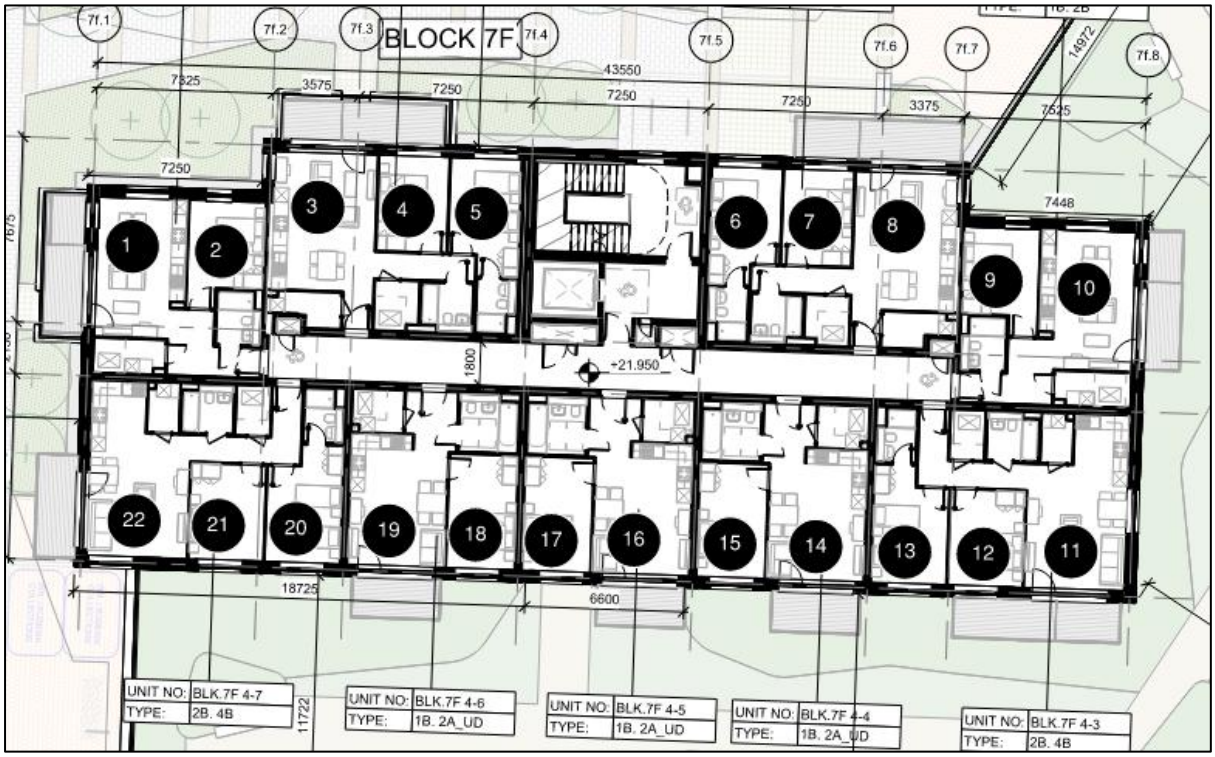
Table 16.39 BR209 Methodology Results (Zone 07 F Third Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	97%	Y
3	Liv/Din	100%	Y	89%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	96%	Y
8	Liv/Din	100%	Y	88%	Y
9	Bedroom	100%	Y	76%	Y
10	Liv/Din	100%	Y	100%	Y
11	Liv/Din	100%	Y	98%	Y
12	Bedroom	100%	Y	100%	Y
13	Bedroom	100%	Y	97%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Liv/Din	100%	Y	98%	Y
15	Bedroom	100%	Y	100%	Y
16	Liv/Din	100%	Y	99%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	80%	Y
20	Bedroom	100%	Y	97%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.39 Zone 07 F Fourth Floor Legend



Results

Table 16.40 BR209 Methodology Results (Zone 07 F Fourth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	96%	Y
3	Liv/Din	100%	Y	90%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	98%	Y
8	Liv/Din	100%	Y	91%	Y
9	Bedroom	100%	Y	88%	Y
10	Liv/Din	100%	Y	100%	Y
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Bedroom	100%	Y	100%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Liv/Din	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	100%	Y
20	Bedroom	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.40 Zone 08 Ground Floor Legend



Results

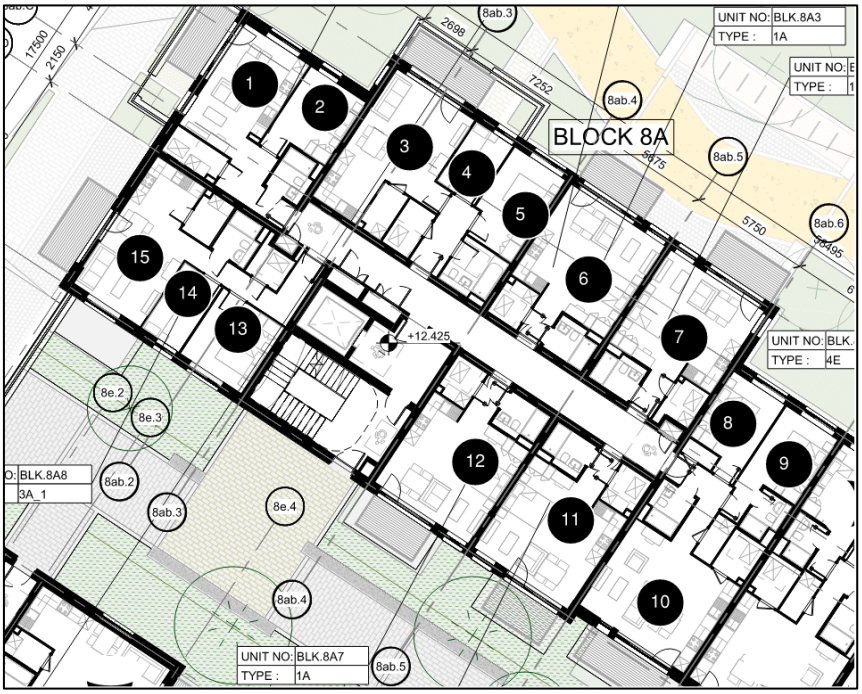
Table 16.41 BR209 Methodology Results (Zone 08 Ground Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	75%	Y
3	Liv/Din	100%	Y	71%	Y
4	Bedroom	100%	Y	57%	Y
5	Bedroom	100%	Y	80%	Y
6	Bedroom	100%	Y	96%	Y
7	Bedroom	100%	Y	97%	Y
8	Liv/Din	100%	Y	100%	Y
9	Liv/Din	100%	Y	76%	Y
10	Bedroom	100%	Y	96%	Y
11	Bedroom	100%	Y	74%	Y
12	Liv/Din	100%	Y	100%	Y
13	Bedroom	100%	Y	65%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Liv/Din	100%	Y	74%	Y
15	Bedroom	100%	Y	92%	Y
16	Bedroom	100%	Y	77%	Y
17	Bedroom	100%	Y	92%	Y
18	Liv/Din	100%	Y	70%	Y
21	Bedroom	100%	Y	69%	Y
22	Liv/Din	100%	Y	32%	N
23	Bedroom	100%	Y	58%	Y
24	Liv/Din	100%	Y	48%	N

Legends

Figure 16.41 Zone 08 A First Floor Legend



Results

Table 16.42 BR209 Methodology Results (Zone 08 A First Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	83%	Y
3	Liv/Din	100%	Y	82%	Y
4	Bedroom	100%	Y	96%	Y
5	Bedroom	100%	Y	97%	Y
6	Studio	100%	Y	95%	Y
7	Studio	100%	Y	100%	Y
8	Bedroom	100%	Y	70%	Y
9	Bedroom	100%	Y	82%	Y
10	Liv/Din	93%	N	46%	N
11	Studio	100%	Y	81%	Y
12	Studio	100%	Y	97%	Y
13	Bedroom	100%	Y	61%	Y
14	Bedroom	100%	Y	50%	Y
15	Liv/Din	100%	Y	85%	Y

Legends

Figure 16.42 Zone 08 A Second Floor Legend



Results

Table 16.43 BR209 Methodology Results (Zone 08 A Second Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	97%	Y	80%	Y
3	Liv/Din	100%	Y	100%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Studio	100%	Y	92%	Y
7	Studio	100%	Y	97%	Y
8	Bedroom	100%	Y	95%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	99%	Y	56%	Y
11	Studio	100%	Y	99%	Y
12	Studio	100%	Y	98%	Y
13	Bedroom	100%	Y	74%	Y
14	Bedroom	100%	Y	53%	Y
15	Liv/Din	100%	Y	82%	Y

Legends

Figure 16.43 Zone 08 A Third Floor Legend



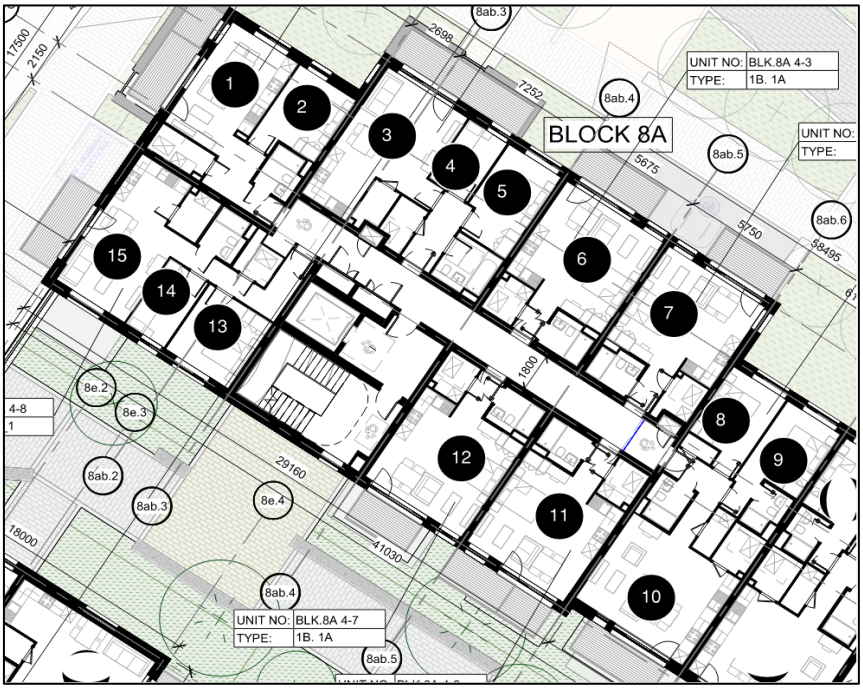
Results

Table 16.44 BR209 Methodology Results (Zone 08 A Third Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Liv/Din	100%	Y	99%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Studio	100%	Y	97%	Y
7	Studio	100%	Y	100%	Y
8	Bedroom	100%	Y	95%	Y
9	Bedroom	100%	Y	94%	Y
10	Liv/Din	99%	Y	65%	Y
11	Studio	100%	Y	99%	Y
12	Studio	100%	Y	96%	Y
13	Bedroom	100%	Y	73%	Y
14	Bedroom	100%	Y	61%	Y
15	Liv/Din	100%	Y	87%	Y

Legends

Figure 16.44 Zone 08 A Fourth Floor Legend



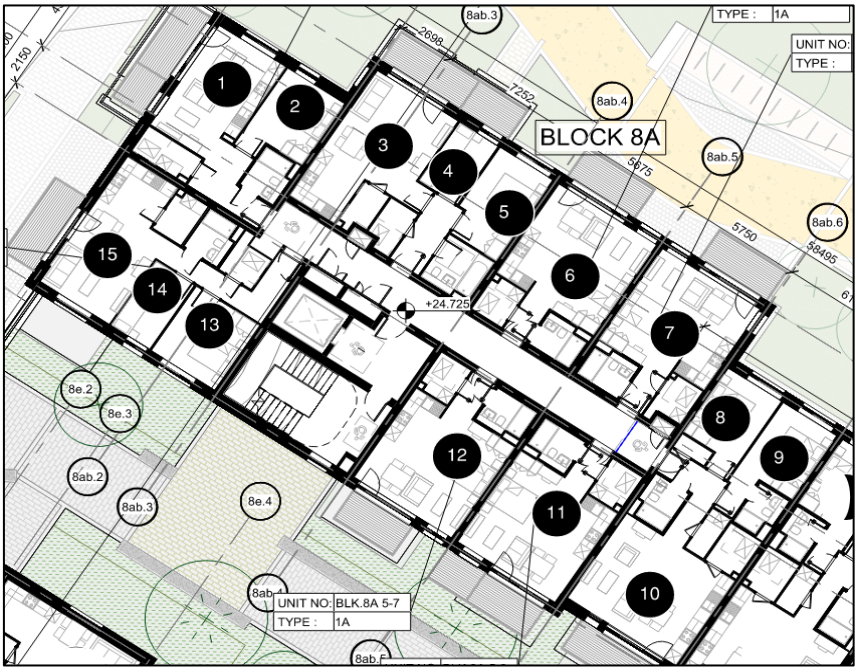
Results

Table 16.45 BR209 Methodology Results (Zone 08 A Fourth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	97%	Y	89%	Y
3	Liv/Din	100%	Y	100%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Studio	100%	Y	100%	Y
7	Studio	100%	Y	100%	Y
8	Bedroom	100%	Y	98%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	100%	Y	71%	Y
11	Studio	100%	Y	100%	Y
12	Studio	100%	Y	100%	Y
13	Bedroom	100%	Y	86%	Y
14	Bedroom	100%	Y	77%	Y
15	Liv/Din	100%	Y	89%	Y

Legends

Figure 16.45 Zone 08 A Fifth Floor Legend



Results

Table 16.46 BR209 Methodology Results (Zone 08 A Fifth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Liv/Din	100%	Y	92%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Studio	100%	Y	100%	Y
7	Studio	100%	Y	100%	Y
8	Bedroom	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	100%	Y	77%	Y
11	Studio	100%	Y	100%	Y
12	Studio	100%	Y	99%	Y
13	Bedroom	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	94%	Y

Legends

Figure 16.46 Zone 08 A Sixth Floor Legend



Results

Table 16.47 BR209 Methodology Results (Zone 08 A Sixth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	97%	Y	93%	Y
3	Liv/Din	100%	Y	100%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Studio	100%	Y	100%	Y
7	Studio	100%	Y	100%	Y
8	Bedroom	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	100%	Y	99%	Y
11	Studio	100%	Y	100%	Y
12	Studio	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.47 Zone 08 B First Floor Legend



Results

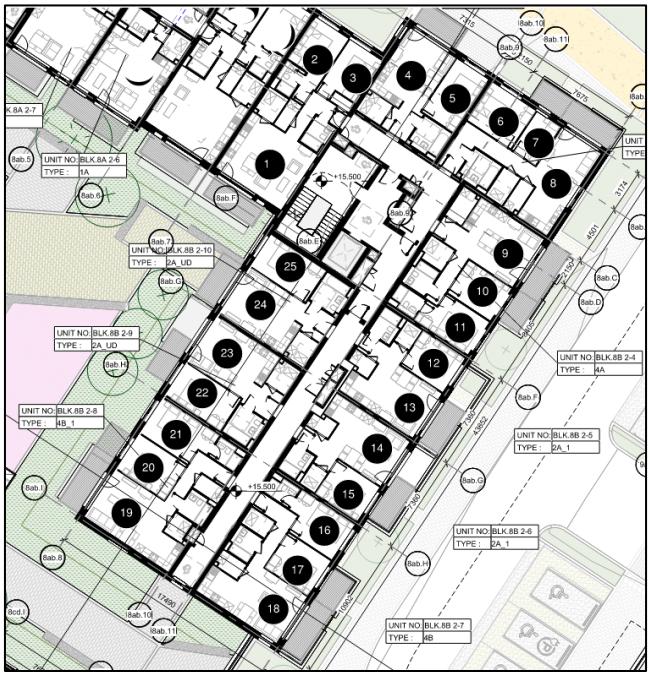
Table 16.48 BR209 Methodology Results (Zone 08 B First Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	97%	Y	39%	N
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	98%	Y
4	Liv/Din	100%	Y	83%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	98%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Liv/Din	100%	Y	97%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	98%	Y
14	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
15	Bedroom	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Liv/Din	100%	Y	95%	Y
19	Liv/Din	100%	Y	90%	Y
20	Bedroom	100%	Y	58%	Y
21	Bedroom	97%	Y	54%	Y
22	Bedroom	100%	Y	33%	N
23	Liv/Din	100%	Y	50%	Y

Legends

Figure 16.48 Zone 08 B Second Floor Legend



Results

Table 16.49 BR209 Methodology Results (Zone 08 B Second Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	51%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	99%	Y
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Liv/Din	80%	Y	79%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	98%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	98%	Y
14	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
15	Bedroom	100%	Y	98%	Y
16	Bedroom	100%	Y	98%	Y
17	Bedroom	100%	Y	100%	Y
18	Liv/Din	100%	Y	96%	Y
19	Liv/Din	100%	Y	90%	Y
20	Bedroom	100%	Y	66%	Y
21	Bedroom	100%	Y	81%	Y
22	Bedroom	100%	Y	56%	Y
23	Liv/Din	100%	Y	55%	Y
24	Liv/Din	98%	Y	43%	N
25	Bedroom	97%	Y	54%	Y

Legends

Figure 16.49 Zone 08 B Third Floor Legend



Results

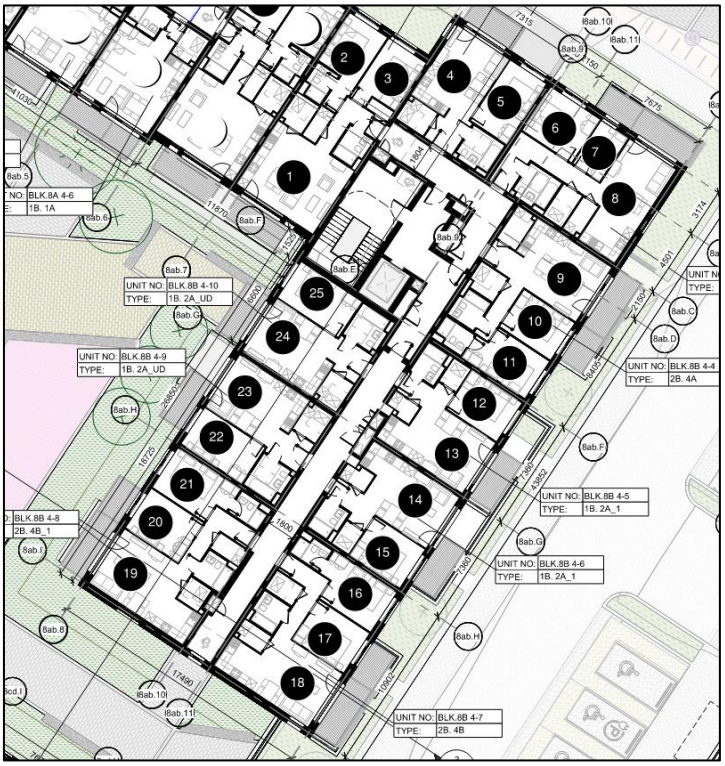
Table 16.50 BR209 Methodology Results (Zone 08 B Third Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	97%	Y	60%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	97%	Y
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Liv/Din	100%	Y	99%	Y
10	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	99%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	97%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	100%	Y	98%	Y
16	Bedroom	100%	Y	98%	Y
17	Bedroom	100%	Y	100%	Y
18	Liv/Din	100%	Y	96%	Y
19	Liv/Din	100%	Y	88%	Y
20	Bedroom	100%	Y	93%	Y
21	Bedroom	99%	Y	83%	Y
22	Bedroom	100%	Y	60%	Y
23	Liv/Din	100%	Y	71%	Y
24	Liv/Din	100%	Y	50%	Y
25	Bedroom	96%	Y	68%	Y

Legends

Figure 16.50 Zone 08 B Fourth Floor Legend



Results

Table 16.51 BR209 Methodology Results (Zone 08 B Fourth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	70%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Liv/Din	100%	Y	99%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Liv/Din	100%	Y	94%	Y
19	Liv/Din	100%	Y	92%	Y
20	Bedroom	100%	Y	78%	Y
21	Bedroom	100%	Y	89%	Y
22	Bedroom	100%	Y	84%	Y
23	Liv/Din	100%	Y	76%	Y
24	Liv/Din	100%	Y	64%	Y
25	Bedroom	100%	Y	72%	Y

Legends

Figure 16.51 Zone 08 B Fifth Floor Legend



Results

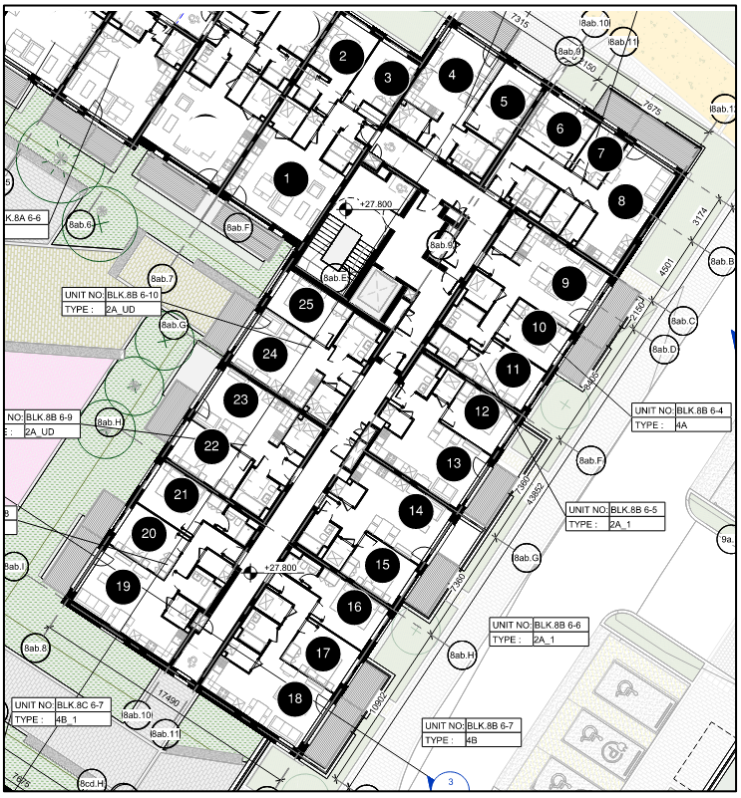
Table 16.52 BR209 Methodology Results (Zone 08 B Fifth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	84%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Liv/Din	100%	Y	99%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Liv/Din	100%	Y	100%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Bedroom	100%	Y	97%	Y
17	Bedroom	100%	Y	100%	Y
18	Liv/Din	100%	Y	98%	Y
19	Liv/Din	100%	Y	92%	Y
20	Bedroom	100%	Y	97%	Y
21	Bedroom	100%	Y	93%	Y
22	Bedroom	100%	Y	80%	Y
23	Liv/Din	100%	Y	86%	Y
24	Liv/Din	100%	Y	73%	Y
25	Bedroom	100%	Y	82%	Y

Legends

Figure 16.52 Zone 08 B Sixth Floor Legend



Results

Table 16.53 BR209 Methodology Results (Zone 08 B Sixth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	98%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Liv/Din	100%	Y	100%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Liv/Din	100%	Y	99%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Liv/Din	100%	Y	98%	Y
19	Liv/Din	100%	Y	97%	Y
20	Bedroom	100%	Y	94%	Y
21	Bedroom	100%	Y	96%	Y
22	Bedroom	100%	Y	95%	Y
23	Liv/Din	100%	Y	95%	Y
24	Liv/Din	100%	Y	88%	Y
25	Bedroom	100%	Y	93%	Y

Legends

Figure 16.53 Zone 08 B Seventh Floor Legend



Results

Table 16.54 BR209 Methodology Results (Zone 08 B Seventh Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	100%	Y
4	Bedroom	100%	Y	100%	Y
5	Liv/Din	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Bedroom	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	98%	Y
16	Liv/Din	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	95%	Y
19	Bedroom	100%	Y	100%	Y
20	Liv/Din	100%	Y	98%	Y
21	Liv/Din	100%	Y	99%	Y
22	Bedroom	100%	Y	98%	Y

Legends

Figure 16.54 Zone 08 C First Floor Legend



Results

Table 16.55 BR209 Methodology Results (Zone 08 C First Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Bedroom	100%	Y	62%	Y
2	Bedroom	100%	Y	54%	Y
3	Liv/Din	100%	Y	81%	Y
4	Liv/Din	100%	Y	87%	Y
5	Bedroom	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Liv/Din	100%	Y	97%	Y
8	Bedroom	100%	Y	95%	Y
9	Bedroom	100%	Y	100%	Y
10	Liv/Din	100%	Y	98%	Y
11	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	88%	Y
14	Bedroom	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Liv/Din	100%	Y	94%	Y
17	Bedroom	100%	Y	84%	Y
18	Bedroom	100%	Y	75%	Y
19	Liv/Din	100%	Y	59%	Y
20	Bedroom	96%	Y	59%	Y

Legends

Figure 16.55 Zone 08 C Second Floor Legend



Results

Table 16.56 BR209 Methodology Results (Zone 08 C Second Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Studio	99%	Y	59%	Y
2	Bedroom	100%	Y	81%	Y
3	Bedroom	100%	Y	83%	Y
4	Liv/Din	100%	Y	80%	Y
5	Liv/Din	100%	Y	96%	Y
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	99%	Y
9	Bedroom	100%	Y	100%	Y
10	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Liv/Din	100%	Y	98%	Y
12	Bedroom	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Liv/Din	100%	Y	96%	Y
15	Bedroom	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Liv/Din	100%	Y	95%	Y
18	Bedroom	100%	Y	98%	Y
19	Bedroom	100%	Y	87%	Y
20	Liv/Din	100%	Y	68%	Y
21	Bedroom	100%	Y	75%	Y

Legends

Figure 16.56 Zone 08 C Third Floor Legend



Results

Table 16.57 BR209 Methodology Results (Zone 08 C Third Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Studio	99%	Y	67%	Y
2	Bedroom	100%	Y	94%	Y
3	Bedroom	100%	Y	81%	Y
4	Liv/Din	100%	Y	78%	Y
5	Liv/Din	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	99%	Y
9	Bedroom	100%	Y	98%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
10	Bedroom	100%	Y	100%	Y
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Bedroom	100%	Y	99%	Y
17	Liv/Din	100%	Y	98%	Y
18	Bedroom	100%	Y	95%	Y
19	Bedroom	100%	Y	91%	Y
20	Liv/Din	100%	Y	80%	Y
21	Bedroom	100%	Y	93%	Y

Legends

Figure 16.57 Zone 08 C Fourth Floor Legend



Results

Table 16.58 BR209 Methodology Results (Zone 08 C Fourth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Studio	99%	Y	92%	Y
2	Bedroom	100%	Y	82%	Y
3	Bedroom	100%	Y	92%	Y
4	Liv/Din	100%	Y	93%	Y
5	Liv/Din	100%	Y	97%	Y
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	99%	Y	99%	Y
9	Bedroom	100%	Y	95%	Y
10	Bedroom	100%	Y	83%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Liv/Din	100%	Y	97%	Y
12	Bedroom	100%	Y	100%	Y
13	Bedroom	100%	Y	81%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Liv/Din	100%	Y	100%	Y
18	Bedroom	100%	Y	95%	Y
19	Bedroom	100%	Y	100%	Y
20	Liv/Din	100%	Y	76%	Y
21	Bedroom	98%	Y	96%	Y

Legends

Figure 16.58 Zone 08 C Fifth Floor Legend



Results

Table 16.59 BR209 Methodology Results (Zone 08 C Fifth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Studio	99%	Y	97%	Y
2	Bedroom	100%	Y	97%	Y
3	Bedroom	100%	Y	96%	Y
4	Liv/Din	100%	Y	96%	Y
5	Liv/Din	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Liv/Din	100%	Y	100%	Y
18	Bedroom	100%	Y	96%	Y

Legends

Figure 16.59 Zone 08 C Sixth Floor Legend



Results

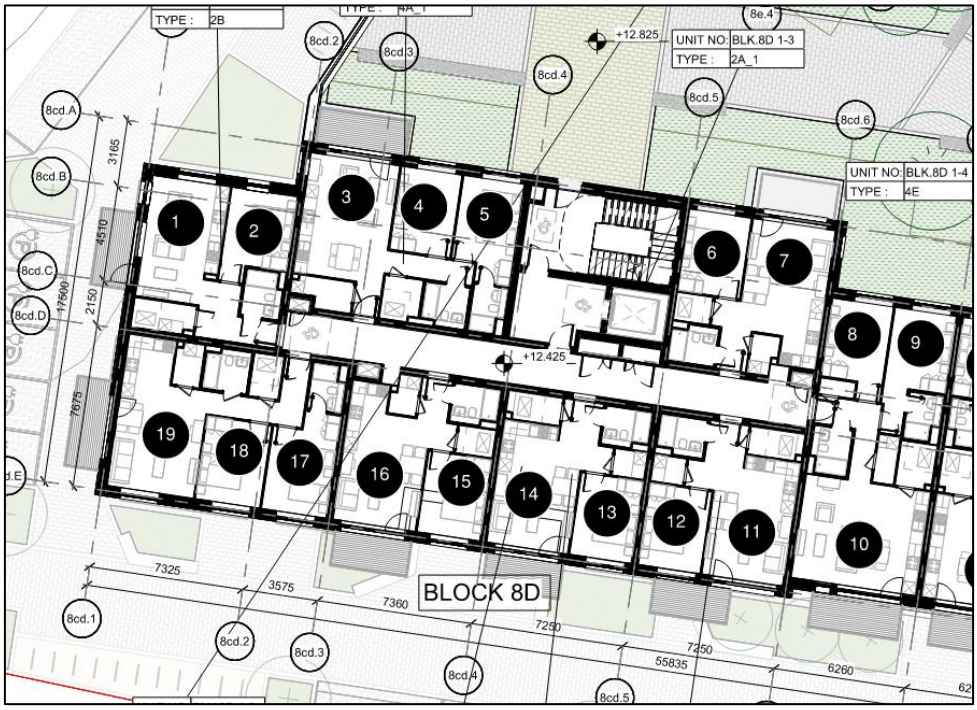
Table 16.60 BR209 Methodology Results (Zone 08 C Sixth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Studio	99%	Y	97%	Y
2	Bedroom	100%	Y	97%	Y
3	Bedroom	100%	Y	97%	Y
4	Liv/Din	100%	Y	100%	Y
5	Liv/Din	100%	Y	100%	Y
6	Bedroom	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Bedroom	100%	Y	100%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Liv/Din	100%	Y	100%	Y
18	Bedroom	100%	Y	95%	Y

Legends

Figure 16.60 Zone 08 D First Floor Legend



Results

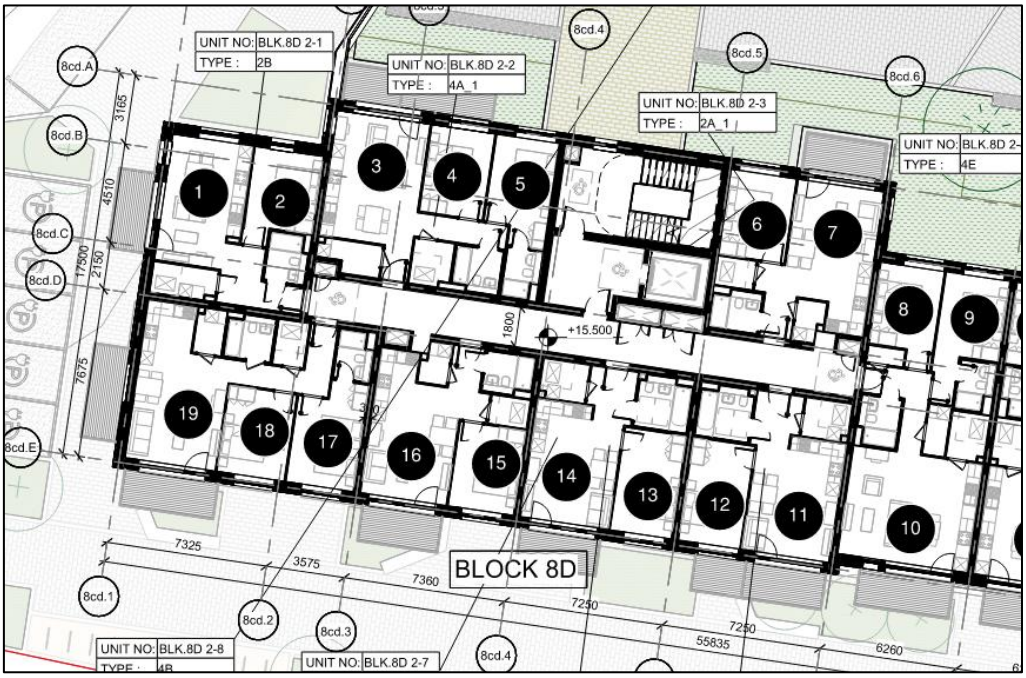
Table 16.61 BR209 Methodology Results (Zone 08 D First Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	49%	N
3	Liv/Din	100%	Y	72%	Y
4	Bedroom	100%	Y	53%	Y
5	Bedroom	100%	Y	61%	Y
6	Bedroom	100%	Y	67%	Y
7	Liv/Din	100%	Y	59%	Y
8	Bedroom	100%	Y	51%	Y
9	Bedroom	100%	Y	67%	Y
10	Liv/Din	100%	Y	87%	Y
11	Liv/Din	99%	Y	83%	Y
12	Bedroom	100%	Y	69%	Y
13	Bedroom	100%	Y	98%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Liv/Din	100%	Y	88%	Y
15	Bedroom	100%	Y	88%	Y
16	Liv/Din	100%	Y	86%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.61 Zone 08 D Second Floor Legend



Results

Table 16.62 BR209 Methodology Results (Zone 08 D Second Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	80%	Y
3	Liv/Din	100%	Y	79%	Y
4	Bedroom	100%	Y	86%	Y
5	Bedroom	100%	Y	69%	Y
6	Bedroom	100%	Y	81%	Y
7	Liv/Din	100%	Y	86%	Y
8	Bedroom	97%	Y	78%	Y
9	Bedroom	100%	Y	80%	Y
10	Liv/Din	100%	Y	92%	Y
11	Liv/Din	100%	Y	94%	Y
12	Bedroom	100%	Y	60%	Y
13	Bedroom	100%	Y	88%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Liv/Din	100%	Y	95%	Y
15	Bedroom	100%	Y	100%	Y
16	Liv/Din	100%	Y	95%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.62 Zone 08 D Third Floor Legend



Results

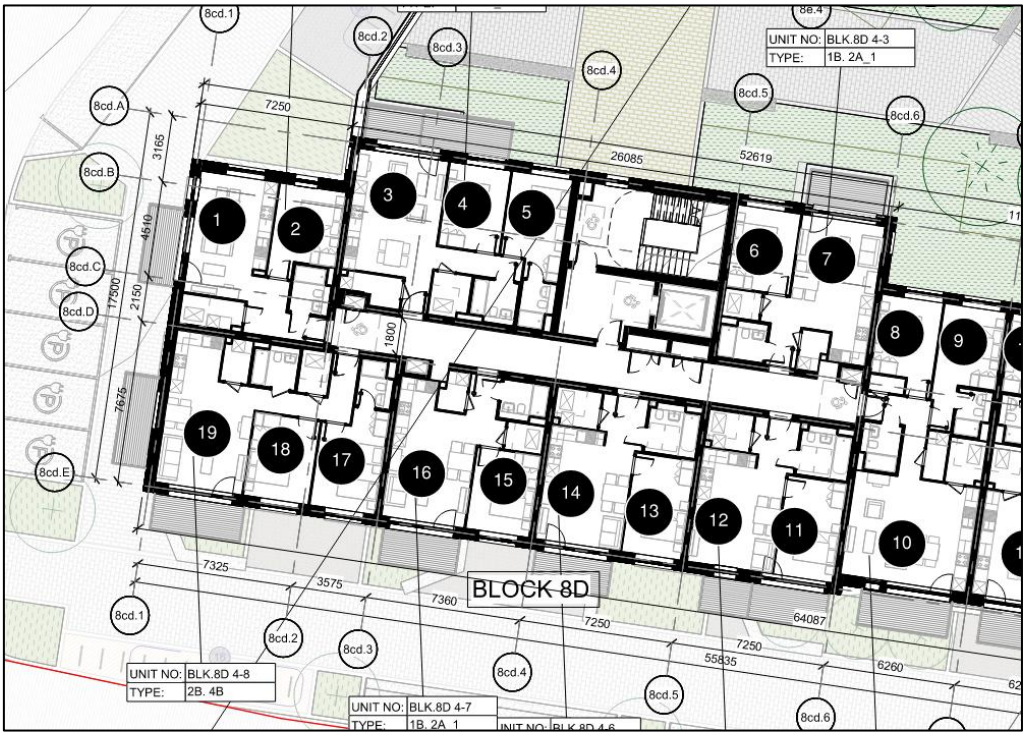
Table 16.63 BR209 Methodology Results (Zone 08 D Third Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	79%	Y
3	Liv/Din	100%	Y	81%	Y
4	Bedroom	100%	Y	82%	Y
5	Bedroom	100%	Y	79%	Y
6	Bedroom	100%	Y	80%	Y
7	Liv/Din	100%	Y	71%	Y
8	Bedroom	100%	Y	87%	Y
9	Bedroom	100%	Y	91%	Y
10	Liv/Din	100%	Y	100%	Y
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	82%	Y
13	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Liv/Din	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.63 Zone 08 D Fourth Floor Legend



Results

Table 16.64 BR209 Methodology Results (Zone 08 D Fourth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	80%	Y
3	Liv/Din	100%	Y	96%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	96%	Y
6	Bedroom	100%	Y	79%	Y
7	Liv/Din	100%	Y	84%	Y
8	Bedroom	100%	Y	86%	Y
9	Bedroom	100%	Y	82%	Y
10	Liv/Din	100%	Y	100%	Y
11	Liv/Din	100%	Y	99%	Y
12	Bedroom	100%	Y	98%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Bedroom	100%	Y	62%	Y
14	Liv/Din	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Liv/Din	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.64 Zone 08 D Fifth Floor Legend



Results

Table 16.65 BR209 Methodology Results (Zone 08 D Fifth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	82%	Y
3	Liv/Din	100%	Y	89%	Y
4	Bedroom	100%	Y	95%	Y
5	Bedroom	100%	Y	99%	Y
6	Bedroom	100%	Y	100%	Y
7	Liv/Din	100%	Y	97%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	100%	Y
10	Bedroom	100%	Y	100%	Y
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.65 Zone 08 E First Floor Legend



Results

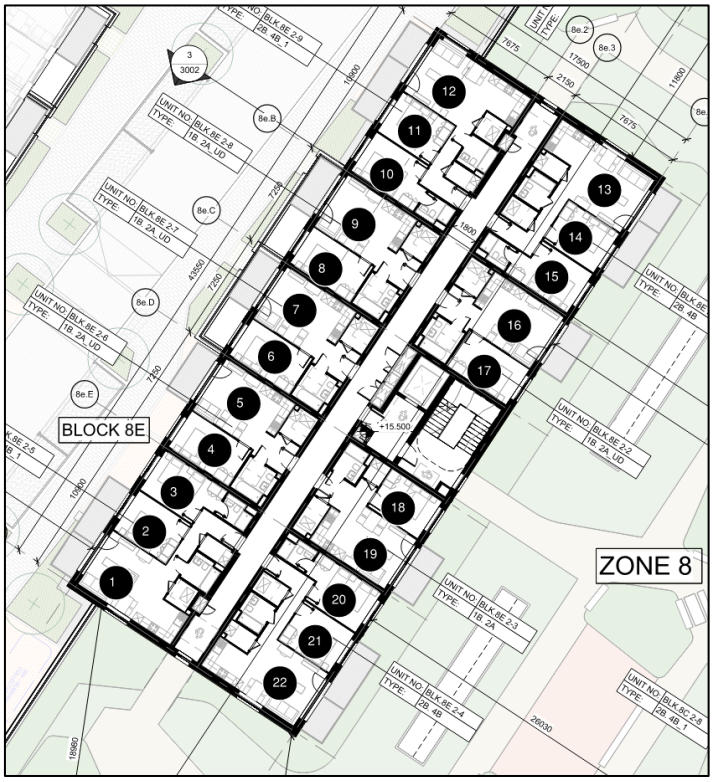
Table 16.662 BR209 Methodology Results (Zone 08 E First Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	57%	Y
3	Bedroom	100%	Y	67%	Y
4	Bedroom	100%	Y	48%	N
5	Liv/Din	100%	Y	54%	Y
6	Bedroom	100%	Y	47%	N
7	Liv/Din	100%	Y	74%	Y
8	Bedroom	100%	Y	60%	Y
9	Liv/Din	100%	Y	41%	N
10	Bedroom	100%	Y	55%	Y
11	Bedroom	100%	Y	72%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Liv/Din	100%	Y	77%	Y
13	Liv/Din	100%	Y	83%	Y
14	Bedroom	100%	Y	75%	Y
15	Bedroom	100%	Y	75%	Y
16	Liv/Din	100%	Y	96%	Y
17	Bedroom	100%	Y	87%	Y
18	Bedroom	100%	Y	78%	Y
19	Liv/Din	100%	Y	88%	Y
20	Bedroom	96%	Y	58%	Y
21	Bedroom	100%	Y	57%	Y
22	Liv/Din	100%	Y	97%	Y

Legends

Figure 16.66 Zone 08 E Second Floor Legend



Results

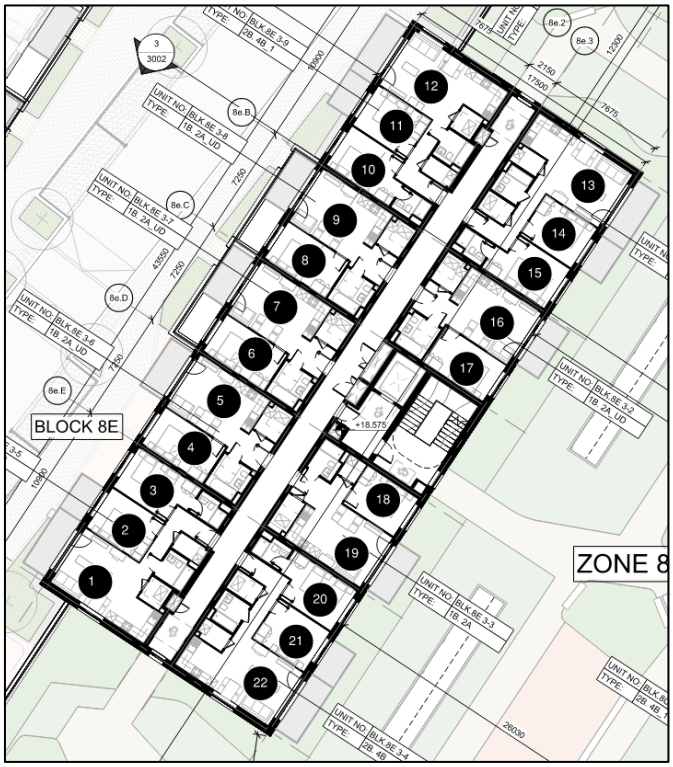
Table 16.67 BR209 Methodology Results (Zone 08 E Second Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	67%	Y
3	Bedroom	100%	Y	69%	Y
4	Bedroom	100%	Y	52%	Y
5	Liv/Din	100%	Y	60%	Y
6	Bedroom	100%	Y	48%	N
7	Liv/Din	100%	Y	80%	Y
8	Bedroom	100%	Y	88%	Y
9	Liv/Din	100%	Y	52%	Y
10	Bedroom	100%	Y	58%	Y
11	Bedroom	100%	Y	62%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Liv/Din	100%	Y	79%	Y
13	Liv/Din	100%	Y	86%	Y
14	Bedroom	100%	Y	95%	Y
15	Bedroom	100%	Y	94%	Y
16	Liv/Din	100%	Y	98%	Y
17	Bedroom	100%	Y	93%	Y
18	Bedroom	100%	Y	97%	Y
19	Liv/Din	100%	Y	82%	Y
20	Bedroom	100%	Y	86%	Y
21	Bedroom	100%	Y	89%	Y
22	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.67 Zone 08 E Third Floor Legend



Results

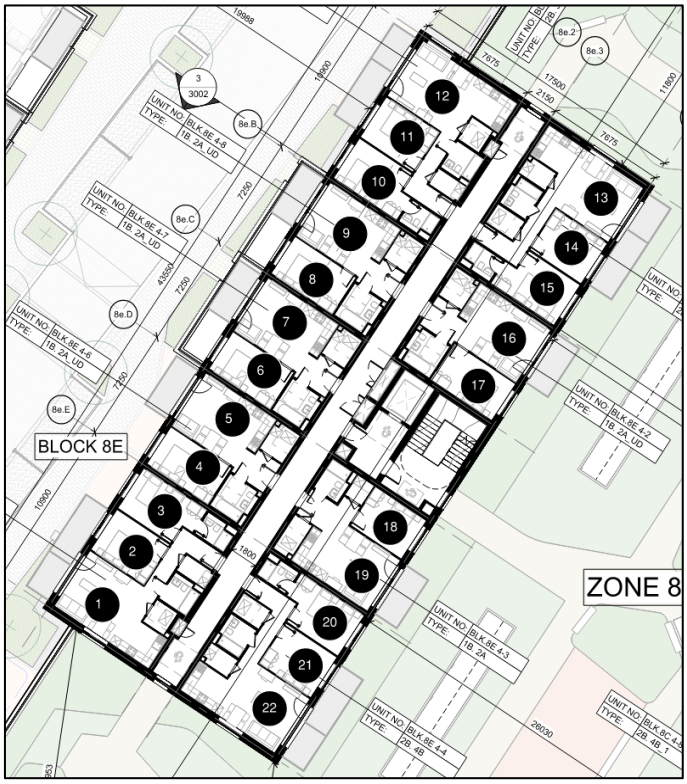
Table 16.68 BR209 Methodology Results (Zone 08 E Third Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	97%	Y
2	Bedroom	100%	Y	82%	Y
3	Bedroom	100%	Y	82%	Y
4	Bedroom	100%	Y	57%	Y
5	Liv/Din	100%	Y	66%	Y
6	Bedroom	100%	Y	55%	Y
7	Liv/Din	100%	Y	94%	Y
8	Bedroom	100%	Y	84%	Y
9	Liv/Din	100%	Y	53%	Y
10	Bedroom	100%	Y	85%	Y
11	Bedroom	100%	Y	64%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Liv/Din	100%	Y	77%	Y
13	Liv/Din	100%	Y	86%	Y
14	Bedroom	100%	Y	75%	Y
15	Bedroom	100%	Y	78%	Y
16	Liv/Din	100%	Y	84%	Y
17	Bedroom	100%	Y	90%	Y
18	Bedroom	100%	Y	97%	Y
19	Liv/Din	100%	Y	83%	Y
20	Bedroom	100%	Y	95%	Y
21	Bedroom	100%	Y	95%	Y
22	Liv/Din	100%	Y	97%	Y

Legends

Figure 16.68 Zone 08 E Fourth Floor Legend



Results

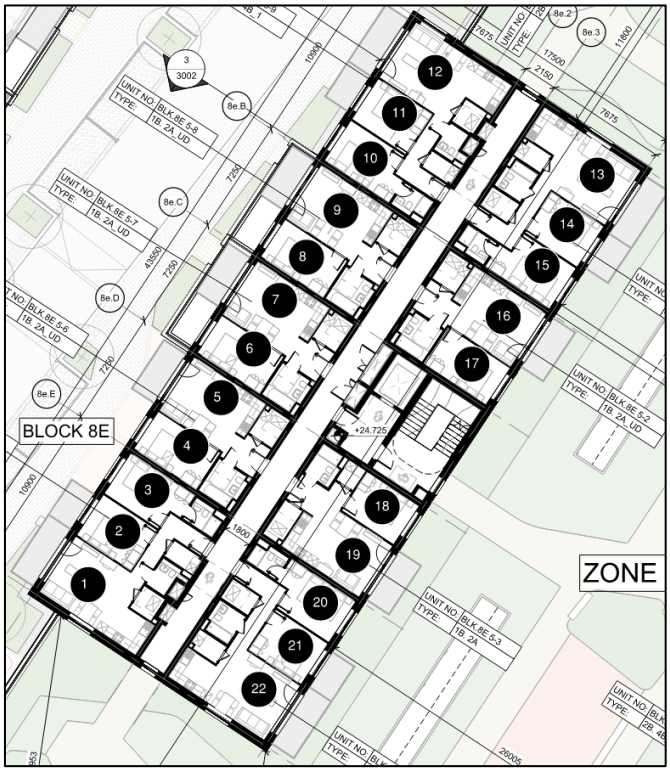
Table 16.69 BR209 Methodology Results (Zone 08 E Fourth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	97%	Y
2	Bedroom	100%	Y	90%	Y
3	Bedroom	100%	Y	87%	Y
4	Bedroom	100%	Y	67%	Y
5	Liv/Din	100%	Y	83%	Y
6	Bedroom	100%	Y	70%	Y
7	Liv/Din	100%	Y	100%	Y
8	Bedroom	100%	Y	100%	Y
9	Liv/Din	100%	Y	71%	Y
10	Bedroom	100%	Y	80%	Y
11	Bedroom	100%	Y	88%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Liv/Din	100%	Y	77%	Y
13	Liv/Din	100%	Y	90%	Y
14	Bedroom	100%	Y	96%	Y
15	Bedroom	100%	Y	100%	Y
16	Liv/Din	100%	Y	94%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	93%	Y
20	Bedroom	100%	Y	99%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	98%	Y

Legends

Figure 16.69 Zone 08 E Fifth Floor Legend



Results

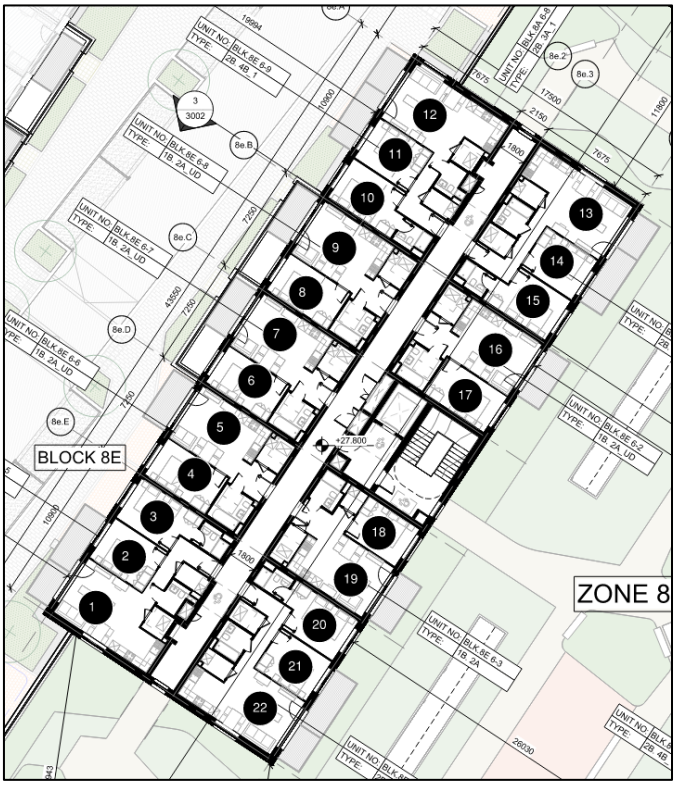
Table 16.70 BR209 Methodology Results (Zone 08 E Fifth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	99%	Y
2	Bedroom	100%	Y	99%	Y
3	Bedroom	100%	Y	97%	Y
4	Bedroom	100%	Y	87%	Y
5	Liv/Din	100%	Y	97%	Y
6	Bedroom	100%	Y	86%	Y
7	Liv/Din	100%	Y	98%	Y
8	Bedroom	100%	Y	100%	Y
9	Liv/Din	100%	Y	85%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	96%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Liv/Din	100%	Y	84%	Y
13	Liv/Din	100%	Y	93%	Y
14	Bedroom	100%	Y	95%	Y
15	Bedroom	100%	Y	79%	Y
16	Liv/Din	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	99%	Y
20	Bedroom	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.70 Zone 08 E Sixth Floor Legend



Results

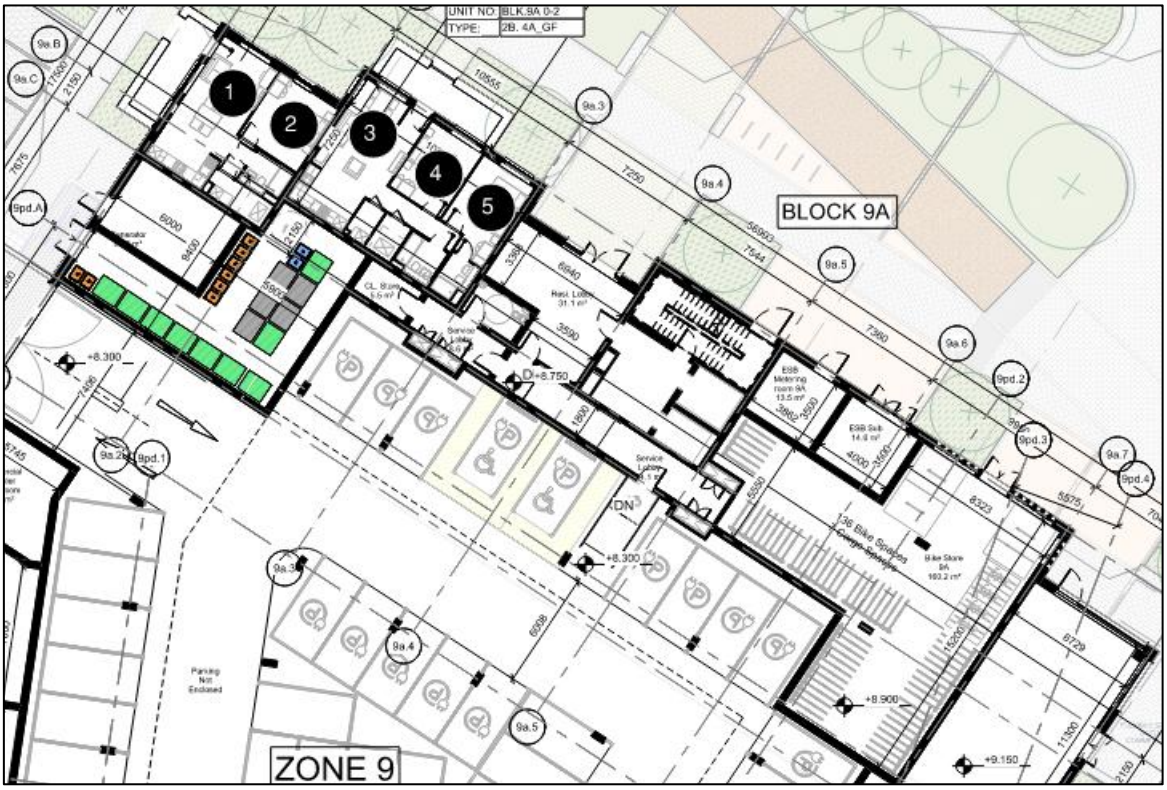
Table 16.71 BR209 Methodology Results (Zone 08 E Sixth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Bedroom	100%	Y	97%	Y
4	Bedroom	100%	Y	100%	Y
5	Liv/Din	100%	Y	98%	Y
6	Bedroom	100%	Y	100%	Y
7	Liv/Din	100%	Y	100%	Y
8	Bedroom	100%	Y	100%	Y
9	Liv/Din	100%	Y	100%	Y
10	Bedroom	100%	Y	98%	Y
11	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Liv/Din	100%	Y	93%	Y
13	Liv/Din	100%	Y	98%	Y
14	Bedroom	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Liv/Din	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Liv/Din	100%	Y	100%	Y
20	Bedroom	100%	Y	100%	Y
21	Bedroom	100%	Y	100%	Y
22	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.71 Zone 09 A Ground Floor Legend



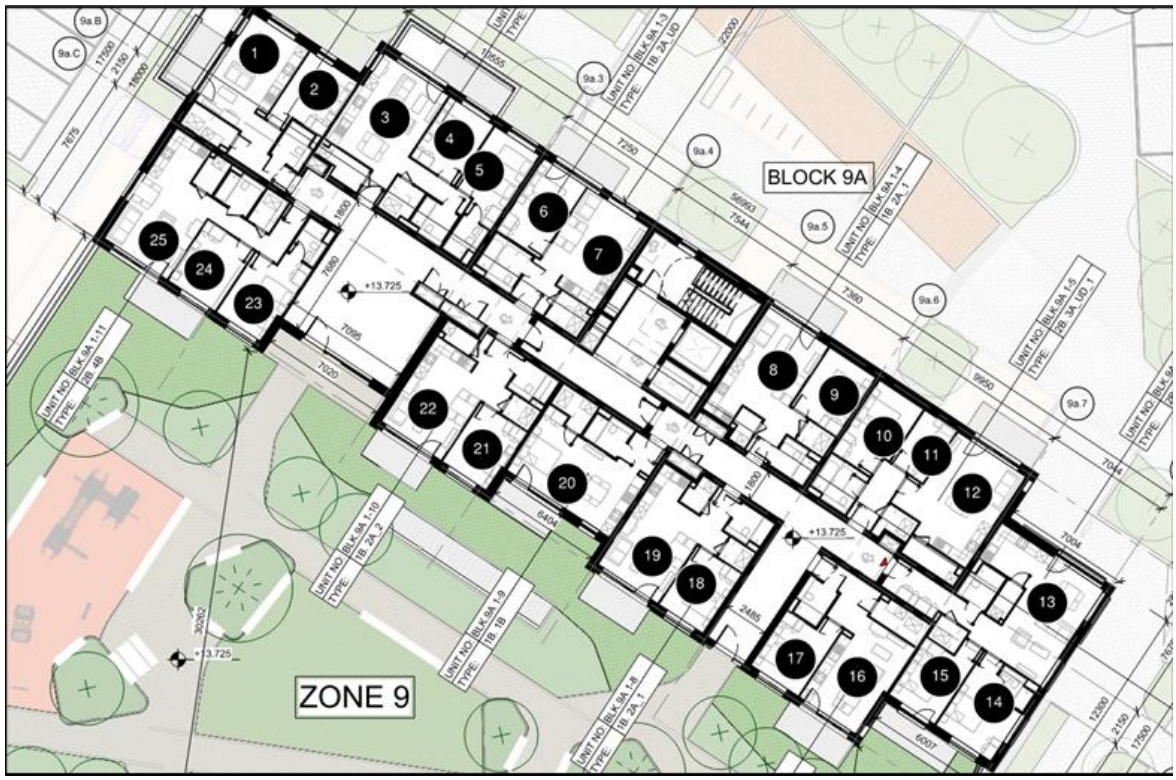
Results

Table 16.72 BR209 Methodology Results (Zone 09 A First Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	88%	Y
3	Liv/Din	100%	Y	74%	Y
4	Bedroom	100%	Y	95%	Y
5	Bedroom	100%	Y	91%	Y

Legends

Figure 16.72 Zone 09 A First Floor Legend



Results

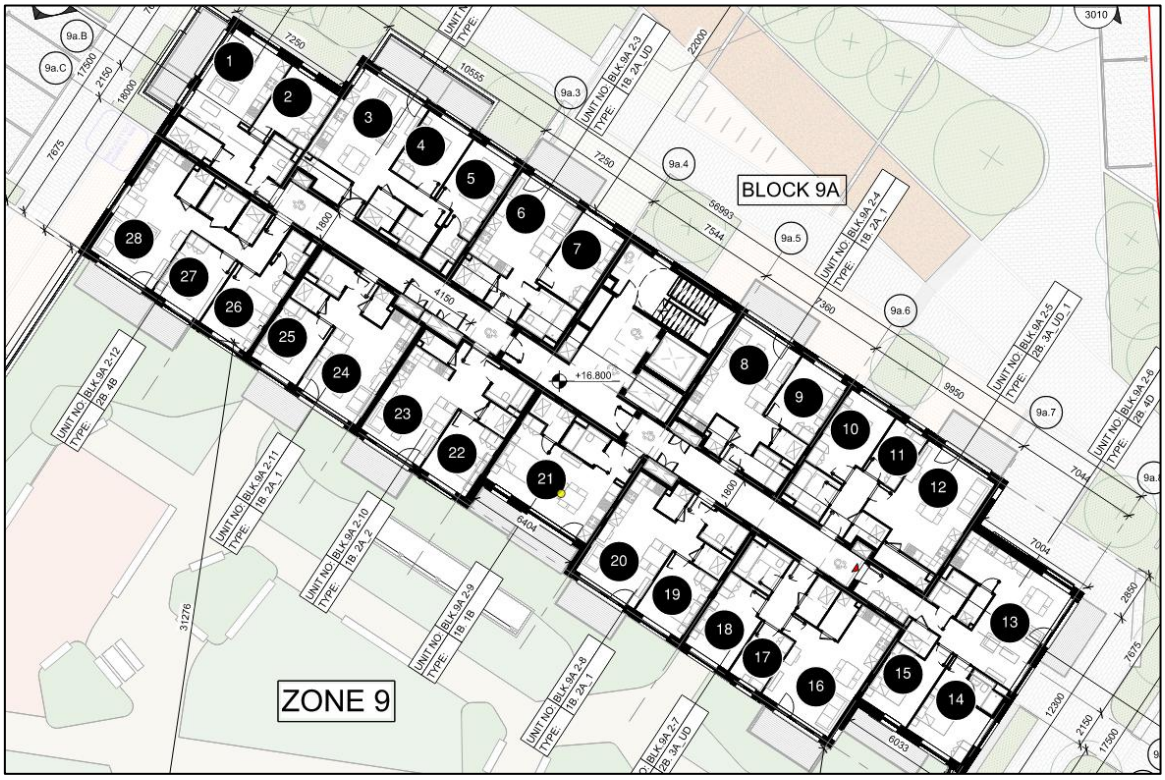
Table 16.73 BR209 Methodology Results (Zone 09 A First Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Liv/Din	100%	Y	99%	Y
4	Bedroom	100%	Y	96%	Y
5	Bedroom	100%	Y	97%	Y
6	Liv/Din	100%	Y	98%	Y
7	Bedroom	100%	Y	97%	Y
8	Liv/Din	100%	Y	94%	Y
9	Bedroom	100%	Y	95%	Y
10	Bedroom	100%	Y	98%	Y
11	Bedroom	100%	Y	100%	Y
12	Liv/Din	100%	Y	87%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Liv/Din	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Bedroom	100%	Y	91%	Y
16	Liv/Din	99%	Y	66%	Y
17	Bedroom	100%	Y	48%	N
18	Bedroom	100%	Y	53%	Y
19	Liv/Din	100%	Y	63%	Y
20	Studio	100%	Y	88%	Y
21	Bedroom	100%	Y	89%	Y
22	Liv/Din	98%	Y	79%	Y
23	Bedroom	100%	Y	100%	Y
24	Bedroom	100%	Y	100%	Y
25	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.73 Zone 09 A Second Floor Legend



Results

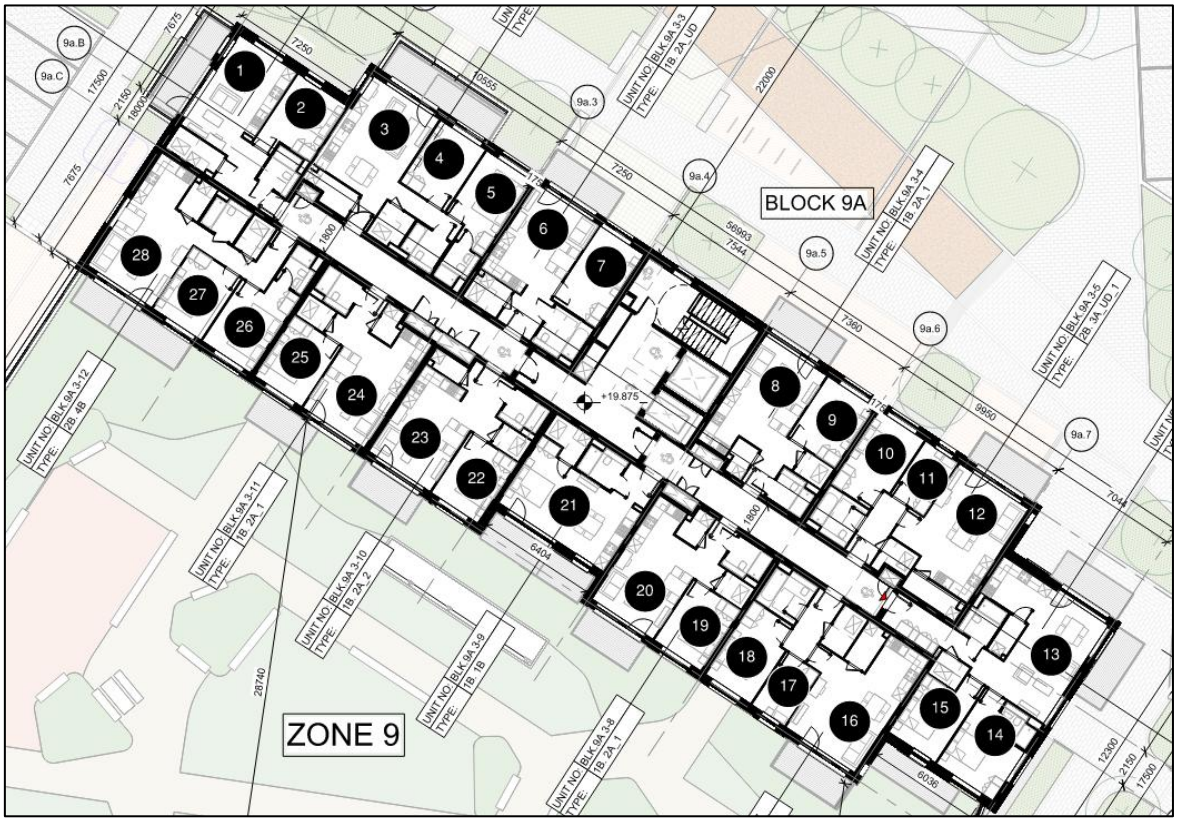
Table 16.74 BR209 Methodology Results (Zone 09 A Second Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Liv/Din	100%	Y	100%	Y
4	Bedroom	100%	Y	98%	Y
5	Bedroom	100%	Y	97%	Y
6	Liv/Din	100%	Y	98%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	96%	Y
9	Bedroom	100%	Y	95%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y
12	Liv/Din	100%	Y	99%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
13	Liv/Din	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Bedroom	100%	Y	92%	Y
16	Liv/Din	100%	Y	58%	Y
17	Bedroom	100%	Y	60%	Y
18	Bedroom	100%	Y	61%	Y
19	Bedroom	100%	Y	70%	Y
20	Liv/Din	100%	Y	67%	Y
21	Studio	100%	Y	95%	Y
22	Bedroom	100%	Y	100%	Y
23	Liv/Din	100%	Y	82%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom	100%	Y	97%	Y
26	Bedroom	100%	Y	100%	Y
27	Bedroom	100%	Y	100%	Y
28	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.74 Zone 09 A Third Floor Legend



Results

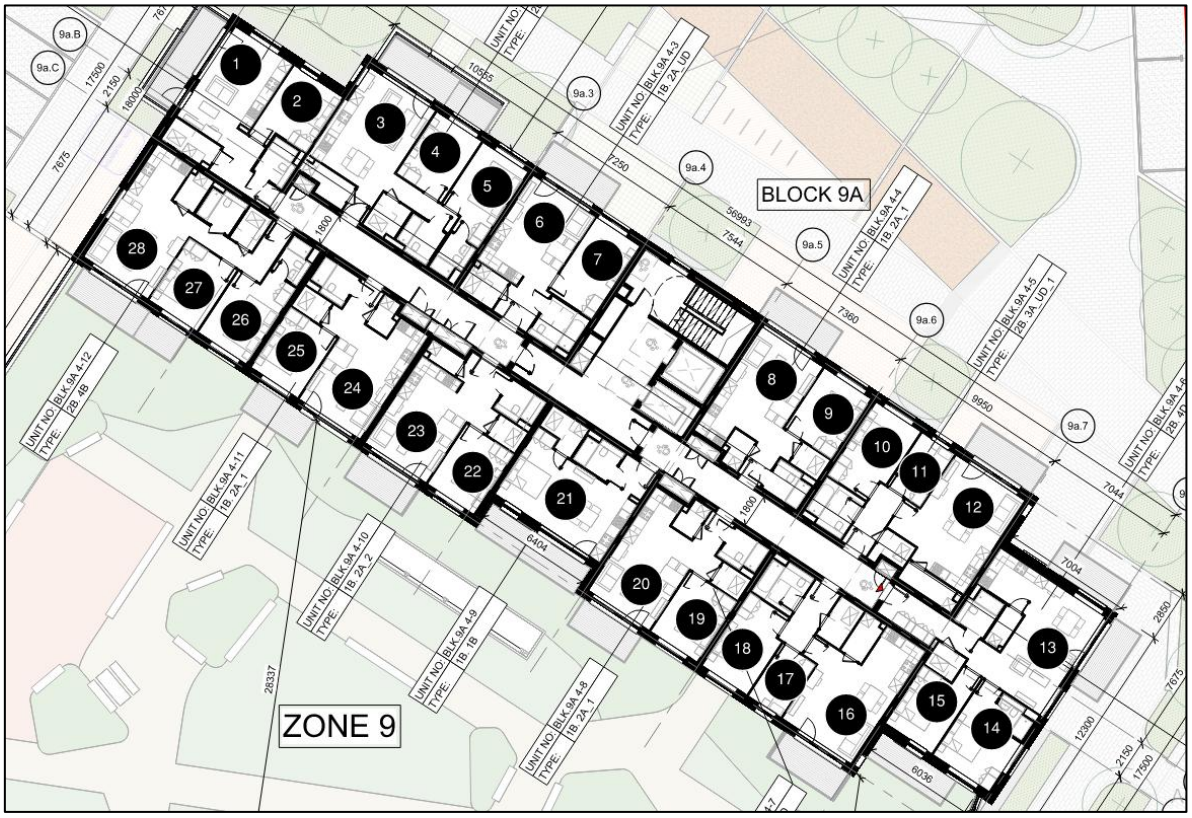
Table 16.75 BR209 Methodology Results (Zone 09 A Third Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Liv/Din	100%	Y	100%	Y
4	Bedroom	100%	Y	98%	Y
5	Bedroom	100%	Y	98%	Y
6	Liv/Din	100%	Y	98%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	96%	Y
10	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
11	Bedroom	100%	Y	100%	Y
12	Liv/Din	100%	Y	99%	Y
13	Liv/Din	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Bedroom	100%	Y	85%	Y
16	Liv/Din	96%	Y	59%	Y
17	Bedroom	100%	Y	66%	Y
18	Bedroom	100%	Y	69%	Y
19	Bedroom	100%	Y	76%	Y
20	Liv/Din	100%	Y	68%	Y
21	Studio	100%	Y	96%	Y
22	Bedroom	100%	Y	97%	Y
23	Liv/Din	98%	Y	85%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom	100%	Y	100%	Y
26	Bedroom	100%	Y	100%	Y
27	Bedroom	100%	Y	100%	Y
28	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.75 Zone 09 A Fourth Floor Legend



Results

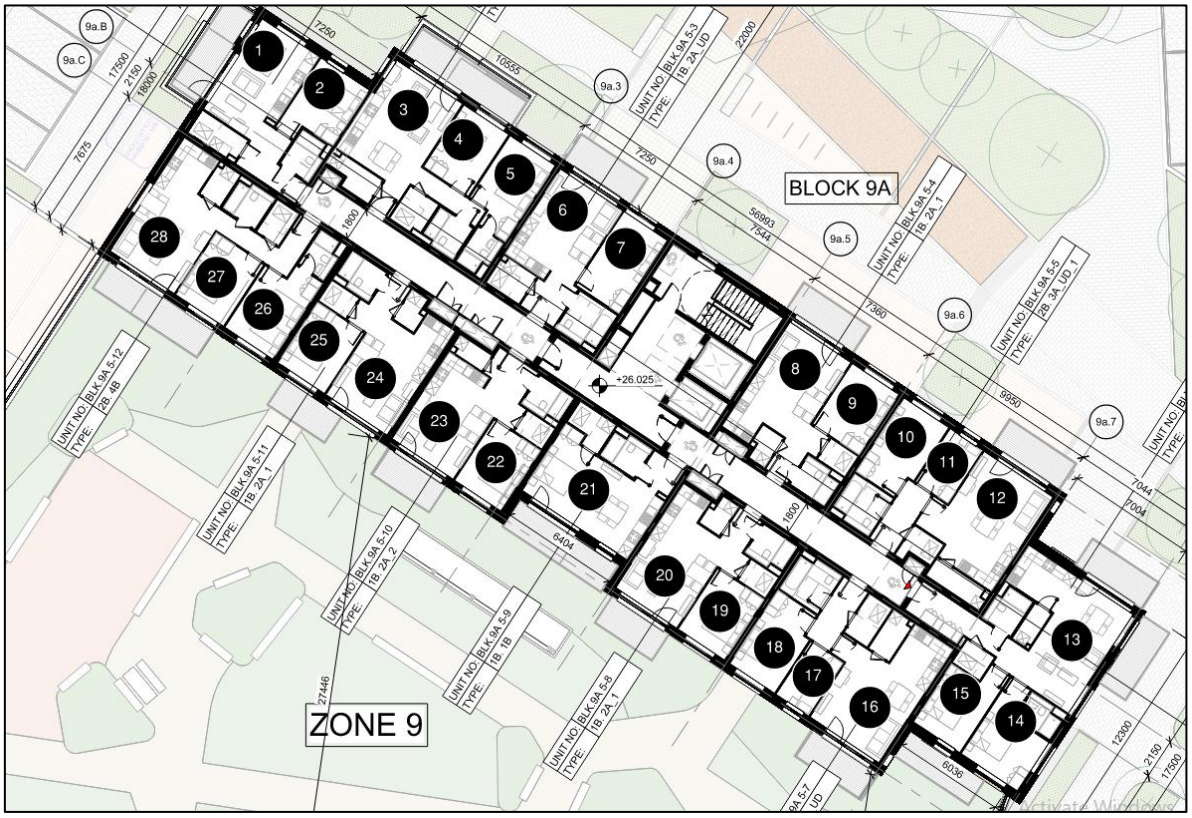
Table 16.76 BR209 Methodology Results (Zone 09 A Fourth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Liv/Din	100%	Y	100%	Y
4	Bedroom	100%	Y	98%	Y
5	Bedroom	100%	Y	97%	Y
6	Liv/Din	100%	Y	98%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	96%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Liv/Din	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Bedroom	100%	Y	91%	Y
16	Liv/Din	98%	Y	61%	Y
17	Bedroom	100%	Y	80%	Y
18	Bedroom	100%	Y	76%	Y
19	Bedroom	100%	Y	90%	Y
20	Liv/Din	100%	Y	75%	Y
21	Studio	100%	Y	94%	Y
22	Bedroom	100%	Y	100%	Y
23	Liv/Din	98%	Y	95%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom	100%	Y	100%	Y
26	Bedroom	100%	Y	100%	Y
27	Bedroom	100%	Y	100%	Y
28	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.76 Zone 09 A Fifth Floor Legend



Results

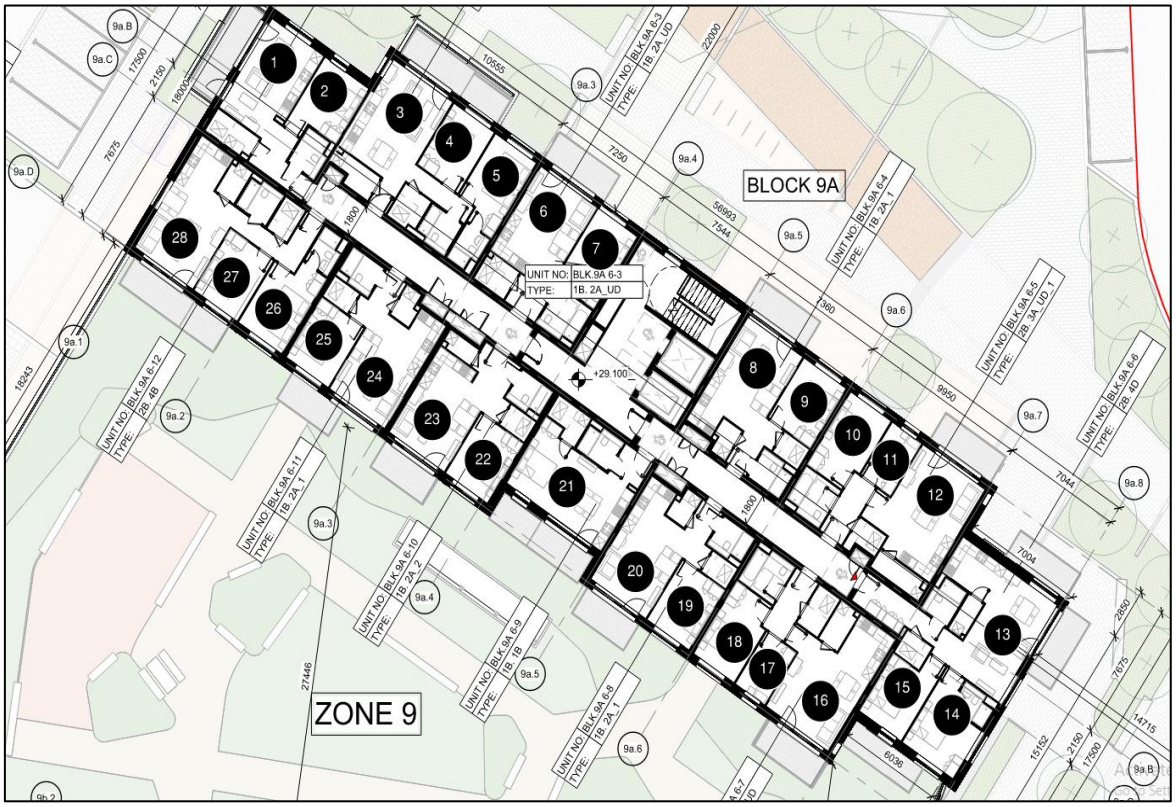
Table 16.77 BR209 Methodology Results (Zone 09 A Fifth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Liv/Din	100%	Y	100%	Y
4	Bedroom	100%	Y	98%	Y
5	Bedroom	100%	Y	98%	Y
6	Liv/Din	100%	Y	98%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	96%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Liv/Din	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Liv/Din	100%	Y	63%	Y
17	Bedroom	100%	Y	93%	Y
18	Bedroom	100%	Y	76%	Y
19	Bedroom	100%	Y	100%	Y
20	Liv/Din	100%	Y	88%	Y
21	Studio	100%	Y	99%	Y
22	Bedroom	100%	Y	100%	Y
23	Liv/Din	100%	Y	98%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom	100%	Y	100%	Y
26	Bedroom	100%	Y	100%	Y
27	Bedroom	100%	Y	100%	Y
28	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.77 Zone 09 A Sixth Floor Legend



Results

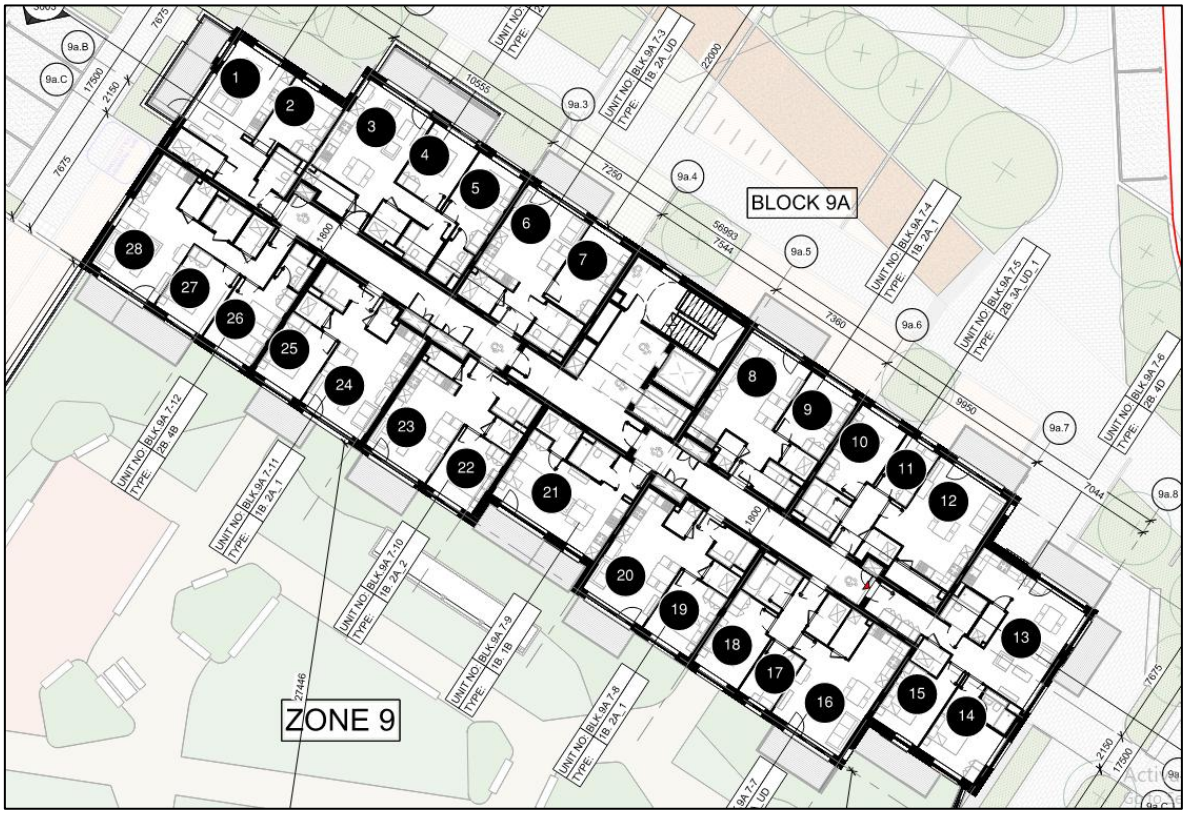
Table 16.78 BR209 Methodology Results (Zone 09 A Sixth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Liv/Din	100%	Y	100%	Y
4	Bedroom	100%	Y	96%	Y
5	Bedroom	100%	Y	99%	Y
6	Liv/Din	100%	Y	98%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	97%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Liv/Din	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Liv/Din	97%	Y	75%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Bedroom	100%	Y	100%	Y
20	Liv/Din	100%	Y	97%	Y
21	Studio	100%	Y	100%	Y
22	Bedroom	100%	Y	100%	Y
23	Liv/Din	100%	Y	98%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom	100%	Y	100%	Y
26	Bedroom	100%	Y	100%	Y
27	Bedroom	100%	Y	100%	Y
28	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.78 Zone 09 A Seventh Floor Legend



Results

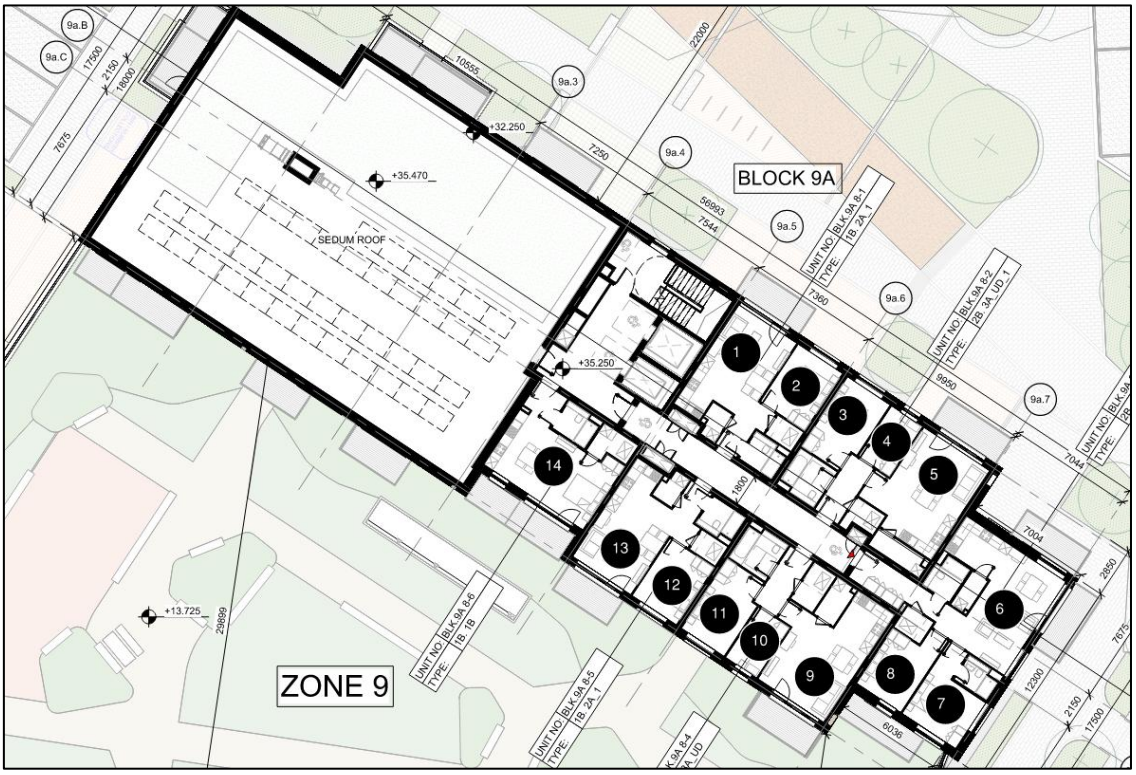
Table 16.79 BR209 Methodology Results (Zone 09 A Seventh Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	100%	Y
3	Liv/Din	100%	Y	100%	Y
4	Bedroom	100%	Y	96%	Y
5	Bedroom	100%	Y	99%	Y
6	Liv/Din	100%	Y	98%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Bedroom	100%	Y	96%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
12	Liv/Din	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Bedroom	100%	Y	100%	Y
15	Bedroom	100%	Y	100%	Y
16	Liv/Din	97%	Y	88%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Bedroom	100%	Y	100%	Y
20	Liv/Din	100%	Y	100%	Y
21	Studio	100%	Y	100%	Y
22	Bedroom	100%	Y	100%	Y
23	Liv/Din	98%	Y	98%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom	100%	Y	100%	Y
26	Bedroom	100%	Y	100%	Y
27	Bedroom	100%	Y	100%	Y
28	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.79 Zone 09 A Eighth Floor Legend



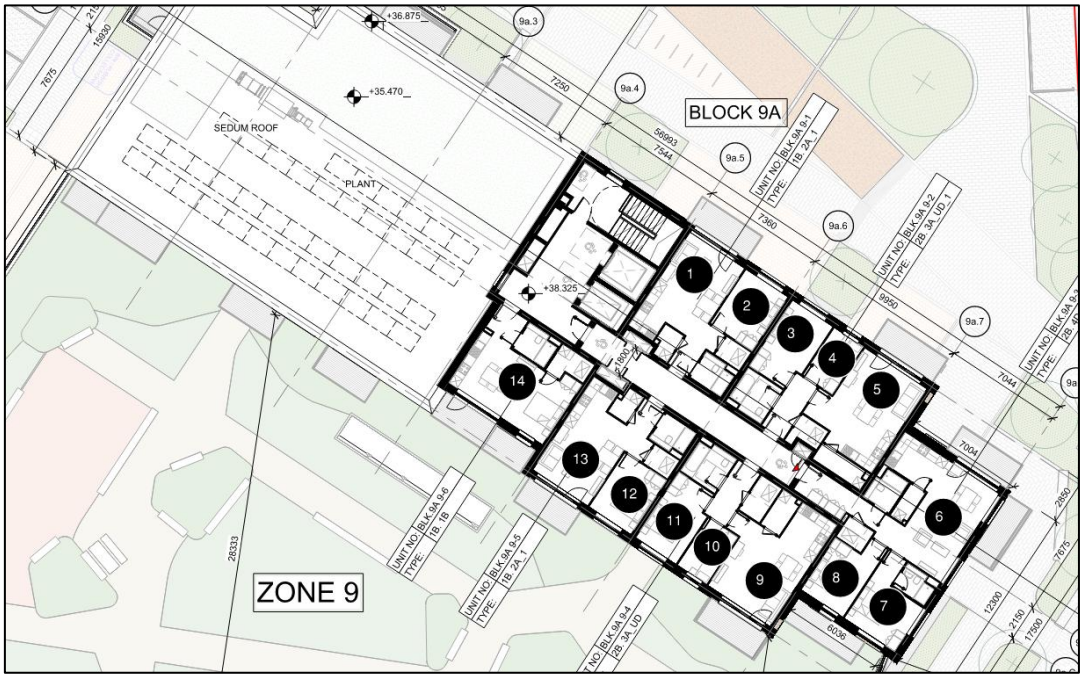
Results

Table 16.80 BR209 Methodology Results (Zone 09 A Eighth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	96%	Y
3	Bedroom	100%	Y	100%	Y
4	Bedroom	100%	Y	90%	Y
5	Liv/Din	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Bedroom	100%	Y	97%	Y
9	Bedroom	100%	Y	100%	Y
10	Bedroom	100%	Y	100%	Y
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Studio	100%	Y	100%	Y

Legends

Figure 16.80 Zone 09 A Ninth Floor Legend



Results

Table 16.81 BR209 Methodology Results (Zone 09 A Ninth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	96%	Y
3	Bedroom	100%	Y	100%	Y
4	Bedroom	100%	Y	100%	Y
5	Liv/Din	100%	Y	100%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	100%	Y
8	Bedroom	100%	Y	100%	Y
9	Bedroom	100%	Y	97%	Y
10	Bedroom	100%	Y	100%	Y
11	Liv/Din	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Studio	100%	Y	100%	Y

Legends

Figure 16.81 Zone 09 B First Floor Legend



Results

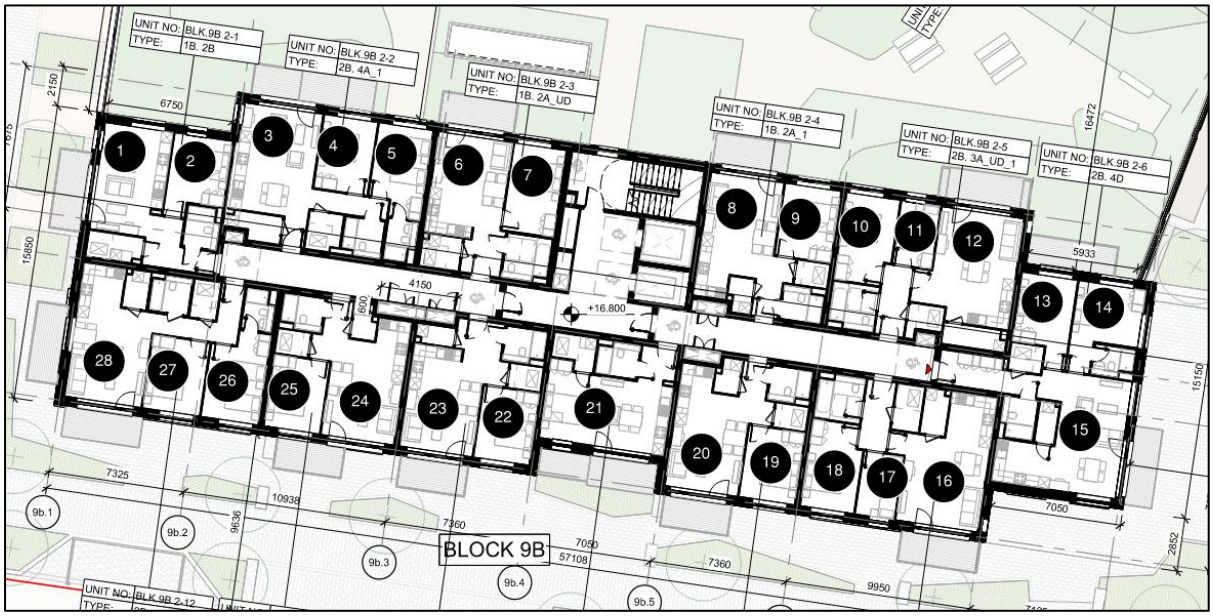
Table 16.82 BR209 Methodology Results (Zone 09 B First Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	73%	Y
3	Liv/Din	100%	Y	94%	Y
4	Bedroom	100%	Y	52%	Y
5	Liv/Din	100%	Y	59%	Y
6	Bedroom	100%	Y	50%	Y
7	Bedroom	100%	Y	41%	N
8	Bedroom	100%	Y	46%	N
9	Liv/Din	97%	Y	61%	Y
10	Bedroom	100%	Y	61%	Y
11	Bedroom	100%	Y	100%	Y
12	Liv/Din	100%	Y	100%	Y
13	Liv/Din	100%	Y	73%	Y
14	Bedroom	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
15	Bedroom	100%	Y	100%	Y
16	Bedroom	100%	Y	100%	Y
17	Liv/Din	100%	Y	90%	Y
18	Studio	100%	Y	100%	Y
19	Bedroom	100%	Y	100%	Y
20	Liv/Din	100%	Y	85%	Y
21	Liv/Din	100%	Y	89%	Y
22	Bedroom	100%	Y	100%	Y
23	Bedroom	100%	Y	100%	Y
24	Bedroom	100%	Y	100%	Y
25	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.82 Zone 09 B Second Floor Legend



Results

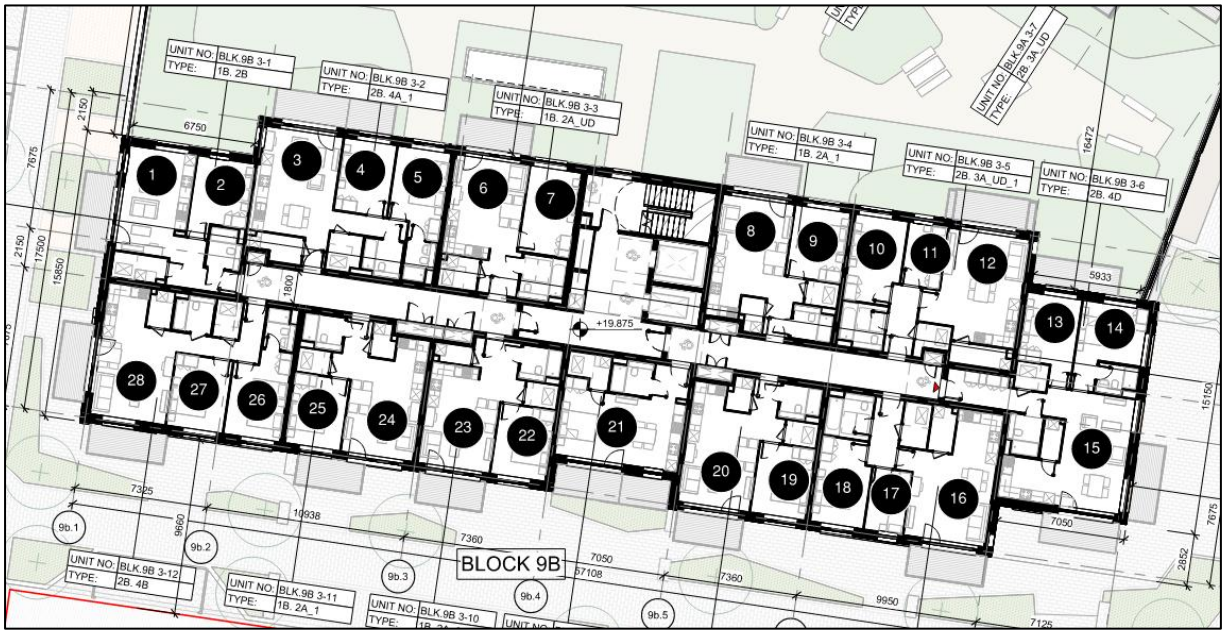
Table 16.83 BR209 Methodology Results (Zone 09 B Second Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	88%	Y
3	Liv/Din	100%	Y	99%	Y
4	Bedroom	100%	Y	92%	Y
5	Bedroom	100%	Y	70%	Y
6	Liv/Din	100%	Y	65%	Y
7	Bedroom	100%	Y	78%	Y
8	Liv/Din	100%	Y	40%	N
9	Bedroom	100%	Y	58%	Y
10	Bedroom	100%	Y	51%	Y
11	Bedroom	100%	Y	50%	Y
12	Liv/Din	98%	Y	71%	Y
13	Bedroom	100%	Y	72%	Y
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Liv/Din	100%	Y	75%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Bedroom	100%	Y	100%	Y
20	Liv/Din	100%	Y	97%	Y
21	Studio	100%	Y	100%	Y
22	Bedroom	100%	Y	100%	Y
23	Liv/Din	100%	Y	93%	Y
24	Liv/Din	100%	Y	97%	Y
25	Bedroom	100%	Y	100%	Y
26	Bedroom	100%	Y	100%	Y
27	Bedroom	100%	Y	100%	Y
28	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.83 Zone 09 B Third Floor Legend



Results

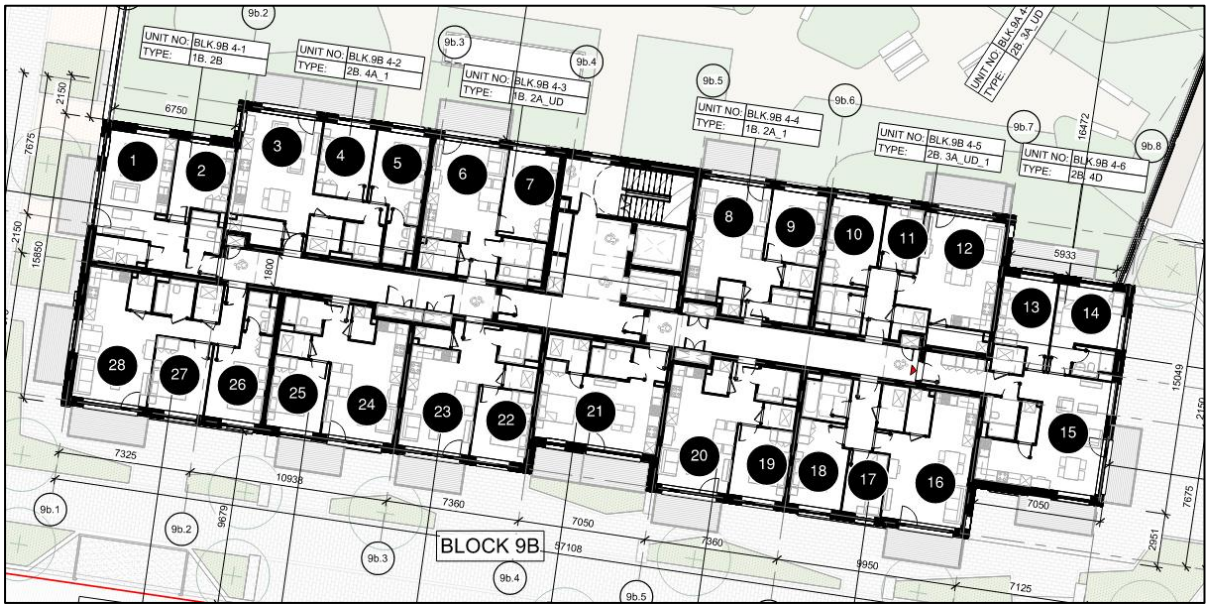
Table 16.84 BR209 Methodology Results (Zone 09 B Third Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	90%	Y
3	Liv/Din	100%	Y	98%	Y
4	Bedroom	100%	Y	85%	Y
5	Bedroom	100%	Y	87%	Y
6	Liv/Din	100%	Y	69%	Y
7	Bedroom	100%	Y	72%	Y
8	Liv/Din	100%	Y	48%	N
9	Bedroom	100%	Y	63%	Y
10	Bedroom	100%	Y	53%	Y
11	Bedroom	100%	Y	52%	Y
12	Liv/Din	98%	Y	71%	Y
13	Bedroom	100%	Y	74%	Y
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y
16	Liv/Din	100%	Y	96%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Bedroom	100%	Y	100%	Y
20	Liv/Din	100%	Y	100%	Y
21	Studio	100%	Y	100%	Y
22	Bedroom	100%	Y	100%	Y
23	Liv/Din	100%	Y	100%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom	100%	Y	100%	Y
26	Bedroom	100%	Y	100%	Y
27	Bedroom	100%	Y	100%	Y
28	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.84 Zone 09 B Fourth Floor Legend



Results

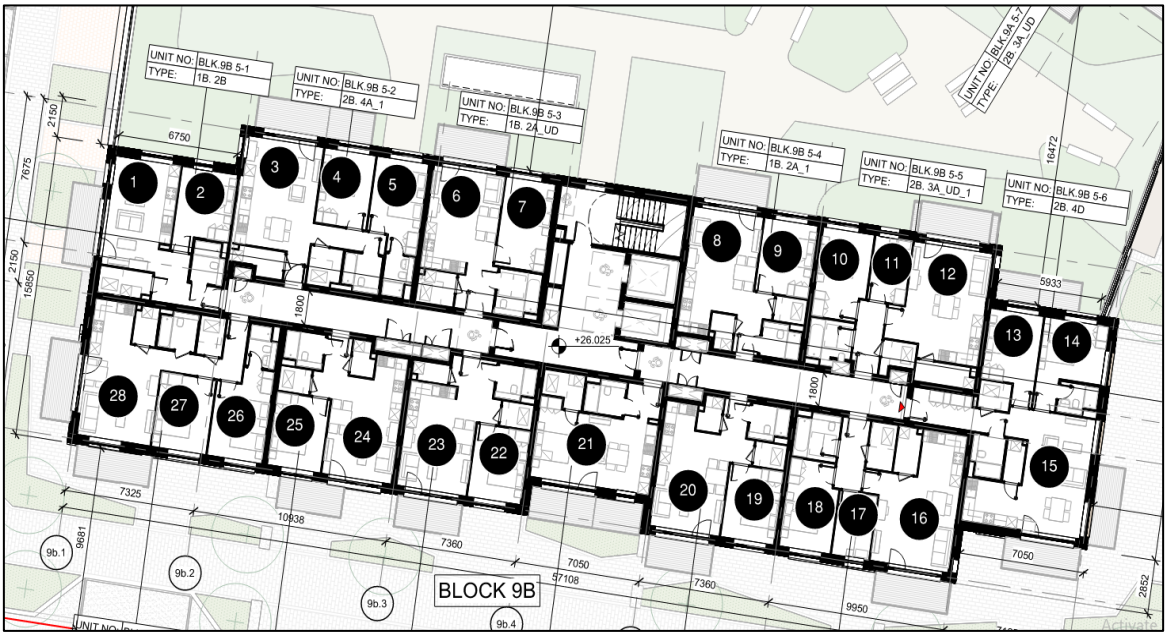
Table 16.85 BR209 Methodology Results (Zone 09 B Fourth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	93%	Y
3	Liv/Din	100%	Y	100%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	96%	Y
6	Liv/Din	100%	Y	78%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	99%	Y	51%	Y
9	Bedroom	100%	Y	68%	Y
10	Bedroom	100%	Y	56%	Y
11	Bedroom	100%	Y	71%	Y
12	Liv/Din	98%	Y	72%	Y
13	Bedroom	100%	Y	75%	Y
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
16	Liv/Din	100%	Y	99%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Bedroom	100%	Y	100%	Y
20	Liv/Din	100%	Y	100%	Y
21	Studio	100%	Y	100%	Y
22	Bedroom	100%	Y	100%	Y
23	Liv/Din	100%	Y	100%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom	100%	Y	100%	Y
26	Bedroom	100%	Y	100%	Y
27	Bedroom	100%	Y	100%	Y
28	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.85 Zone 09 B Fifth Floor Legend



Results

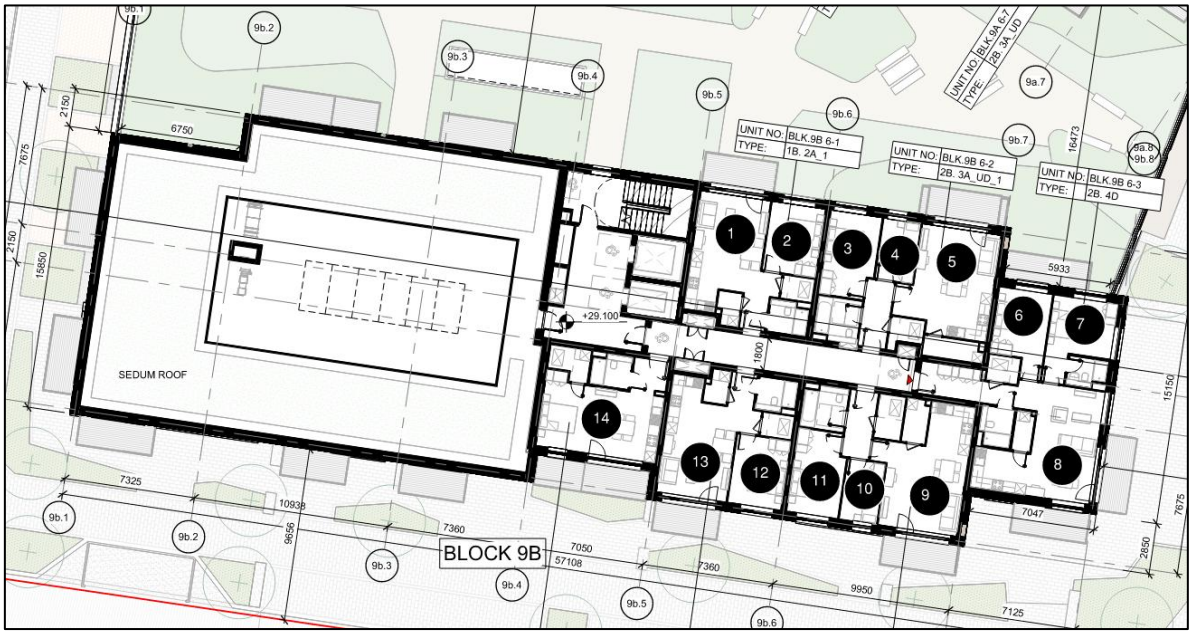
Table 16.86 BR209 Methodology Results (Zone 09 B Fifth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	100%	Y
2	Bedroom	100%	Y	96%	Y
3	Liv/Din	100%	Y	100%	Y
4	Bedroom	100%	Y	100%	Y
5	Bedroom	100%	Y	93%	Y
6	Liv/Din	100%	Y	100%	Y
7	Bedroom	100%	Y	95%	Y
8	Liv/Din	99%	Y	59%	Y
9	Bedroom	100%	Y	74%	Y
10	Bedroom	100%	Y	61%	Y
11	Bedroom	100%	Y	77%	Y
12	Liv/Din	98%	Y	74%	Y
13	Bedroom	100%	Y	82%	Y
14	Bedroom	100%	Y	100%	Y
15	Liv/Din	100%	Y	100%	Y

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
16	Liv/Din	100%	Y	100%	Y
17	Bedroom	100%	Y	100%	Y
18	Bedroom	100%	Y	100%	Y
19	Bedroom	100%	Y	100%	Y
20	Liv/Din	100%	Y	100%	Y
21	Studio	100%	Y	100%	Y
22	Bedroom	100%	Y	100%	Y
23	Liv/Din	100%	Y	100%	Y
24	Liv/Din	100%	Y	100%	Y
25	Bedroom	100%	Y	100%	Y
26	Bedroom	100%	Y	100%	Y
27	Bedroom	100%	Y	100%	Y
28	Liv/Din	100%	Y	100%	Y

Legends

Figure 16.86 Zone 09 B Sixth Floor Legend



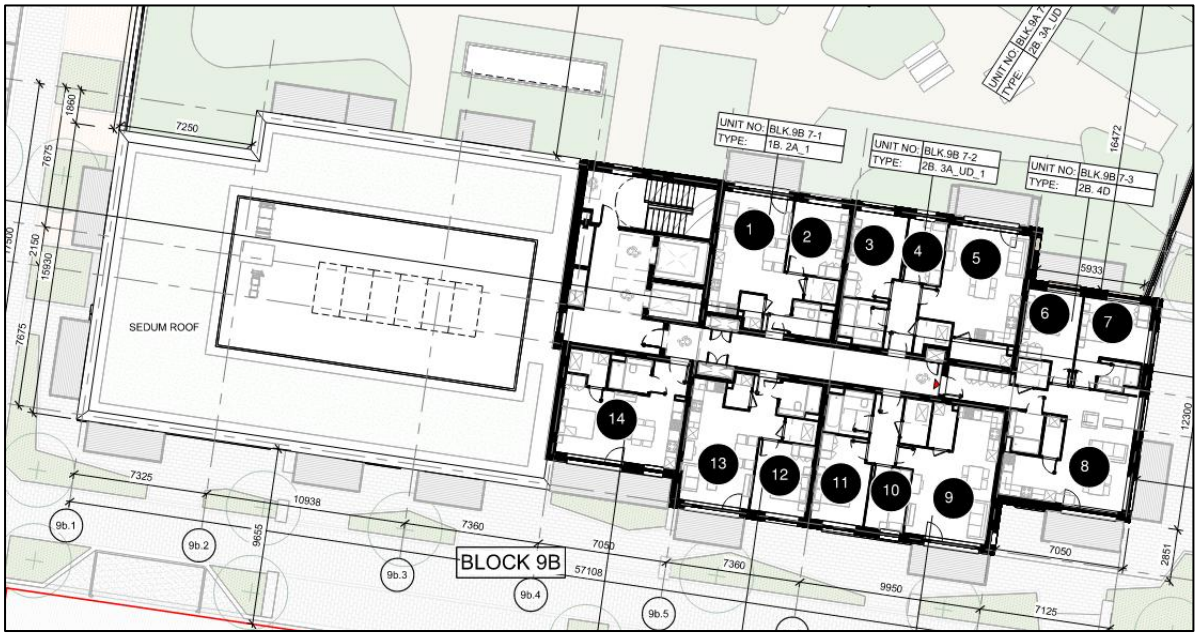
Results

Table 16.87 BR209 Methodology Results (Zone 09 B Sixth Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	68%	Y
2	Bedroom	100%	Y	93%	Y
3	Bedroom	100%	Y	69%	Y
4	Bedroom	100%	Y	91%	Y
5	Liv/Din	98%	Y	77%	Y
6	Bedroom	100%	Y	91%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Liv/Din	100%	Y	100%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Studio	100%	Y	100%	Y

Legends

Figure 16.87 Zone 09 B Seventh Floor Legend



Results

Table 16.88 BR209 Methodology Results (Zone 09 B Seventh Floor)

Legend	Space	2022 Methodology Criterion 1 (%) (Compliance at ≥ 95% @100lux)	2022 Methodology Criterion 1 Compliance	2022 Methodology Criterion 2 (%) (Compliance at ≥ 50% @300lux)	2022 Methodology Criterion 2 Compliance
1	Liv/Din	100%	Y	89%	Y
2	Bedroom	100%	Y	92%	Y
3	Bedroom	100%	Y	79%	Y
4	Bedroom	100%	Y	100%	Y
5	Liv/Din	100%	Y	86%	Y
6	Bedroom	100%	Y	93%	Y
7	Bedroom	100%	Y	100%	Y
8	Liv/Din	100%	Y	100%	Y
9	Liv/Din	100%	Y	100%	Y
10	Bedroom	100%	Y	100%	Y
11	Bedroom	100%	Y	100%	Y
12	Bedroom	100%	Y	100%	Y
13	Liv/Din	100%	Y	100%	Y
14	Studio	100%	Y	100%	Y

Appendix 16.2 VSC Results for Properties Adjacent to the Proposed Development

Appendix 16.2: VSC Results for Properties Adjacent to the Proposed Development

Ref. 1

Figure 16.88 Location of Sensitive Receptors – Ref. 1



Table 16.89 VSC Results (Ref. 1)

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines
1	34.17%	≥ 27%	Y
2	34.09%	≥ 27%	Y
3	34.05%	≥ 27%	Y
4	33.81%	≥ 27%	Y
5	33.14%	≥ 27%	Y
6	32.94%	≥ 27%	Y
7	32.23%	≥ 27%	Y
8	31.61%	≥ 27%	Y
9	30.84%	≥ 27%	Y
10	32.62%	≥ 27%	Y
11	32.45%	≥ 27%	Y
12	32.58%	≥ 27%	Y

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines
13	32.11%	≥ 27%	Y
14	31.87%	≥ 27%	Y
15	31.58%	≥ 27%	Y
16	30.99%	≥ 27%	Y
17	30.09%	≥ 27%	Y
18	29.53%	≥ 27%	Y

Ref. 2

Figure 16.89 Location of Sensitive Receptors – Ref. 2



Table 16.90 VSC Results (Ref. 2)

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines
1	36.98%	≥ 27%	Y
2	37.16%	≥ 27%	Y
3	37.43%	≥ 27%	Y
4	37.64%	≥ 27%	Y
5	37.81%	≥ 27%	Y
6	37.96%	≥ 27%	Y
7	37.85%	≥ 27%	Y
8	36.04%	≥ 27%	Y
9	36.52%	≥ 27%	Y
10	36.88%	≥ 27%	Y
11	37.16%	≥ 27%	Y
12	37.08%	≥ 27%	Y
13	37.55%	≥ 27%	Y
14	37.59%	≥ 27%	Y

Ref. 3

Figure 16.90 Location of Sensitive Receptors – Ref. 3



Table 16.91 VSC Results (Ref. 3)

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines (≥27%)	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
1	33.63%	≥27%	Y	NA	NA	NA	NA	NA
2	33.04%	≥27%	Y	NA	NA	NA	NA	NA
3	32.38%	≥27%	Y	NA	NA	NA	NA	NA
4	31.86%	≥27%	Y	NA	NA	NA	NA	NA
5	31.50%	≥27%	Y	NA	NA	NA	NA	NA
6	30.98%	≥27%	Y	NA	NA	NA	NA	NA
7	30.02%	≥27%	Y	NA	NA	NA	NA	NA
8	29.51%	≥27%	Y	NA	NA	NA	NA	NA
9	28.82%	≥27%	Y	NA	NA	NA	NA	NA
10	28.11%	≥27%	Y	NA	NA	NA	NA	NA
11	26.13%	≥27%	N	26.27%	99%	28.23%	93%	Y
12	25.43%	≥27%	N	25.92%	98%	27.68%	92%	Y
13	25.37%	≥27%	N	26.26%	97%	27.54%	92%	Y
14	24.57%	≥27%	N	26.11%	94%	27.92%	88%	Y

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines (≥27%)	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
15	24.99%	≥27%	N	26.41%	95%	28.36%	88%	Y
16	25.00%	≥27%	N	26.20%	95%	28.57%	88%	Y
17	25.50%	≥27%	N	26.27%	97%	28.88%	88%	Y
18	25.80%	≥27%	N	26.39%	98%	29.13%	89%	Y
19	26.35%	≥27%	N	26.90%	98%	29.41%	90%	Y
20	26.85%	≥27%	N	26.73%	100%	29.07%	92%	Y
21	27.50%	≥27%	Y	NA	NA	NA	NA	NA
22	28.13%	≥27%	Y	NA	NA	NA	NA	NA
23	28.82%	≥27%	Y	NA	NA	NA	NA	NA
24	28.95%	≥27%	Y	NA	NA	NA	NA	NA
25	29.61%	≥27%	Y	NA	NA	NA	NA	NA
26	34.48%	≥27%	Y	NA	NA	NA	NA	NA
27	34.46%	≥27%	Y	NA	NA	NA	NA	NA
28	33.47%	≥27%	Y	NA	NA	NA	NA	NA
29	33.15%	≥27%	Y	NA	NA	NA	NA	NA
30	32.78%	≥27%	Y	NA	NA	NA	NA	NA
31	32.34%	≥27%	Y	NA	NA	NA	NA	NA
32	31.33%	≥27%	Y	NA	NA	NA	NA	NA
33	30.99%	≥27%	Y	NA	NA	NA	NA	NA
34	30.28%	≥27%	Y	NA	NA	NA	NA	NA
35	30.01%	≥27%	Y	NA	NA	NA	NA	NA
36	28.42%	≥27%	Y	NA	NA	NA	NA	NA
37	27.90%	≥27%	Y	NA	NA	NA	NA	NA
38	27.21%	≥27%	Y	NA	NA	NA	NA	NA
39	27.06%	≥27%	Y	NA	NA	NA	NA	NA
40	27.23%	≥27%	Y	NA	NA	NA	NA	NA
41	27.74%	≥27%	Y	NA	NA	NA	NA	NA
42	27.94%	≥27%	Y	NA	NA	NA	NA	NA
43	28.16%	≥27%	Y	NA	NA	NA	NA	NA
44	28.55%	≥27%	Y	NA	NA	NA	NA	NA
45	29.31%	≥27%	Y	NA	NA	NA	NA	NA
46	29.76%	≥27%	Y	NA	NA	NA	NA	NA
47	30.21%	≥27%	Y	NA	NA	NA	NA	NA
48	31.03%	≥27%	Y	NA	NA	NA	NA	NA

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines (≥27%)	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
49	31.16%	≥27%	Y	NA	NA	NA	NA	NA
50	31.54%	≥27%	Y	NA	NA	NA	NA	NA
51	35.70%	≥27%	Y	NA	NA	NA	NA	NA
52	35.28%	≥27%	Y	NA	NA	NA	NA	NA
53	34.91%	≥27%	Y	NA	NA	NA	NA	NA
54	34.33%	≥27%	Y	NA	NA	NA	NA	NA
55	33.89%	≥27%	Y	NA	NA	NA	NA	NA
56	33.84%	≥27%	Y	NA	NA	NA	NA	NA
57	33.09%	≥27%	Y	NA	NA	NA	NA	NA
58	32.48%	≥27%	Y	NA	NA	NA	NA	NA
59	32.19%	≥27%	Y	NA	NA	NA	NA	NA
60	31.65%	≥27%	Y	NA	NA	NA	NA	NA
61	30.09%	≥27%	Y	NA	NA	NA	NA	NA
62	29.86%	≥27%	Y	NA	NA	NA	NA	NA
63	29.56%	≥27%	Y	NA	NA	NA	NA	NA
64	29.35%	≥27%	Y	NA	NA	NA	NA	NA
65	29.62%	≥27%	Y	NA	NA	NA	NA	NA
66	29.71%	≥27%	Y	NA	NA	NA	NA	NA
67	29.96%	≥27%	Y	NA	NA	NA	NA	NA
68	30.52%	≥27%	Y	NA	NA	NA	NA	NA
69	31.09%	≥27%	Y	NA	NA	NA	NA	NA
70	31.31%	≥27%	Y	NA	NA	NA	NA	NA
71	31.58%	≥27%	Y	NA	NA	NA	NA	NA
72	32.45%	≥27%	Y	NA	NA	NA	NA	NA
73	32.79%	≥27%	Y	NA	NA	NA	NA	NA
74	33.19%	≥27%	Y	NA	NA	NA	NA	NA
75	33.43%	≥27%	Y	NA	NA	NA	NA	NA
76	36.70%	≥27%	Y	NA	NA	NA	NA	NA
77	36.30%	≥27%	Y	NA	NA	NA	NA	NA
78	36.13%	≥27%	Y	NA	NA	NA	NA	NA
79	35.69%	≥27%	Y	NA	NA	NA	NA	NA
80	35.47%	≥27%	Y	NA	NA	NA	NA	NA
81	35.03%	≥27%	Y	NA	NA	NA	NA	NA
82	34.57%	≥27%	Y	NA	NA	NA	NA	NA

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines (≥27%)	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
83	34.04%	≥27%	Y	NA	NA	NA	NA	NA
84	33.72%	≥27%	Y	NA	NA	NA	NA	NA
85	33.52%	≥27%	Y	NA	NA	NA	NA	NA
86	32.32%	≥27%	Y	NA	NA	NA	NA	NA
87	31.81%	≥27%	Y	NA	NA	NA	NA	NA
88	31.87%	≥27%	Y	NA	NA	NA	NA	NA
89	31.79%	≥27%	Y	NA	NA	NA	NA	NA
90	31.98%	≥27%	Y	NA	NA	NA	NA	NA
91	32.32%	≥27%	Y	NA	NA	NA	NA	NA
92	32.64%	≥27%	Y	NA	NA	NA	NA	NA
93	32.82%	≥27%	Y	NA	NA	NA	NA	NA
94	33.48%	≥27%	Y	NA	NA	NA	NA	NA
95	33.53%	≥27%	Y	NA	NA	NA	NA	NA
96	33.83%	≥27%	Y	NA	NA	NA	NA	NA
97	34.57%	≥27%	Y	NA	NA	NA	NA	NA
98	34.71%	≥27%	Y	NA	NA	NA	NA	NA
99	35.01%	≥27%	Y	NA	NA	NA	NA	NA
100	35.06%	≥27%	Y	NA	NA	NA	NA	NA
101	37.75%	≥27%	Y	NA	NA	NA	NA	NA
102	37.49%	≥27%	Y	NA	NA	NA	NA	NA
103	36.98%	≥27%	Y	NA	NA	NA	NA	NA
104	36.77%	≥27%	Y	NA	NA	NA	NA	NA
105	36.15%	≥27%	Y	NA	NA	NA	NA	NA
106	35.35%	≥27%	Y	NA	NA	NA	NA	NA
107	34.82%	≥27%	Y	NA	NA	NA	NA	NA
108	34.58%	≥27%	Y	NA	NA	NA	NA	NA
109	34.40%	≥27%	Y	NA	NA	NA	NA	NA
110	34.25%	≥27%	Y	NA	NA	NA	NA	NA
111	34.38%	≥27%	Y	NA	NA	NA	NA	NA
112	34.55%	≥27%	Y	NA	NA	NA	NA	NA
113	34.96%	≥27%	Y	NA	NA	NA	NA	NA
114	35.35%	≥27%	Y	NA	NA	NA	NA	NA
115	35.81%	≥27%	Y	NA	NA	NA	NA	NA
116	35.09%	≥27%	Y	NA	NA	NA	NA	NA

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines (≥27%)	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
117	36.17%	≥27%	Y	NA	NA	NA	NA	NA
118	36.09%	≥27%	Y	NA	NA	NA	NA	NA
119	38.17%	≥27%	Y	NA	NA	NA	NA	NA
120	37.92%	≥27%	Y	NA	NA	NA	NA	NA
121	37.92%	≥27%	Y	NA	NA	NA	NA	NA
122	37.71%	≥27%	Y	NA	NA	NA	NA	NA
123	36.02%	≥27%	Y	NA	NA	NA	NA	NA
124	35.96%	≥27%	Y	NA	NA	NA	NA	NA
125	37.33%	≥27%	Y	NA	NA	NA	NA	NA
126	37.46%	≥27%	Y	NA	NA	NA	NA	NA

Ref. 4

Figure 16.91 Location of Sensitive Receptors – Ref. 4



Table 16.92 VSC Results (Ref. 4)

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
1	29.61%	≥27%	Y	NA	NA	NA	NA	NA
2	30.01%	≥27%	Y	NA	NA	NA	NA	NA
3	29.52%	≥27%	Y	NA	NA	NA	NA	NA
4	29.32%	≥27%	Y	NA	NA	NA	NA	NA
5	39.17%	≥27%	Y	NA	NA	NA	NA	NA
6	28.96%	≥27%	Y	NA	NA	NA	NA	NA
7	28.30%	≥27%	Y	NA	NA	NA	NA	NA
8	28.18%	≥27%	Y	NA	NA	NA	NA	NA
9	28.17%	≥27%	Y	NA	NA	NA	NA	NA
10	27.76%	≥27%	Y	NA	NA	NA	NA	NA
11	27.19%	≥27%	Y	NA	NA	NA	NA	NA
12	27.11%	≥27%	Y	NA	NA	NA	NA	NA
13	27.10%	≥27%	Y	NA	NA	NA	NA	NA
14	27.24%	≥27%	Y	NA	NA	NA	NA	NA

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
15	26.63%	≥27%	N	28.63%	93%	23.73%	112%	Y
16	27.01%	≥27%	Y	NA	NA	NA	NA	NA
17	26.91%	≥27%	N	29.25%	92%	23.70%	114%	Y
18	27.12%	≥27%	Y	NA	NA	NA	NA	NA
19	27.27%	≥27%	Y	NA	NA	NA	NA	NA
20	27.78%	≥27%	Y	NA	NA	NA	NA	NA
21	27.60%	≥27%	Y	NA	NA	NA	NA	NA
22	28.51%	≥27%	Y	NA	NA	NA	NA	NA
23	28.47%	≥27%	Y	NA	NA	NA	NA	NA
24	31.19%	≥27%	Y	NA	NA	NA	NA	NA
25	31.78%	≥27%	Y	NA	NA	NA	NA	NA
26	31.65%	≥27%	Y	NA	NA	NA	NA	NA
27	30.80%	≥27%	Y	NA	NA	NA	NA	NA
28	31.23%	≥27%	Y	NA	NA	NA	NA	NA
29	31.00%	≥27%	Y	NA	NA	NA	NA	NA
30	30.75%	≥27%	Y	NA	NA	NA	NA	NA
31	30.29%	≥27%	Y	NA	NA	NA	NA	NA
32	30.32%	≥27%	Y	NA	NA	NA	NA	NA
33	30.25%	≥27%	Y	NA	NA	NA	NA	NA
34	30.15%	≥27%	Y	NA	NA	NA	NA	NA
35	29.61%	≥27%	Y	NA	NA	NA	NA	NA
36	29.71%	≥27%	Y	NA	NA	NA	NA	NA
37	29.57%	≥27%	Y	NA	NA	NA	NA	NA
38	29.15%	≥27%	Y	NA	NA	NA	NA	NA
39	30.14%	≥27%	Y	NA	NA	NA	NA	NA
40	29.81%	≥27%	Y	NA	NA	NA	NA	NA
41	29.57%	≥27%	Y	NA	NA	NA	NA	NA
42	29.92%	≥27%	Y	NA	NA	NA	NA	NA
43	30.23%	≥27%	Y	NA	NA	NA	NA	NA
44	30.16%	≥27%	Y	NA	NA	NA	NA	NA
45	30.90%	≥27%	Y	NA	NA	NA	NA	NA
46	30.87%	≥27%	Y	NA	NA	NA	NA	NA
47	33.18%	≥27%	Y	NA	NA	NA	NA	NA
48	33.50%	≥27%	Y	NA	NA	NA	NA	NA

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
49	33.20%	≥27%	Y	NA	NA	NA	NA	NA
50	32.65%	≥27%	Y	NA	NA	NA	NA	NA
51	32.81%	≥27%	Y	NA	NA	NA	NA	NA
52	32.83%	≥27%	Y	NA	NA	NA	NA	NA
53	32.55%	≥27%	Y	NA	NA	NA	NA	NA
54	32.52%	≥27%	Y	NA	NA	NA	NA	NA
55	32.69%	≥27%	Y	NA	NA	NA	NA	NA
56	32.49%	≥27%	Y	NA	NA	NA	NA	NA
57	32.47%	≥27%	Y	NA	NA	NA	NA	NA
58	32.32%	≥27%	Y	NA	NA	NA	NA	NA
59	32.28%	≥27%	Y	NA	NA	NA	NA	NA
60	32.54%	≥27%	Y	NA	NA	NA	NA	NA
61	31.89%	≥27%	Y	NA	NA	NA	NA	NA
62	32.64%	≥27%	Y	NA	NA	NA	NA	NA
63	32.33%	≥27%	Y	NA	NA	NA	NA	NA
64	32.21%	≥27%	Y	NA	NA	NA	NA	NA
65	32.57%	≥27%	Y	NA	NA	NA	NA	NA
66	32.82%	≥27%	Y	NA	NA	NA	NA	NA
67	32.79%	≥27%	Y	NA	NA	NA	NA	NA
68	33.47%	≥27%	Y	NA	NA	NA	NA	NA
69	32.93%	≥27%	Y	NA	NA	NA	NA	NA
70	35.03%	≥27%	Y	NA	NA	NA	NA	NA
71	35.05%	≥27%	Y	NA	NA	NA	NA	NA
72	34.75%	≥27%	Y	NA	NA	NA	NA	NA
73	34.83%	≥27%	Y	NA	NA	NA	NA	NA
74	34.88%	≥27%	Y	NA	NA	NA	NA	NA
75	34.63%	≥27%	Y	NA	NA	NA	NA	NA
76	34.43%	≥27%	Y	NA	NA	NA	NA	NA
77	34.47%	≥27%	Y	NA	NA	NA	NA	NA
78	35.00%	≥27%	Y	NA	NA	NA	NA	NA
79	34.84%	≥27%	Y	NA	NA	NA	NA	NA
80	34.75%	≥27%	Y	NA	NA	NA	NA	NA
81	34.89%	≥27%	Y	NA	NA	NA	NA	NA
82	34.80%	≥27%	Y	NA	NA	NA	NA	NA

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
83	34.73%	≥27%	Y	NA	NA	NA	NA	NA
84	34.93%	≥27%	Y	NA	NA	NA	NA	NA
85	35.11%	≥27%	Y	NA	NA	NA	NA	NA
86	34.81%	≥27%	Y	NA	NA	NA	NA	NA
87	34.98%	≥27%	Y	NA	NA	NA	NA	NA
88	35.08%	≥27%	Y	NA	NA	NA	NA	NA
89	35.44%	≥27%	Y	NA	NA	NA	NA	NA
90	34.94%	≥27%	Y	NA	NA	NA	NA	NA
91	35.66%	≥27%	Y	NA	NA	NA	NA	NA
92	35.25%	≥27%	Y	NA	NA	NA	NA	NA
93	36.66%	≥27%	Y	NA	NA	NA	NA	NA
94	36.55%	≥27%	Y	NA	NA	NA	NA	NA
95	36.58%	≥27%	Y	NA	NA	NA	NA	NA
96	36.73%	≥27%	Y	NA	NA	NA	NA	NA
97	36.74%	≥27%	Y	NA	NA	NA	NA	NA
98	36.91%	≥27%	Y	NA	NA	NA	NA	NA
99	36.92%	≥27%	Y	NA	NA	NA	NA	NA
100	37.18%	≥27%	Y	NA	NA	NA	NA	NA
101	37.36%	≥27%	Y	NA	NA	NA	NA	NA
102	37.40%	≥27%	Y	NA	NA	NA	NA	NA

Ref. 5

Figure 16.92 Location of Sensitive Receptors – Ref. 5



Table 16.93 VSC Results (Ref. 5)

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines
1	29.59%	≥27%	Y
2	30.11%	≥27%	Y
3	29.63%	≥27%	Y
4	29.75%	≥27%	Y
5	30.35%	≥27%	Y
6	30.12%	≥27%	Y
7	29.72%	≥27%	Y
8	30.19%	≥27%	Y
9	29.79%	≥27%	Y
10	29.52%	≥27%	Y
11	29.84%	≥27%	Y
12	29.53%	≥27%	Y
13	29.37%	≥27%	Y
14	29.43%	≥27%	Y

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines
15	30.02%	≥27%	Y
16	30.51%	≥27%	Y
17	30.52%	≥27%	Y
18	31.01%	≥27%	Y
19	31.84%	≥27%	Y
20	32.24%	≥27%	Y
21	31.89%	≥27%	Y
22	31.70%	≥27%	Y
23	32.20%	≥27%	Y
24	31.93%	≥27%	Y
25	32.08%	≥27%	Y
26	32.36%	≥27%	Y
27	32.29%	≥27%	Y
28	31.69%	≥27%	Y
29	32.18%	≥27%	Y
30	31.75%	≥27%	Y
31	32.01%	≥27%	Y
32	32.23%	≥27%	Y
33	32.26%	≥27%	Y
34	31.92%	≥27%	Y
35	32.02%	≥27%	Y
36	32.53%	≥27%	Y
37	32.92%	≥27%	Y
38	32.78%	≥27%	Y
39	33.33%	≥27%	Y
40	33.72%	≥27%	Y
41	34.08%	≥27%	Y
42	34.00%	≥27%	Y
43	33.89%	≥27%	Y
44	34.26%	≥27%	Y
45	33.88%	≥27%	Y
46	34.21%	≥27%	Y
47	33.99%	≥27%	Y
48	33.99%	≥27%	Y
49	33.82%	≥27%	Y

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines
50	34.34%	≥27%	Y
51	33.98%	≥27%	Y
52	34.32%	≥27%	Y
53	34.40%	≥27%	Y
54	34.52%	≥27%	Y
55	34.16%	≥27%	Y
56	34.20%	≥27%	Y
57	34.89%	≥27%	Y
58	34.95%	≥27%	Y
59	34.71%	≥27%	Y
60	35.22%	≥27%	Y
61	35.71%	≥27%	Y
62	35.94%	≥27%	Y
63	36.04%	≥27%	Y
64	36.12%	≥27%	Y
65	36.24%	≥27%	Y
66	36.08%	≥27%	Y
67	36.20%	≥27%	Y
68	36.31%	≥27%	Y
69	36.23%	≥27%	Y

Ref. 6

Figure 16.93 Location of Sensitive Receptors – Ref. 6



Table 16.94 VSC Results (Ref. 6)

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines
1	30.82%	≥27%	Y
2	30.69%	≥27%	Y
3	30.60%	≥27%	Y
4	30.27%	≥27%	Y
5	30.04%	≥27%	Y
6	30.49%	≥27%	Y
7	30.43%	≥27%	Y
8	30.31%	≥27%	Y
9	30.64%	≥27%	Y
10	31.11%	≥27%	Y
11	31.67%	≥27%	Y
12	31.69%	≥27%	Y
13	32.14%	≥27%	Y
14	33.13%	≥27%	Y

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines
15	33.23%	≥27%	Y
16	33.54%	≥27%	Y
17	33.58%	≥27%	Y
18	33.16%	≥27%	Y
19	33.02%	≥27%	Y
20	33.64%	≥27%	Y
21	33.77%	≥27%	Y
22	33.05%	≥27%	Y
23	33.70%	≥27%	Y
24	34.04%	≥27%	Y
25	34.62%	≥27%	Y
26	34.46%	≥27%	Y
27	34.93%	≥27%	Y
28	35.54%	≥27%	Y
29	35.16%	≥27%	Y
30	35.55%	≥27%	Y
31	35.88%	≥27%	Y
32	35.44%	≥27%	Y
33	35.39%	≥27%	Y
34	35.85%	≥27%	Y
35	36.00%	≥27%	Y
36	35.57%	≥27%	Y
37	36.00%	≥27%	Y
38	36.50%	≥27%	Y
39	36.66%	≥27%	Y
40	36.51%	≥27%	Y
41	36.93%	≥27%	Y
42	37.14%	≥27%	Y
43	36.89%	≥27%	Y
44	37.47%	≥27%	Y
45	37.50%	≥27%	Y
46	37.05%	≥27%	Y
47	37.38%	≥27%	Y
48	37.71%	≥27%	Y
49	37.90%	≥27%	Y

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines
50	37.55%	≥27%	Y
51	37.72%	≥27%	Y
52	38.18%	≥27%	Y
53	38.40%	≥27%	Y
54	38.03%	≥27%	Y
55	38.22%	≥27%	Y
56	38.52%	≥27%	Y

Ref. 7

Figure 16.94 Location of Sensitive Receptors – Ref. 7



Table 16.95 VSC Results (Ref. 7)

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
1	29.48%	≥27%	Y	NA	NA	NA	NA	NA
2	28.07%	≥27%	Y	NA	NA	NA	NA	NA
3	27.44%	≥27%	Y	NA	NA	NA	NA	NA
4	26.95%	≥27%	Y	NA	NA	NA	NA	NA
5	26.28%	≥27%	N	29.92%	88%	18.71%	140%	Y
6	25.97%	≥27%	N	29.56%	88%	18.76%	138%	Y
7	26.26%	≥27%	N	29.76%	88%	19.02%	138%	Y
8	26.43%	≥27%	N	29.30%	90%	19.15%	138%	Y
9	26.79%	≥27%	N	29.64%	90%	19.37%	138%	Y
10	26.60%	≥27%	N	29.74%	89%	19.45%	137%	Y

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
11	27.26%	≥27%	Y	NA	NA	NA	NA	NA
12	27.40%	≥27%	Y	NA	NA	NA	NA	NA
13	28.15%	≥27%	Y	NA	NA	NA	NA	NA
14	28.71%	≥27%	Y	NA	NA	NA	NA	NA
15	28.68%	≥27%	Y	NA	NA	NA	NA	NA
16	31.91%	≥27%	Y	NA	NA	NA	NA	NA
17	30.91%	≥27%	Y	NA	NA	NA	NA	NA
18	30.11%	≥27%	Y	NA	NA	NA	NA	NA
19	30.11%	≥27%	Y	NA	NA	NA	NA	NA
20	29.54%	≥27%	Y	NA	NA	NA	NA	NA
21	29.14%	≥27%	Y	NA	NA	NA	NA	NA
22	29.06%	≥27%	Y	NA	NA	NA	NA	NA
23	29.22%	≥27%	Y	NA	NA	NA	NA	NA
24	29.25%	≥27%	Y	NA	NA	NA	NA	NA
25	29.70%	≥27%	Y	NA	NA	NA	NA	NA
26	30.02%	≥27%	Y	NA	NA	NA	NA	NA
27	30.62%	≥27%	Y	NA	NA	NA	NA	NA
28	30.88%	≥27%	Y	NA	NA	NA	NA	NA
29	31.58%	≥27%	Y	NA	NA	NA	NA	NA
30	31.73%	≥27%	Y	NA	NA	NA	NA	NA
31	34.47%	≥27%	Y	NA	NA	NA	NA	NA
32	33.47%	≥27%	Y	NA	NA	NA	NA	NA
33	33.02%	≥27%	Y	NA	NA	NA	NA	NA
34	32.57%	≥27%	Y	NA	NA	NA	NA	NA
35	32.61%	≥27%	Y	NA	NA	NA	NA	NA
36	32.36%	≥27%	Y	NA	NA	NA	NA	NA
37	32.34%	≥27%	Y	NA	NA	NA	NA	NA
38	32.30%	≥27%	Y	NA	NA	NA	NA	NA
39	32.43%	≥27%	Y	NA	NA	NA	NA	NA
40	32.72%	≥27%	Y	NA	NA	NA	NA	NA
41	33.03%	≥27%	Y	NA	NA	NA	NA	NA
42	33.43%	≥27%	Y	NA	NA	NA	NA	NA
43	33.62%	≥27%	Y	NA	NA	NA	NA	NA
44	34.03%	≥27%	Y	NA	NA	NA	NA	NA
45	34.49%	≥27%	Y	NA	NA	NA	NA	NA

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
46	35.95%	≥27%	Y	NA	NA	NA	NA	NA
47	31.16%	≥27%	Y	NA	NA	NA	NA	NA
48	35.58%	≥27%	Y	NA	NA	NA	NA	NA
49	35.59%	≥27%	Y	NA	NA	NA	NA	NA
50	35.58%	≥27%	Y	NA	NA	NA	NA	NA
51	35.41%	≥27%	Y	NA	NA	NA	NA	NA
52	35.39%	≥27%	Y	NA	NA	NA	NA	NA
53	29.27%	≥27%	Y	NA	NA	NA	NA	NA
54	32.87%	≥27%	Y	NA	NA	NA	NA	NA
55	33.87%	≥27%	Y	NA	NA	NA	NA	NA
56	36.68%	≥27%	Y	NA	NA	NA	NA	NA
57	36.82%	≥27%	Y	NA	NA	NA	NA	NA

Ref. 8

Figure 16.95 Location of Sensitive Receptors – Ref. 8



Table 16.96 VSC Results (Ref. 8)

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
1	24.28%	≥27%	N	25.29%	96%	21.20%	115%	Y
2	26.09%	≥27%	N	28.07%	93%	22.64%	115%	Y
3	27.21%	≥27%	Y	NA	NA	NA	NA	NA
4	28.07%	≥27%	Y	NA	NA	NA	NA	NA
5	28.74%	≥27%	Y	NA	NA	NA	NA	NA
6	29.23%	≥27%	Y	NA	NA	NA	NA	NA
7	29.42%	≥27%	Y	NA	NA	NA	NA	NA
8	29.72%	≥27%	Y	NA	NA	NA	NA	NA
9	30.34%	≥27%	Y	NA	NA	NA	NA	NA
10	30.53%	≥27%	Y	NA	NA	NA	NA	NA

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
11	30.98%	≥27%	Y	NA	NA	NA	NA	NA
12	31.41%	≥27%	Y	NA	NA	NA	NA	NA
13	31.84%	≥27%	Y	NA	NA	NA	NA	NA
14	26.54%	≥27%	N	28.11%	94%	19.44%	137%	Y
15	28.79%	≥27%	Y	NA	NA	NA	NA	NA
16	30.09%	≥27%	Y	NA	NA	NA	NA	NA
17	30.56%	≥27%	Y	NA	NA	NA	NA	NA
18	31.13%	≥27%	Y	NA	NA	NA	NA	NA
19	31.52%	≥27%	Y	NA	NA	NA	NA	NA
20	31.88%	≥27%	Y	NA	NA	NA	NA	NA
21	32.30%	≥27%	Y	NA	NA	NA	NA	NA
22	32.86%	≥27%	Y	NA	NA	NA	NA	NA
23	33.20%	≥27%	Y	NA	NA	NA	NA	NA
24	33.49%	≥27%	Y	NA	NA	NA	NA	NA
25	33.83%	≥27%	Y	NA	NA	NA	NA	NA
26	34.38%	≥27%	Y	NA	NA	NA	NA	NA
27	23.24%	≥27%	N	23.88%	97%	21.58%	108%	Y
28	27.89%	≥27%	Y	NA	NA	NA	NA	NA
29	30.03%	≥27%	Y	NA	NA	NA	NA	NA
30	31.67%	≥27%	Y	NA	NA	NA	NA	NA
31	32.93%	≥27%	Y	NA	NA	NA	NA	NA
32	33.27%	≥27%	Y	NA	NA	NA	NA	NA
33	33.40%	≥27%	Y	NA	NA	NA	NA	NA
34	30.83%	≥27%	Y	NA	NA	NA	NA	NA
35	34.74%	≥27%	Y	NA	NA	NA	NA	NA
36	35.19%	≥27%	Y	NA	NA	NA	NA	NA
37	35.66%	≥27%	Y	NA	NA	NA	NA	NA
38	35.84%	≥27%	Y	NA	NA	NA	NA	NA
39	35.87%	≥27%	Y	NA	NA	NA	NA	NA

Ref. 9

Figure 16.96 Location of Sensitive Receptors – Ref. 9



Table 16.97 VSC Results (Ref. 9)

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines
1	34.41%	≥27%	Y
2	33.94%	≥27%	Y
3	34.22%	≥27%	Y
4	33.68%	≥27%	Y
5	33.48%	≥27%	Y
6	33.12%	≥27%	Y
7	32.57%	≥27%	Y
8	35.94%	≥27%	Y
9	35.94%	≥27%	Y
10	35.77%	≥27%	Y
11	35.78%	≥27%	Y

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines
12	35.61%	≥27%	Y
13	35.45%	≥27%	Y
14	35.58%	≥27%	Y
15	35.42%	≥27%	Y
16	35.20%	≥27%	Y
17	34.75%	≥27%	Y
18	34.32%	≥27%	Y

Ref. 10

Figure 16.97 Location of Sensitive Receptors – Ref. 10



Table 16.98 VSC Results (Ref. 10)

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
1	29.88%	≥27%	Y	NA	NA	NA	NA	NA
2	29.50%	≥27%	Y	NA	NA	NA	NA	NA
3	29.56%	≥27%	Y	NA	NA	NA	NA	NA
4	28.95%	≥27%	Y	NA	NA	NA	NA	NA
5	28.08%	≥27%	Y	NA	NA	NA	NA	NA
6	27.14%	≥27%	Y	NA	NA	NA	NA	NA
7	32.45%	≥27%	Y	NA	NA	NA	NA	NA
8	32.28%	≥27%	Y	NA	NA	NA	NA	NA
9	31.84%	≥27%	Y	NA	NA	NA	NA	NA
10	31.55%	≥27%	Y	NA	NA	NA	NA	NA
11	30.97%	≥27%	Y	NA	NA	NA	NA	NA
12	30.26%	≥27%	Y	NA	NA	NA	NA	NA
13	25.43%	≥27%	Y	27.56%	92%	26.45%	96%	Y

Ref. 11

Figure 16.98 Location of Sensitive Receptors – Ref. 11



Table 16.99 VSC Results (Ref. 11)

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted	% of its Former Value (80% or higher)	Meets 80% or higher its former value
1	34.41%	≥27%	Y	NA	NA	NA	NA	NA
2	33.46%	≥27%	Y	NA	NA	NA	NA	NA
3	33.58%	≥27%	Y	NA	NA	NA	NA	NA
4	32.33%	≥27%	Y	NA	NA	NA	NA	NA
5	32.65%	≥27%	Y	NA	NA	NA	NA	NA
6	31.26%	≥27%	Y	NA	NA	NA	NA	NA
7	31.57%	≥27%	Y	NA	NA	NA	NA	NA
8	29.98%	≥27%	Y	NA	NA	NA	NA	NA
9	30.57%	≥27%	Y	NA	NA	NA	NA	NA
10	29.43%	≥27%	Y	NA	NA	NA	NA	NA
11	30.09%	≥27%	Y	NA	NA	NA	NA	NA
12	29.24%	≥27%	Y	NA	NA	NA	NA	NA
13	25.16%	≥27%	N	28.47%	88%	24.62%	102%	Y
14	26.63%	≥27%	N	28.93%	92%	24.69%	108%	Y
15	36.24%	≥27%	Y	NA	NA	NA	NA	NA
16	36.08%	≥27%	Y	NA	NA	NA	NA	NA
17	35.68%	≥27%	Y	NA	NA	NA	NA	NA
18	35.34%	≥27%	Y	NA	NA	NA	NA	NA
19	34.96%	≥27%	Y	NA	NA	NA	NA	NA
20	34.68%	≥27%	Y	NA	NA	NA	NA	NA
21	34.11%	≥27%	Y	NA	NA	NA	NA	NA
22	33.58%	≥27%	Y	NA	NA	NA	NA	NA

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
23	33.63%	≥27%	Y	NA	NA	NA	NA	NA
24	33.17%	≥27%	Y	NA	NA	NA	NA	NA
25	33.00%	≥27%	Y	NA	NA	NA	NA	NA
26	32.91%	≥27%	Y	NA	NA	NA	NA	NA
27	28.09%	≥27%	Y	NA	NA	NA	NA	NA
28	28.91%	≥27%	Y	NA	NA	NA	NA	NA
29	37.87%	≥27%	Y	NA	NA	NA	NA	NA
30	37.30%	≥27%	Y	NA	NA	NA	NA	NA
31	37.46%	≥27%	Y	NA	NA	NA	NA	NA
32	37.31%	≥27%	Y	NA	NA	NA	NA	NA
33	37.21%	≥27%	Y	NA	NA	NA	NA	NA
34	37.09%	≥27%	Y	NA	NA	NA	NA	NA
35	36.68%	≥27%	Y	NA	NA	NA	NA	NA
36	36.48%	≥27%	Y	NA	NA	NA	NA	NA
37	36.05%	≥27%	Y	NA	NA	NA	NA	NA
38	38.85%	≥27%	Y	NA	NA	NA	NA	NA
39	35.67%	≥27%	Y	NA	NA	NA	NA	NA
40	35.37%	≥27%	Y	NA	NA	NA	NA	NA
41	31.01%	≥27%	Y	NA	NA	NA	NA	NA
42	31.70%	≥27%	Y	NA	NA	NA	NA	NA
43	27.70%	≥27%	Y	NA	NA	NA	NA	NA

Ref. 12

Figure 16.99 Location of Sensitive Receptors – Ref. 12



Table 16.100 VSC Results (Ref. 12)

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
1	30.00%	≥27%	Y	NA	NA	NA	NA	NA
2	28.90%	≥27%	Y	NA	NA	NA	NA	NA
3	28.41%	≥27%	Y	NA	NA	NA	NA	NA
4	27.46%	≥27%	Y	NA	NA	NA	NA	NA
5	32.34%	≥27%	Y	NA	NA	NA	NA	NA
6	32.11%	≥27%	Y	NA	NA	NA	NA	NA
7	31.34%	≥27%	Y	NA	NA	NA	NA	NA
8	31.12%	≥27%	Y	NA	NA	NA	NA	NA
9	30.32%	≥27%	Y	NA	NA	NA	NA	NA
10	34.56%	≥27%	Y	NA	NA	NA	NA	NA
11	33.67%	≥27%	Y	NA	NA	NA	NA	NA
12	33.33%	≥27%	Y	NA	NA	NA	NA	NA
13	32.93%	≥27%	Y	NA	NA	NA	NA	NA
14	15.86%	≥27%	N	16.46%	96%	16.06%	99%	Y
15	16.91%	≥27%	N	17.40%	97%	16.83%	100%	Y
16	22.24%	≥27%	N	22.82%	97%	22.30%	100%	Y
17	23.32%	≥27%	N	23.72%	98%	22.88%	102%	Y
18	22.73%	≥27%	N	23.19%	98%	22.70%	100%	Y
19	20.27%	≥27%	N	20.86%	97%	20.06%	101%	Y
20	16.22%	≥27%	N	16.45%	99%	16.04%	101%	Y

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
21	14.83%	≥27%	N	15.37%	96%	14.78%	100%	Y
22	25.51%	≥27%	N	30.63%	83%	24.33%	105%	Y
23	25.41%	≥27%	N	29.81%	85%	26.64%	95%	Y
24	25.21%	≥27%	N	29.74%	85%	25.11%	100%	Y
25	25.45%	≥27%	N	29.54%	86%	25.99%	98%	Y
26	26.56%	≥27%	N	29.87%	89%	27.22%	98%	Y
27	17.91%	≥27%	N	18.70%	96%	18.09%	99%	Y
28	19.78%	≥27%	N	19.47%	102%	19.70%	100%	Y
29	25.71%	≥27%	N	25.72%	100%	25.64%	100%	Y
30	26.83%	≥27%	N	26.94%	100%	26.60%	101%	Y
31	25.83%	≥27%	N	25.98%	99%	25.60%	101%	Y
32	22.96%	≥27%	N	23.27%	99%	22.85%	100%	Y
33	17.76%	≥27%	N	18.23%	97%	17.94%	99%	Y
34	16.25%	≥27%	N	16.29%	100%	16.12%	101%	Y
35	27.97%	≥27%	Y	NA	NA	NA	NA	NA
36	28.51%	≥27%	Y	NA	NA	NA	NA	NA
37	27.97%	≥27%	Y	NA	NA	NA	NA	NA
38	28.50%	≥27%	Y	NA	NA	NA	NA	NA
39	28.87%	≥27%	Y	NA	NA	NA	NA	NA
40	29.18%	≥27%	Y	NA	NA	NA	NA	NA
41	20.34%	≥27%	N	20.51%	99%	20.52%	99%	Y
42	22.90%	≥27%	N	22.95%	100%	22.63%	101%	Y
43	29.98%	≥27%	Y	NA	NA	NA	NA	NA
44	30.86%	≥27%	Y	NA	NA	NA	NA	NA
45	29.38%	≥27%	Y	NA	NA	NA	NA	NA
46	26.93%	≥27%	N	26.63%	101%	26.28%	102%	Y
47	20.14%	≥27%	N	20.60%	98%	19.69%	102%	Y
48	17.67%	≥27%	N	18.03%	98%	17.78%	99%	Y
49	30.82%	≥27%	Y	NA	NA	NA	NA	NA
50	30.71%	≥27%	Y	NA	NA	NA	NA	NA
51	30.74%	≥27%	Y	NA	NA	NA	NA	NA
52	31.05%	≥27%	Y	NA	NA	NA	NA	NA
53	31.13%	≥27%	Y	NA	NA	NA	NA	NA
54	24.10%	≥27%	N	24.25%	99%	24.00%	100%	Y
55	27.50%	≥27%	Y	NA	NA	NA	NA	NA

Window Legend	VSC received with Proposed Scheme [%]	VSC Required per BRE Guideline [%]	Meets BRE Guidelines	VSC received with Mirror Imaging Scenario [%]	% of its Former Value (80% or higher)	VSC received with Previously Permitted Scenario [%]	% of its Former Value (80% or higher)	Meets 80% or higher its former value
56	35.34%	≥27%	Y	NA	NA	NA	NA	NA
57	35.35%	≥27%	Y	NA	NA	NA	NA	NA
58	33.89%	≥27%	Y	NA	NA	NA	NA	NA
59	31.19%	≥27%	Y	NA	NA	NA	NA	NA
60	23.71%	≥27%	N	24.12%	98%	23.54%	101%	Y
61	20.14%	≥27%	N	20.44%	99%	20.01%	101%	Y
62	33.45%	≥27%	Y	NA	NA	NA	NA	NA
63	33.46%	≥27%	Y	NA	NA	NA	NA	NA
64	33.47%	≥27%	Y	NA	NA	NA	NA	NA
65	33.74%	≥27%	Y	NA	NA	NA	NA	NA
66	33.94%	≥27%	Y	NA	NA	NA	NA	NA
67	33.84%	≥27%	Y	NA	NA	NA	NA	NA
68	27.36%	≥27%	Y	NA	NA	NA	NA	NA
69	31.35%	≥27%	Y	NA	NA	NA	NA	NA
70	38.08%	≥27%	Y	NA	NA	NA	NA	NA
71	38.04%	≥27%	Y	NA	NA	NA	NA	NA
72	37.63%	≥27%	Y	NA	NA	NA	NA	NA
73	36.57%	≥27%	Y	NA	NA	NA	NA	NA
74	31.01%	≥27%	Y	NA	NA	NA	NA	NA
75	26.72%	≥27%	N	26.97%	99%	26.76%	100%	Y
76	36.31%	≥27%	Y	NA	NA	NA	NA	NA
77	36.44%	≥27%	Y	NA	NA	NA	NA	NA
78	36.56%	≥27%	Y	NA	NA	NA	NA	NA

Appendix 16.3 APSH and WPSH Analysis Results

Appendix 16.3: APSH and WPSH Analysis Results

Ref. 07

Figure 16.100 Location of sensitive receptor for APSH (Ref.07)

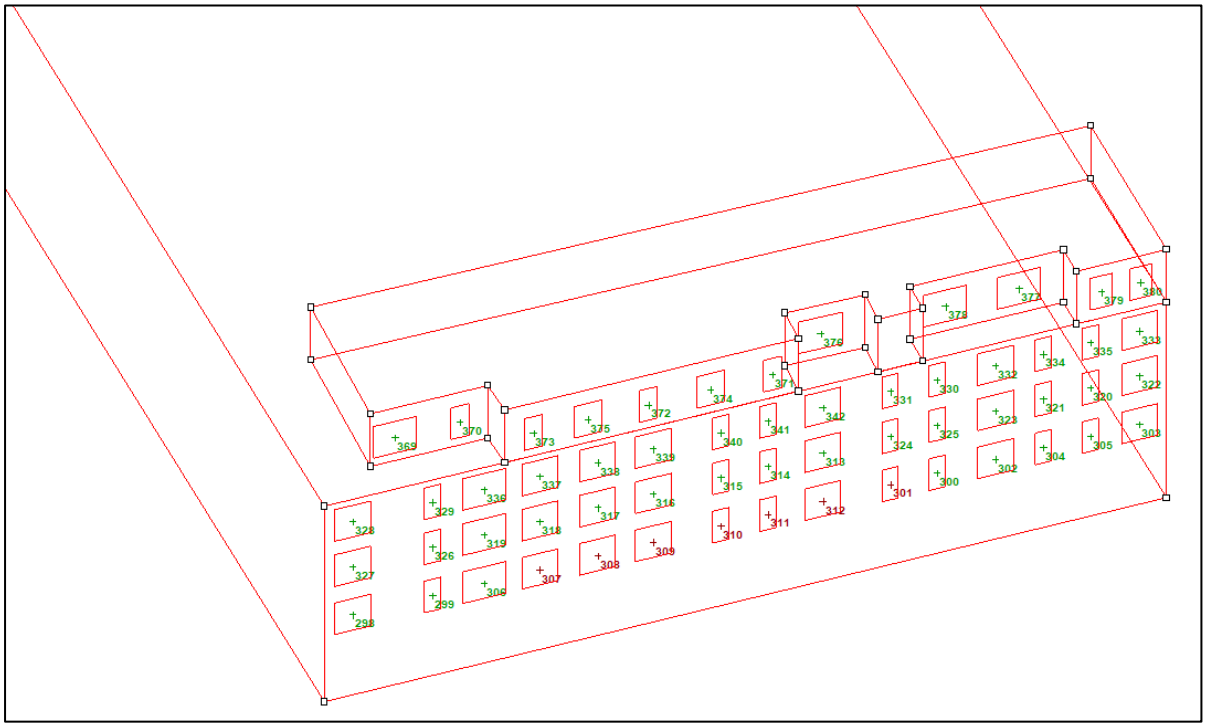


Table 16.101 APSH and WPSH analysis results for Ref. 07

Window Legend	Proposed Scheme		Proposed APSH & WPSH against Mirror Imaging Scenario		% of its former Value		Proposed APSH & WPSH against Previously Permitted Scheme		% of its former Value		APSH Results	WPSH Results
	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH
298	17.58	7.78	18.86	NA	93.21%	NA	14.70	NA	119.59%	NA	Pass	Pass
299	18.34	8.57	19.36	NA	94.73%	NA	13.62	NA	134.65%	NA	Pass	Pass
300	15.28	4.90	16.55	5.72	92.33%	85.7%	11.19	2.80	136.55%	175.00%	Pass	Pass
301	15.29	5.59	17.12	NA	89.31%	NA	11.19	NA	136.64%	NA	Pass	Pass
302	15.43	4.88	16.48	5.63	93.63%	86.7%	11.02	2.80	140.02%	174.29%	Pass	Pass
303	16.25	4.87	16.98	4.97	95.70%	98.0%	11.60	2.80	140.09%	173.93%	Pass	Pass
304	15.90	4.88	16.83	5.59	94.47%	87.3%	11.01	2.80	144.41%	174.29%	Pass	Pass
305	16.05	4.87	16.91	5.59	94.91%	87.1%	11.00	2.80	145.91%	173.93%	Pass	Pass
306	18.22	8.47	19.01	NA	95.84%	NA	12.59	NA	144.72%	NA	Pass	Pass

Window Legend	Proposed Scheme		Proposed APSH & WPSH against Mirror Imaging Scenario		% of its former Value		Proposed APSH & WPSH against Previously Permitted Scheme		% of its former Value		APSH Results	WPSH Results
	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH
307	18.03	8.30	18.87	NA	95.55%	NA	11.72	NA	153.84%	NA	Pass	Pass
308	17.42	7.69	17.91	NA	97.26%	NA	11.37	NA	153.21%	NA	Pass	Pass
309	16.72	6.99	17.73	NA	94.30%	NA	11.31	NA	147.83%	NA	Pass	Pass
310	16.71	6.99	17.80	NA	93.88%	NA	11.45	NA	145.94%	NA	Pass	Pass
311	16.00	6.29	18.12	NA	88.30%	NA	11.19	NA	142.98%	NA	Pass	Pass
312	15.73	6.02	16.61	NA	94.70%	NA	10.49	NA	149.95%	NA	Pass	Pass
313	16.21	6.02	19.07	NA	85.00%	NA	12.02	NA	134.86%	NA	Pass	Pass
314	16.49	6.29	19.12	NA	86.24%	NA	12.02	NA	137.19%	NA	Pass	Pass
315	17.20	6.99	18.94	NA	90.81%	NA	12.14	NA	141.68%	NA	Pass	Pass
316	17.21	6.99	19.32	NA	89.08%	NA	12.86	NA	133.83%	NA	Pass	Pass
317	17.92	7.69	19.11	NA	93.77%	NA	12.97	NA	138.16%	NA	Pass	Pass
318	18.63	8.39	19.49	NA	95.59%	NA	13.46	NA	138.41%	NA	Pass	Pass
319	19.02	8.78	19.84	NA	95.87%	NA	13.94	NA	136.44%	NA	Pass	Pass
320	16.58	4.90	18.69	6.80	88.71%	72.1%	12.25	3.21	135.35%	152.65%	Pass	Fail
321	16.98	4.90	18.77	6.81	90.46%	72.0%	12.50	3.32	135.84%	147.59%	Pass	Fail
322	16.65	4.90	19.35	6.80	86.05%	72.1%	13.91	3.58	119.70%	136.87%	Pass	Fail
323	16.07	4.90	18.71	7.21	85.89%	68.0%	12.15	2.95	132.26%	166.10%	Pass	Fail
324	15.77	5.59	18.81	NA	83.84%	NA	12.08	NA	130.55%	NA	Pass	Pass
325	15.76	4.90	18.76	7.45	84.01%	65.8%	12.13	2.80	129.93%	175.00%	Pass	Fail
326	19.34	9.09	20.50	NA	94.34%	NA	14.99	NA	129.02%	NA	Pass	Pass
327	19.38	9.09	20.72	NA	93.53%	NA	16.21	NA	119.56%	NA	Pass	Pass
328	20.28	9.09	21.68	NA	93.54%	NA	16.83	NA	120.50%	NA	Pass	Pass
329	20.28	9.09	21.68	NA	93.54%	NA	15.61	NA	129.92%	NA	Pass	Pass
330	18.62	6.68	20.45	NA	91.05%	NA	13.93	NA	133.67%	NA	Pass	Pass
331	18.12	6.68	20.45	NA	88.61%	NA	13.60	NA	133.24%	NA	Pass	Pass
332	19.27	6.68	20.60	NA	93.54%	NA	13.97	NA	137.94%	NA	Pass	Pass
333	19.26	6.67	21.15	NA	91.06%	NA	15.52	NA	124.10%	NA	Pass	Pass
334	19.86	6.67	20.89	NA	95.07%	NA	14.38	NA	138.11%	NA	Pass	Pass
335	19.41	6.67	20.82	NA	93.23%	NA	14.91	NA	130.18%	NA	Pass	Pass
336	19.96	8.78	21.68	NA	92.07%	NA	15.93	NA	125.30%	NA	Pass	Pass
337	19.58	8.39	21.68	NA	90.31%	NA	15.27	NA	128.23%	NA	Pass	Pass
338	18.88	7.69	21.68	NA	87.08%	NA	14.53	NA	129.94%	NA	Pass	Pass
339	18.59	7.40	21.05	NA	88.31%	NA	14.46	NA	128.56%	NA	Pass	Pass
340	18.58	7.40	20.90	NA	88.90%	NA	14.09	NA	131.87%	NA	Pass	Pass
341	18.58	7.39	20.83	NA	89.20%	NA	14.06	NA	132.15%	NA	Pass	Pass

Window Legend	Proposed Scheme		Proposed APSH & WPSH against Mirror Imaging Scenario		% of its former Value		Proposed APSH & WPSH against Previously Permitted Scheme		% of its former Value		APSH Results	WPSH Results
	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH
342	18.83	7.12	20.46	NA	92.03%	NA	13.42	NA	140.31%	NA	Pass	Pass
369	22.36	9.77	23.75	NA	94.15%	NA	19.28	NA	115.98%	NA	Pass	Pass
370	22.36	9.77	23.55	NA	94.95%	NA	18.72	NA	119.44%	NA	Pass	Pass
371	20.33	7.75	23.78	NA	85.49%	NA	16.14	NA	125.96%	NA	Pass	Pass
372	20.34	7.75	23.78	NA	85.53%	NA	16.19	NA	125.63%	NA	Pass	Pass
373	21.68	9.09	23.78	NA	91.17%	NA	17.17	NA	126.27%	NA	Pass	Pass
374	20.34	7.75	23.78	NA	85.53%	NA	16.18	NA	125.71%	NA	Pass	Pass
375	21.04	8.45	23.78	NA	88.48%	NA	16.79	NA	125.31%	NA	Pass	Pass
376	12.32	1.52	14.16	2.67	87.01%	56.9%	10.15	0.81	121.38%	187.65%	Pass	Fail
377	21.27	7.28	22.69	NA	93.74%	NA	18.82	NA	113.02%	NA	Pass	Pass
378	13.24	1.72	14.43	2.91	91.75%	59.1%	11.08	1.30	119.49%	132.31%	Pass	Fail
379	21.61	7.62	23.24	NA	92.99%	NA	20.09	NA	107.57%	NA	Pass	Pass
380	21.61	7.62	23.24	NA	92.99%	NA	20.34	NA	106.24%	NA	Pass	Pass

Ref. 08

Figure 16.101 Location of sensitive receptor for APSH (Ref. 08)

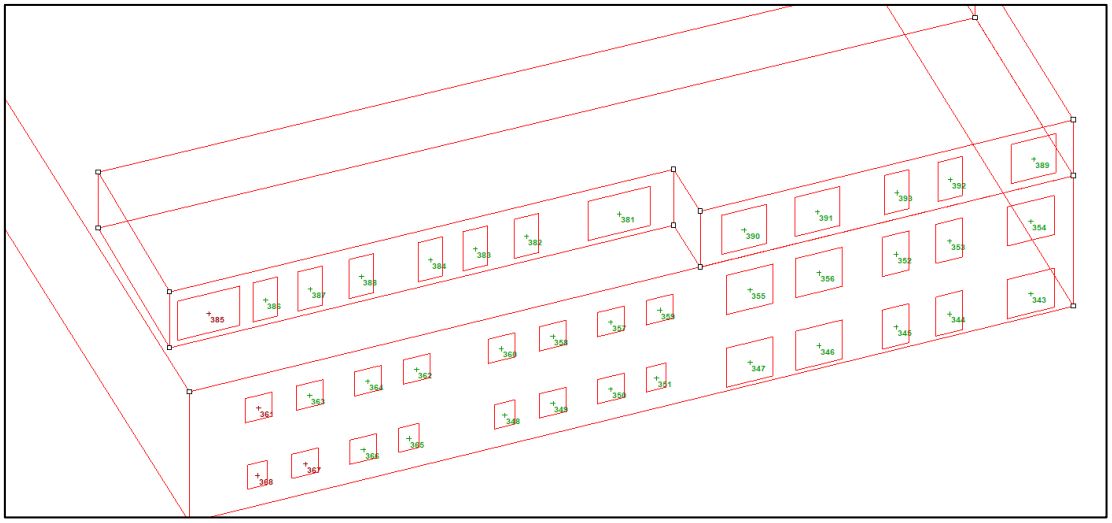


Table 16.102 APSH and WPSH analysis results for Ref. 08

Window Legend	Proposed Scheme		Proposed APSH & WPSH against Mirror Imaging Scenario		% of its former Value		Proposed APSH & WPSH against Previously Permitted Scheme		% of its former Value		APSH Results	WPSH Results
	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH
343	17.11	4.20	17.31	4.72	98.84%	88.98%	13.70	2.80	124.89%	150.00%	Pass	Pass
344	17.10	4.04	17.11	4.74	99.94%	85.23%	14.01	2.80	122.06%	144.29%	Pass	Pass
345	16.94	3.65	17.51	4.93	96.74%	74.04%	13.64	2.80	124.19%	130.36%	Pass	Fail
346	15.81	2.88	15.78	3.62	100.19%	79.56%	12.80	2.20	123.52%	130.91%	Pass	Fail
347	15.38	2.80	15.44	3.55	99.61%	78.87%	11.47	2.15	134.09%	130.23%	Pass	Fail
348	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
349	12.59	2.80	14.69	4.20	85.70%	66.67%	10.50	2.10	119.90%	133.33%	Pass	Fail
350	13.77	2.80	15.28	4.20	90.12%	66.67%	10.76	2.10	127.97%	133.33%	Pass	Fail
351	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
352	17.68	4.39	19.45	6.26	90.90%	70.13%	16.02	4.00	110.36%	109.75%	Pass	Fail
353	17.94	4.65	20.21	6.53	88.77%	71.21%	16.17	3.99	110.95%	116.54%	Pass	Fail
354	17.66	4.37	20.10	6.29	87.86%	69.48%	17.07	4.20	103.46%	104.05%	Pass	Fail
355	17.51	4.39	18.39	5.23	95.21%	83.94%	14.40	3.46	121.60%	126.88%	Pass	Pass
356	17.73	4.44	18.69	5.73	94.86%	77.49%	15.15	3.58	117.03%	124.02%	Pass	Fail
357	16.25	3.66	17.07	4.62	95.20%	79.22%	13.07	2.80	124.33%	130.71%	Pass	Fail
358	15.89	3.67	16.76	4.31	94.81%	85.15%	13.29	2.80	119.56%	131.07%	Pass	Pass

Window Legend	Proposed Scheme		Proposed APSH & WPSH against Mirror Imaging Scenario		% of its former Value		Proposed APSH & WPSH against Previously Permitted Scheme		% of its former Value		APSH Results	WPSH Results
	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH
359	16.34	3.75	17.42	4.75	93.80%	78.95%	12.68	2.89	128.86%	129.76%	Pass	Fail
360	14.70	2.97	15.79	3.52	93.10%	84.38%	12.27	2.10	119.80%	141.43%	Pass	Pass
361	5.78	0.00	6.92	0.03	83.53%	0.00%	4.61	0.00	125.38%	NA	Pass	Fail
362	12.00	2.28	14.29	3.05	83.97%	74.75%	11.82	1.40	101.52%	162.86%	Pass	Fail
363	8.94	1.14	10.61	1.20	84.26%	95.00%	8.09	0.32	110.51%	356.25%	Pass	Pass
364	11.67	2.80	13.34	2.85	87.48%	98.25%	10.71	1.40	108.96%	200.00%	Pass	Pass
365	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
366	9.79	2.10	11.19	2.80	87.49%	75.00%	7.15	0.70	136.92%	300.00%	Pass	Fail
367	7.46	0.33	8.92	1.03	83.63%	32.04%	5.49	0.00	135.88%	0.00%	Pass	Fail
368	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
381	18.13	5.14	19.78	6.72	91.66%	NA	15.26	3.65	118.81%	NA	Pass	Pass
382	16.92	4.03	18.58	5.29	91.07%	76.18%	13.68	2.50	123.68%	161.20%	Pass	Fail
383	15.87	2.96	17.34	4.22	91.52%	70.14%	12.71	1.42	124.86%	208.45%	Pass	Fail
384	15.14	2.24	16.34	3.50	92.66%	64.00%	13.28	1.40	114.01%	160.00%	Pass	Fail
385	3.99	0.00	4.75	0.00	84.00%	NA	3.72	0.00	107.26%	NA	Pass	Pass
386	6.88	0.00	7.21	0.29	95.42%	0.00%	6.29	0.00	109.38%	NA	Pass	Fail
387	9.54	0.35	10.43	1.22	91.47%	28.69%	8.51	0.00	112.10%	0.00%	Pass	Fail
388	12.67	1.43	13.84	2.56	91.55%	55.86%	11.28	0.70	112.32%	204.29%	Pass	Fail
389	20.54	6.56	22.19	NA	92.56%	NA	18.29	NA	112.30%	NA	Pass	Pass
390	19.24	5.85	20.83	NA	92.37%	NA	16.66	NA	115.49%	NA	Pass	Pass
391	19.70	6.21	21.89	NA	90.00%	NA	17.13	NA	115.00%	NA	Pass	Pass
392	20.22	6.26	22.19	NA	91.12%	NA	18.62	NA	108.59%	NA	Pass	Pass
393	20.15	6.26	22.19	NA	90.81%	NA	18.24	NA	110.47%	NA	Pass	Pass

Ref. 09

Figure 16.102 Location of sensitive receptor for APSH (Ref. 09)

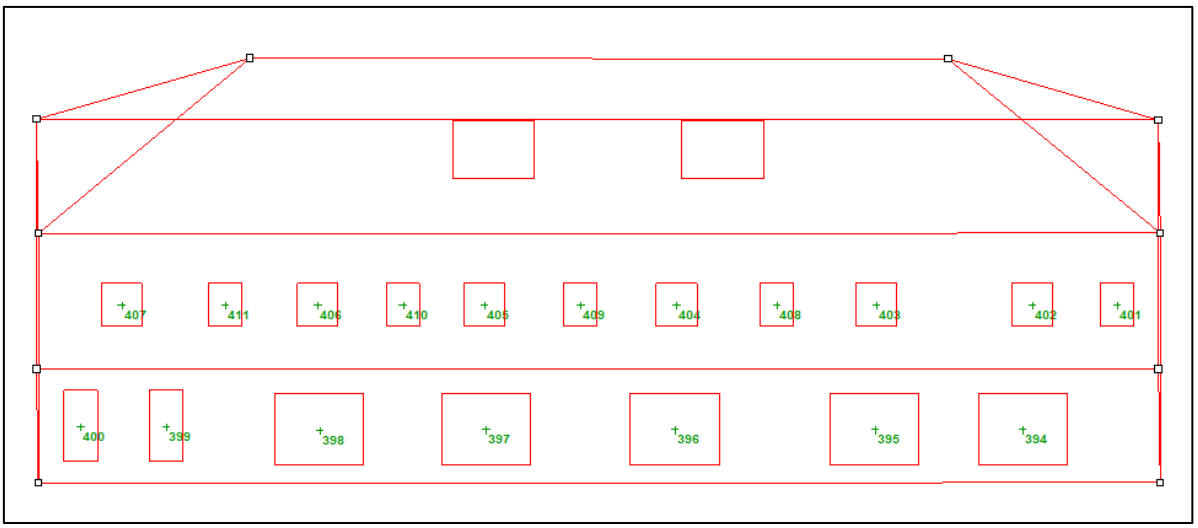


Table 16.103 APSH and WPSH analysis results for Ref. 09

Window Legend	Proposed Scheme		Proposed APSH & WPSH against Mirror Imaging Scenario		% of its former Value		Proposed APSH & WPSH against Previously Permitted Scheme		% of its former Value		APSH Results	WPSH Results
	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH
394	31.94	10.49	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
395	32.88	10.49	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
396	33.20	10.13	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
397	34.14	11.07	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
398	33.57	10.49	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
399	33.57	10.49	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
400	33.11	10.03	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
401	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
402	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
403	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
404	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
405	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
406	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
407	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
408	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
409	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
410	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
411	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass

Ref. 10

Figure 16.103 Location of sensitive receptor for APSH (Ref. 10)

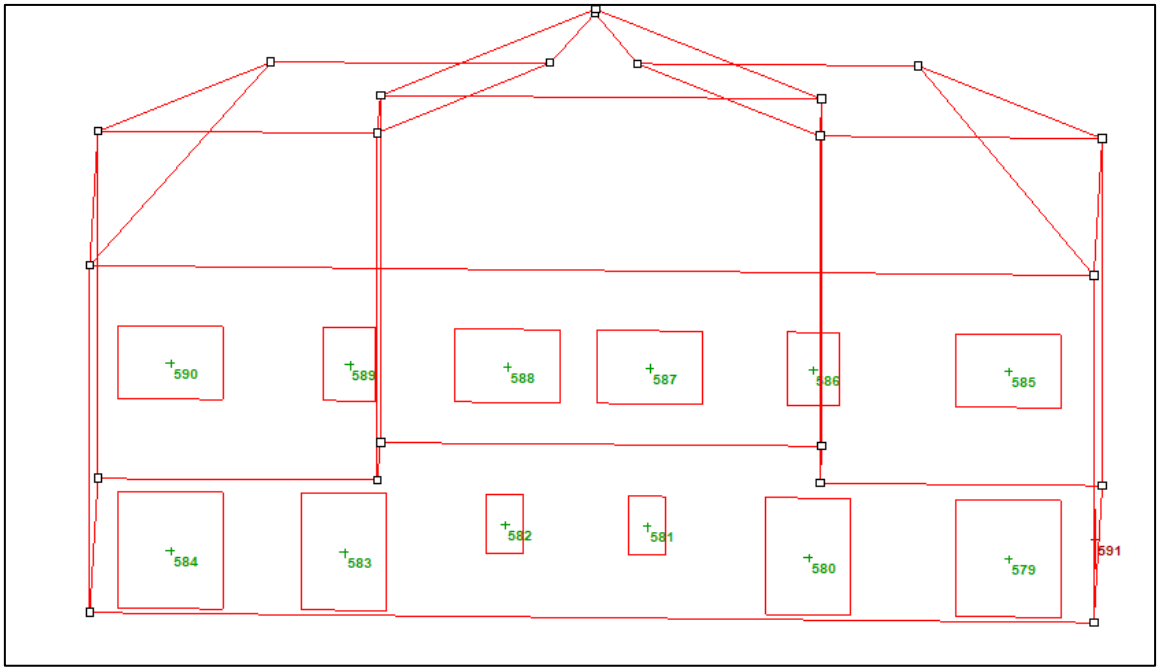


Table 16.104 APSH and WPSH analysis results for Ref. 10

Window Legend	Proposed Scheme		Proposed APSH & WPSH against Mirror Imaging Scenario		% of its former Value		Proposed APSH & WPSH against Previously Permitted Scheme		% of its former Value		APSH Results	WPSH Results
	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH
579	26.26	6.25	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
580	27.25	7.58	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
581	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
582	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
583	28.62	8.34	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
584	29.97	8.99	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
585	28.74	8.46	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
586	30.16	9.88	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
587	29.87	9.59	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
588	29.91	9.42	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
589	30.57	9.79	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
590	30.55	9.57	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
591	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass

Ref. 11

Figure 16.104 Location of sensitive receptor for APSH (Ref. 11)

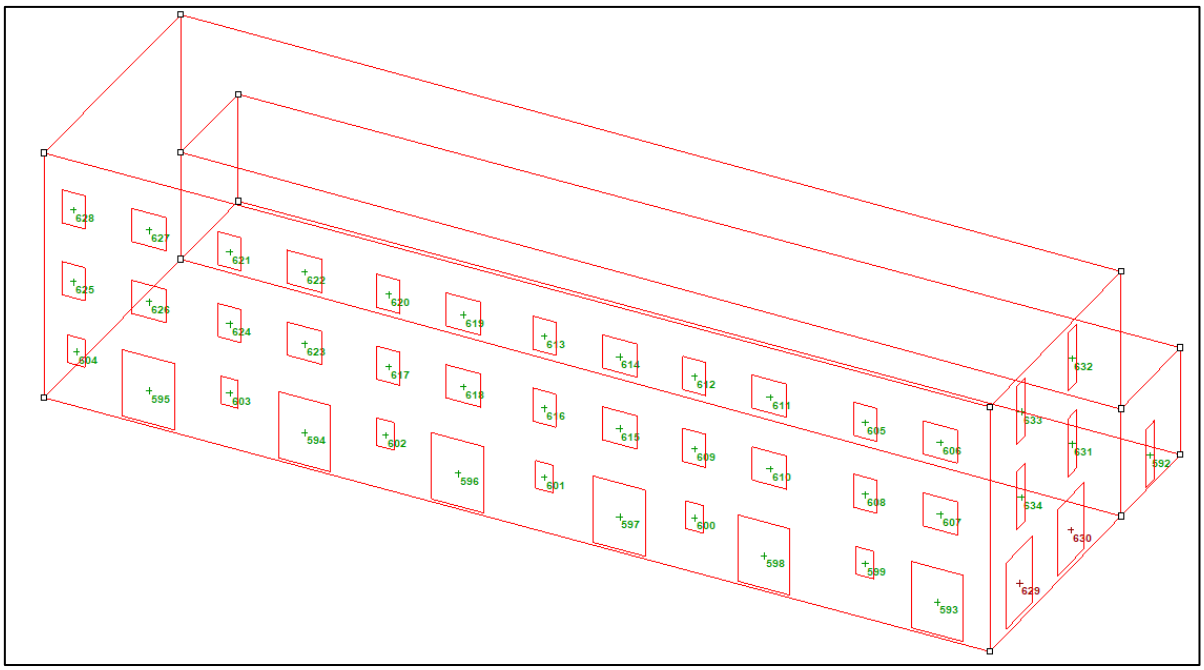


Table 16.105 APSH and WPSH analysis results for Ref. 11

Window Legend	Proposed Scheme		Proposed APSH & WPSH against Mirror Imaging Scenario		% of its former Value		Proposed APSH & WPSH against Previously Permitted Scheme		% of its former Value		APSH Results	WPSH Results
	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH
592	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
593	24.72	4.90	26.42	6.15	93.57%	79.67%	25.98	5.71	95.15%	85.81%	Pass	Fail
594	27.22	6.95	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
595	28.02	7.75	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
596	26.44	6.16	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
597	24.24	3.96	24.67	4.39	98.26%	90.21%	26.34	6.07	92.03%	65.24%	Pass	Pass
598	24.63	4.44	25.95	5.76	94.91%	77.08%	25.37	5.18	97.08%	85.71%	Pass	Fail
599	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
600	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
601	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
602	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
603	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass

Window Legend	Proposed Scheme		Proposed APSH & WPSH against Mirror Imaging Scenario		% of its former Value		Proposed APSH & WPSH against Previously Permitted Scheme		% of its former Value		APSH Results	WPSH Results
	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH
604	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
605	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
606	29.42	9.15	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
607	27.97	7.69	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
608	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
609	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
610	28.22	7.94	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
611	30.07	9.79	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
612	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
613	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
614	31.08	10.80	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
615	28.99	8.71	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
616	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
617	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
618	28.75	8.47	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
619	32.51	12.23	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
620	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
621	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
622	32.87	12.59	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
623	31.23	10.95	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
624	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
625	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
626	32.51	12.23	31.88	11.60	NA	NA	32.17	11.89	NA	NA	Pass	Pass
627	32.87	12.59	33.77	13.49	NA	NA	32.87	12.59	NA	NA	Pass	Pass
628	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
629	18.26	4.14	20.59	5.21	88.68%	79.46%	18.73	5.91	97.49%	70.05%	Pass	Fail
630	18.69	4.50	20.58	5.59	90.82%	80.50%	18.51	5.76	100.97%	78.13%	Pass	Pass
631	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
632	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
633	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
634	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass

Ref. 12

Figure 16.105 Location of sensitive receptor for APSH (Ref. 12)

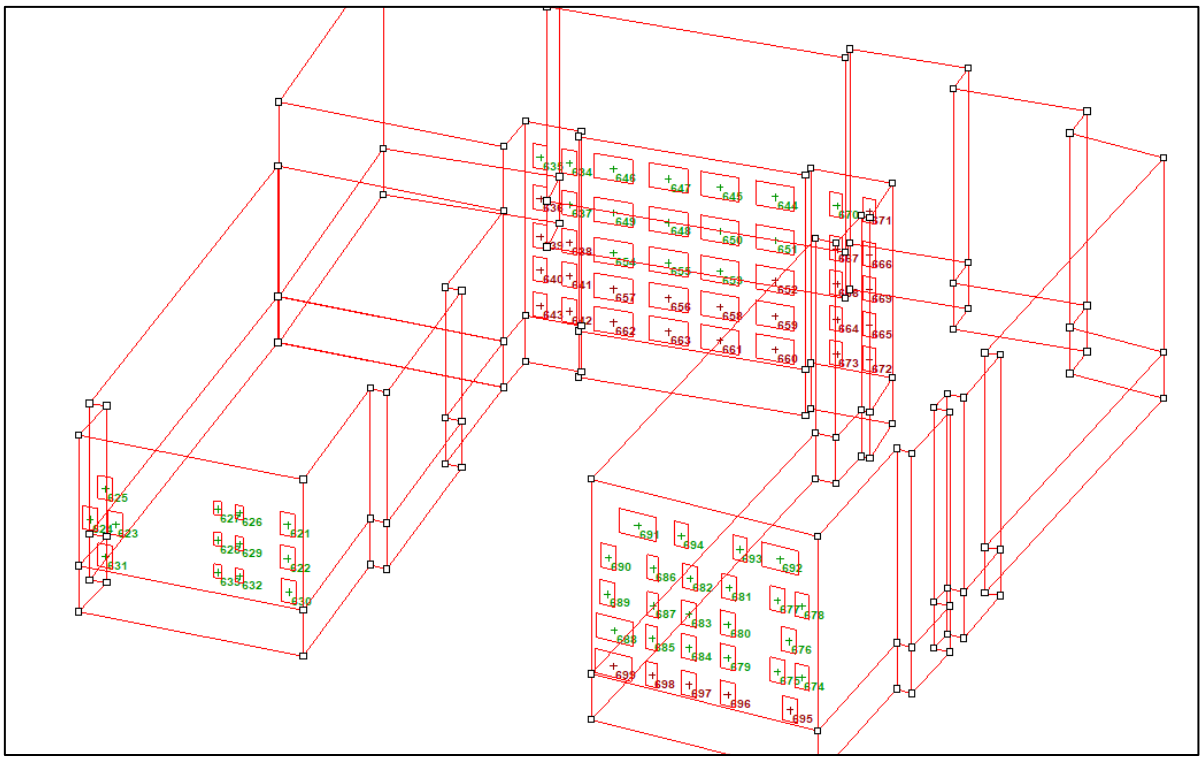


Table 16.106 APSH and WPSH analysis results for Ref. 12

Window Legend	Proposed Scheme		Proposed APSH & WPSH against Mirror Imaging Scenario		% of its former Value		Proposed APSH & WPSH against Previously Permitted Scheme		% of its former Value		APSH Results	WPSH Results
	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH
621	31.36	10.38	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
622	28.37	7.39	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
623	29.77	8.79	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
624	29.34	8.36	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
625	32.87	11.89	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
626	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
627	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
628	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
629	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
630	25.86	4.88	NA	9.07	NA	53.80%	NA	4.59	NA	106.32%	Pass	Fail
631	26.86	5.88	NA	8.76	NA	NA	NA	NA	NA	NA	Pass	Pass
632	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass

Window Legend	Proposed Scheme		Proposed APSH & WPSH against Mirror Imaging Scenario		% of its former Value		Proposed APSH & WPSH against Previously Permitted Scheme		% of its former Value		APSH Results	WPSH Results
	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH
633	0.00	0.00	0.00	0.00	NA	NA	0.00	0.00	NA	NA	Pass	Pass
634	23.43	9.08	23.43	NA	100.00%	NA	23.43	NA	100.00%	NA	Pass	Pass
635	26.87	12.89	26.87	NA	NA	NA	26.87	NA	NA	NA	Pass	Pass
636	23.27	11.19	23.27	NA	100.00%	NA	23.27	NA	100.00%	NA	Pass	Pass
637	21.24	8.65	21.24	NA	100.00%	NA	21.24	NA	100.00%	NA	Pass	Pass
638	19.60	7.51	19.60	NA	100.00%	NA	19.58	NA	100.10%	NA	Pass	Pass
639	19.67	8.25	19.67	NA	100.00%	NA	19.71	NA	99.80%	NA	Pass	Pass
640	17.28	6.02	17.28	NA	100.00%	NA	17.28	NA	100.00%	NA	Pass	Pass
641	16.82	6.09	16.82	NA	100.00%	NA	16.82	NA	100.00%	NA	Pass	Pass
642	12.29	4.03	12.93	4.67	95.05%	86.30%	12.79	4.53	96.09%	88.96%	Pass	Pass
643	14.71	4.11	15.37	4.77	95.71%	86.16%	15.21	4.60	96.71%	89.35%	Pass	Pass
644	32.22	11.24	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
645	34.11	13.13	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
646	35.34	14.44	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
647	34.86	13.88	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
648	29.93	9.01	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
649	30.60	10.32	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
650	28.25	7.27	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
651	24.93	4.49	25.22	4.78	98.85%	93.93%	25.22	4.78	98.85%	93.93%	Pass	Pass
652	20.49	3.14	20.49	3.14	100.00%	100.00%	20.49	3.14	100.00%	100.00%	Pass	Pass
653	25.00	4.94	NA	4.94	NA	100.00%	NA	4.94	NA	100.00%	Pass	Pass
654	27.58	7.70	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
655	26.86	6.08	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
656	23.87	5.16	23.87	5.16	100.00%	NA	23.87	5.16	100.00%	NA	Pass	Pass
657	23.09	5.44	23.09	5.44	100.00%	NA	23.09	5.44	100.00%	NA	Pass	Pass
658	22.09	3.96	22.09	3.96	100.00%	100.00%	22.09	3.96	100.00%	100.00%	Pass	Pass
659	17.22	2.35	17.22	2.35	100.00%	100.00%	17.22	2.35	100.00%	100.00%	Pass	Pass
660	15.05	2.10	15.05	2.10	100.00%	100.00%	15.05	2.10	100.00%	100.00%	Pass	Pass
661	18.37	3.32	18.71	3.66	98.18%	90.71%	18.68	3.63	98.34%	91.46%	Pass	Pass
662	19.43	4.15	20.03	4.75	97.00%	87.37%	19.93	4.65	97.49%	89.25%	Pass	Pass
663	19.63	3.65	20.18	4.20	97.27%	86.90%	20.13	4.16	97.52%	87.74%	Pass	Pass
664	12.88	1.99	12.88	1.99	100.00%	100.00%	12.88	1.99	100.00%	100.00%	Pass	Pass
665	11.47	1.31	11.47	1.31	100.00%	100.00%	11.47	1.31	100.00%	100.00%	Pass	Pass
666	13.51	1.31	13.51	1.31	100.00%	100.00%	13.51	1.31	100.00%	100.00%	Pass	Pass
667	16.75	2.10	16.75	2.10	100.00%	100.00%	16.75	2.10	100.00%	100.00%	Pass	Pass
668	14.39	2.10	14.39	2.10	100.00%	100.00%	14.39	2.10	100.00%	100.00%	Pass	Pass

Window Legend	Proposed Scheme		Proposed APSH & WPSH against Mirror Imaging Scenario		% of its former Value		Proposed APSH & WPSH against Previously Permitted Scheme		% of its former Value		APSH Results	WPSH Results
	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH	APSH	WPSH
669	12.13	1.31	12.13	1.31	100.00%	100.00%	12.13	1.31	100.00%	100.00%	Pass	Pass
670	25.93	6.29	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
671	19.25	3.04	19.25	3.04	100.00%	100.00%	19.25	3.04	100.00%	100.00%	Pass	Pass
672	11.24	1.31	11.24	1.31	100.00%	100.00%	11.36	1.31	98.94%	100.00%	Pass	Pass
673	12.24	1.63	12.24	1.63	100.00%	100.00%	12.24	1.63	100.00%	100.00%	Pass	Pass
674	29.32	9.04	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
675	28.67	8.39	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
676	30.17	9.89	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
677	33.41	13.13	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
678	33.60	13.32	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
679	27.97	7.69	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
680	29.75	9.47	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
681	32.81	12.53	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
682	33.20	12.92	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
683	29.80	9.52	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
684	27.97	7.69	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
685	28.02	7.74	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
686	33.22	12.95	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
687	29.87	9.59	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
688	26.83	6.55	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
689	29.40	9.12	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
690	33.25	12.97	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
691	34.97	14.69	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
692	34.97	14.69	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
693	34.97	14.69	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
694	34.97	14.69	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
695	26.73	7.44	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
696	26.14	6.69	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
697	25.88	6.30	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
698	26.12	6.54	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass
699	25.21	5.63	NA	NA	NA	NA	NA	NA	NA	NA	Pass	Pass

Appendix 16.4 APSH Images for the Proposed Development

Appendix 16.4: APSH Assessment Images for Proposed Development

Figure 16.106 Sunlight Exposure (2022 Methodology Min Level) – SE Elevation (Zone 7)



Figure 16.107 Sunlight Exposure (2022 Methodology Min Level) – SW Elevation (Zone 7)



Figure 16.108 Sunlight Exposure (2022 Methodology Min Level) – NW Elevation (Zone 7)

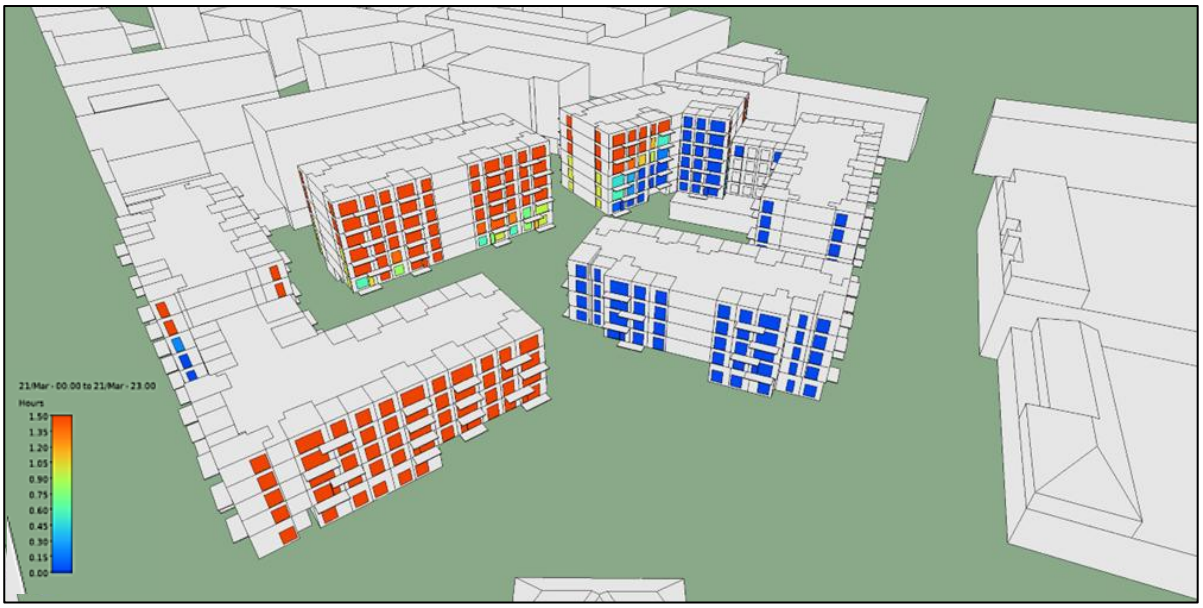


Figure 16.109 Sunlight Exposure (2022 Methodology Min Level) – NE Elevation (Zone 7)

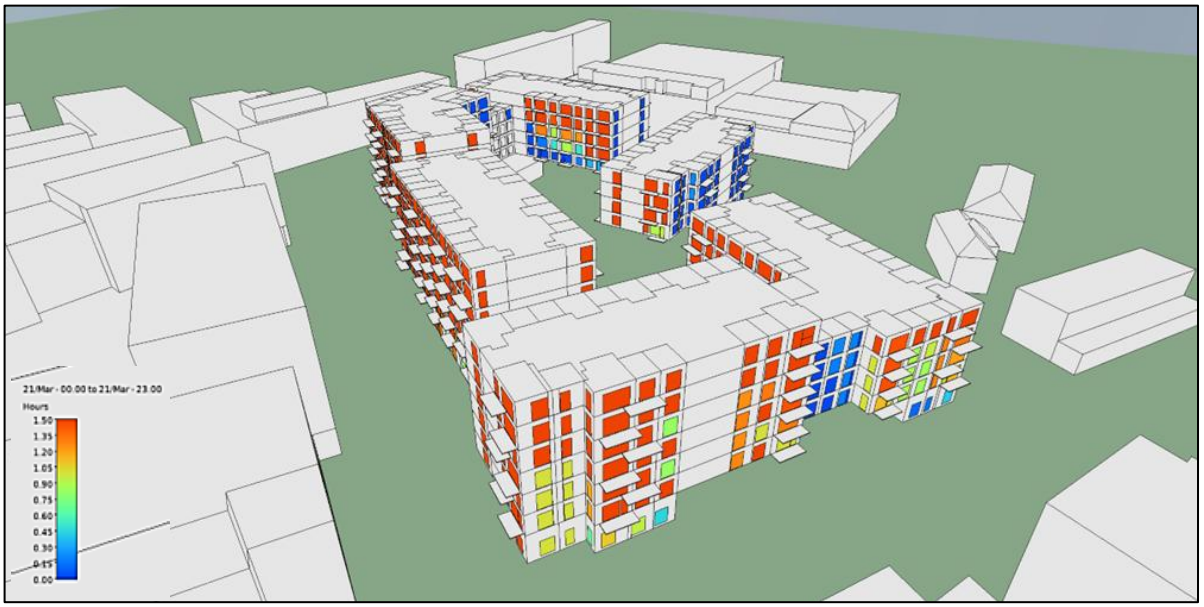


Figure 16.110 Sunlight Exposure (2022 Methodology Medium Level) – SE Elevation (Zone 7)



Figure 16.111 Sunlight Exposure (2022 Methodology Medium Level) –SW Elevation (Zone 7)



Figure 16.112 Sunlight Exposure (2022 Methodology Medium Level) –NW Elevation (Zone 7)

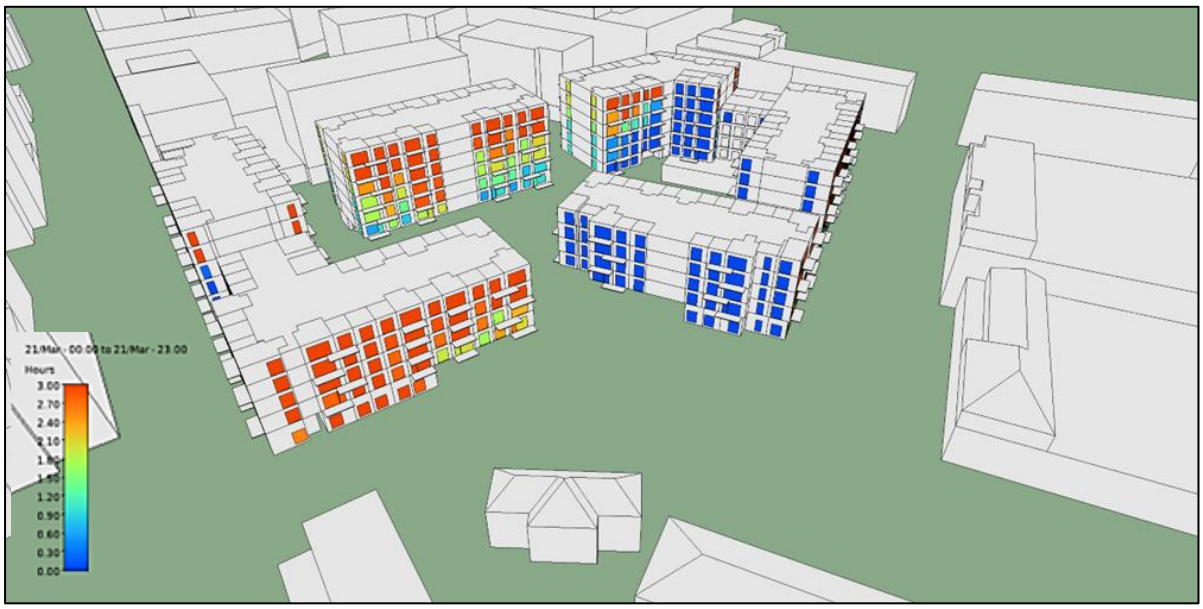


Figure 16.113 Sunlight Exposure (2022 Methodology Medium Level) – NE Elevation (Zone 7)

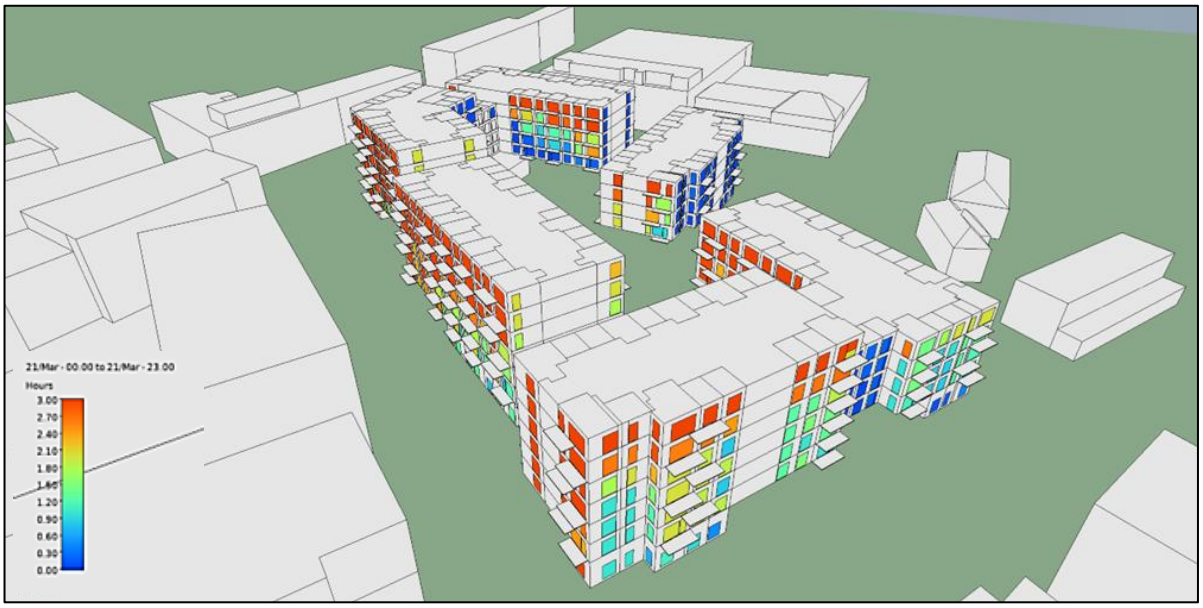


Figure 16.114 Sunlight Exposure (2022 Methodology High Level) – SE Elevation (Zone 7)

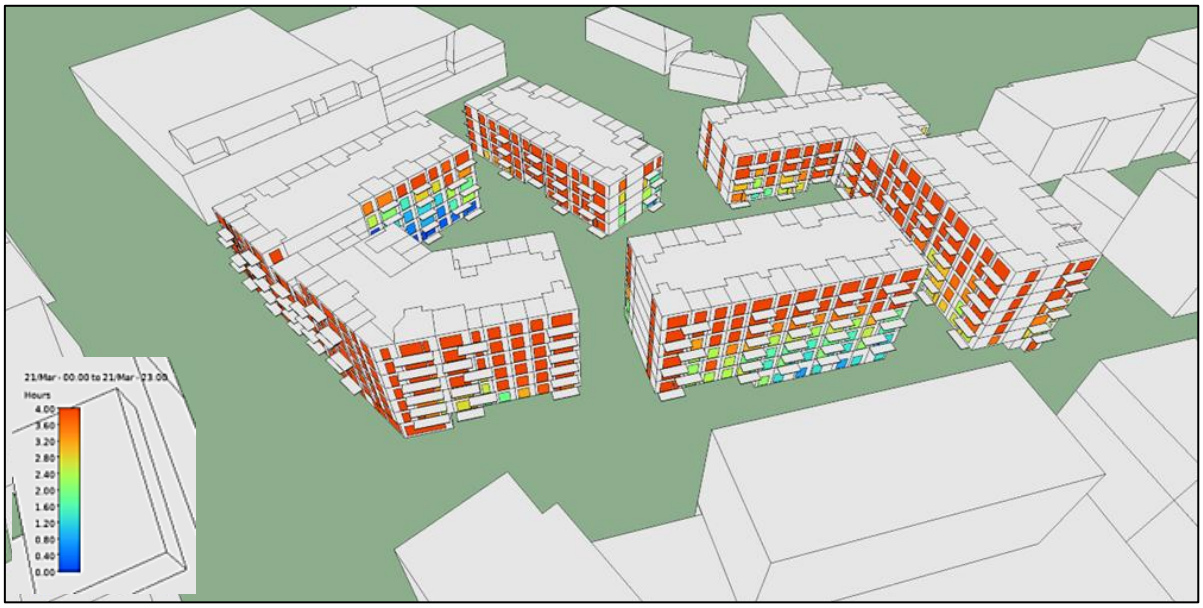


Figure 16.115 Sunlight Exposure (2022 Methodology High Level) – SW Elevation (Zone 7)



Figure 16.116 Sunlight Exposure (2022 Methodology High Level) – NW Elevation (Zone 7)

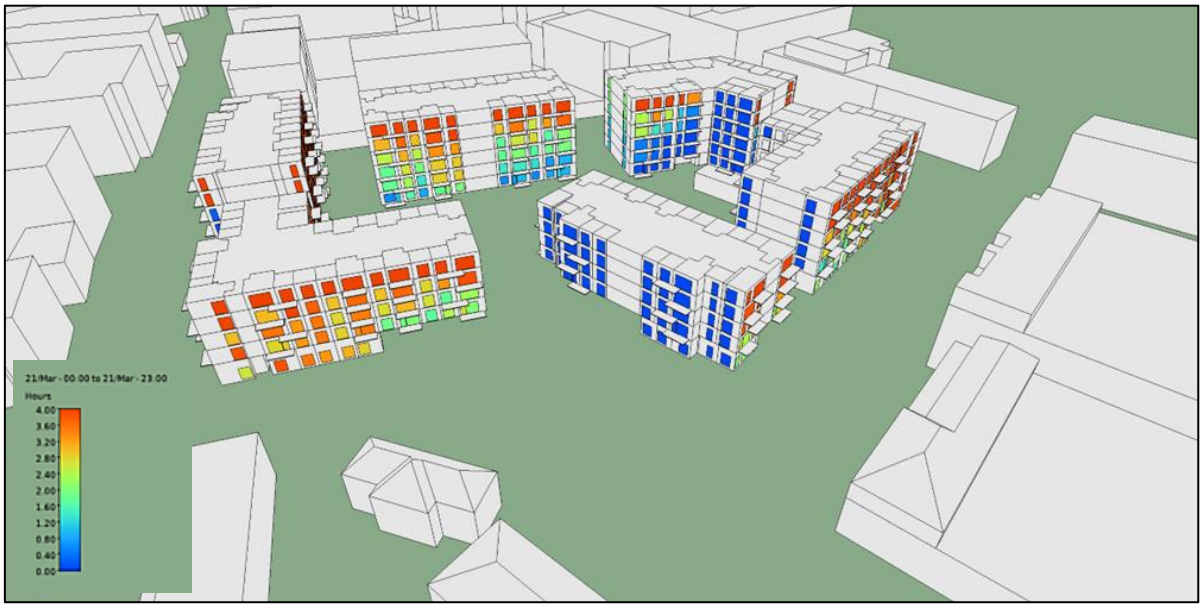


Figure 16.117 Sunlight Exposure (2022 Methodology High Level) – NE Elevation (Zone 7)

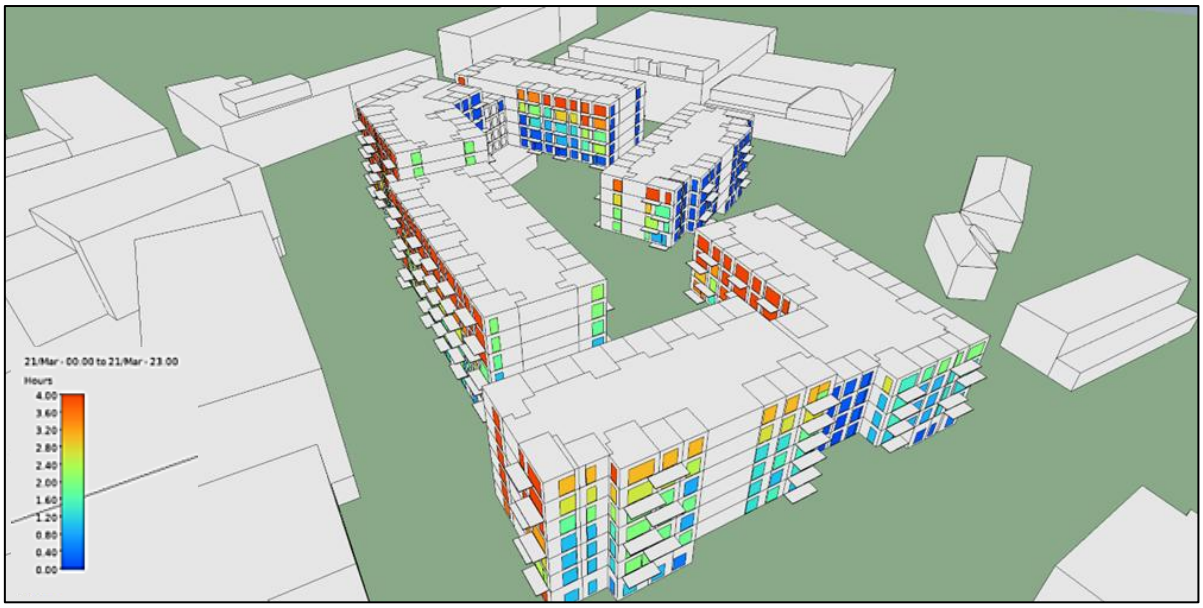


Figure 16.118 Sunlight Exposure (2022 Methodology Min Level) – SE Elevation (Zone 8)

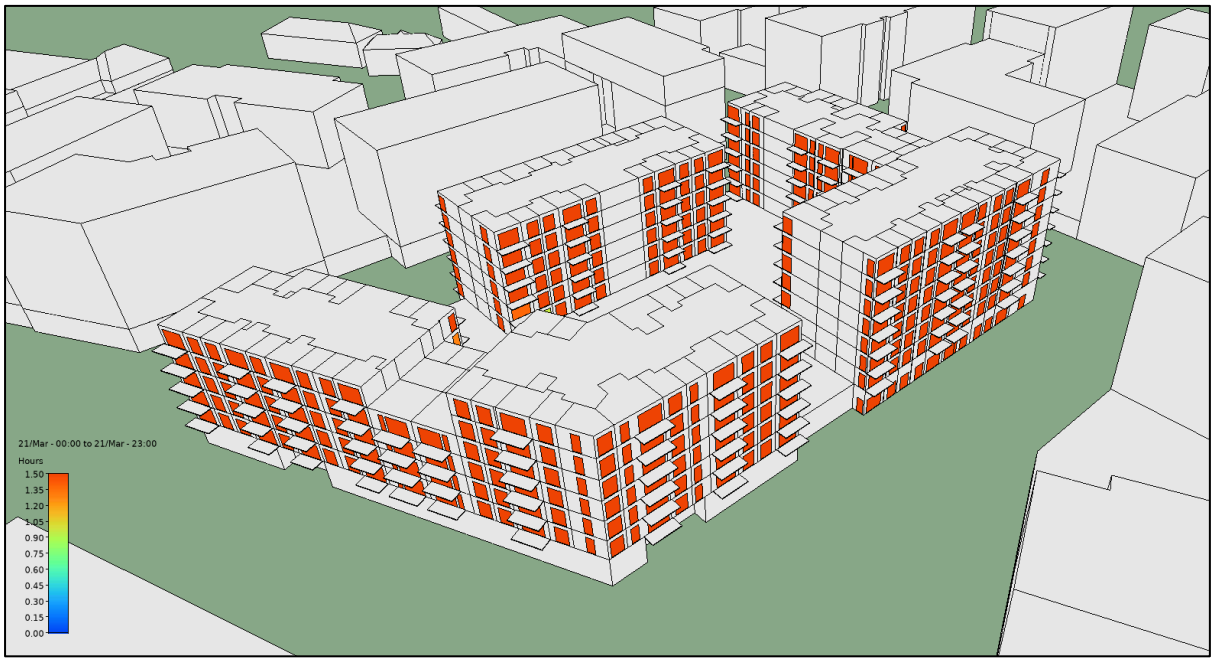


Figure 16.119 Sunlight Exposure (2022 Methodology Min Level) – SW Elevation (Zone 8)



Figure 16.120 Sunlight Exposure (2022 Methodology Min Level) – NW Elevation (Zone 8)

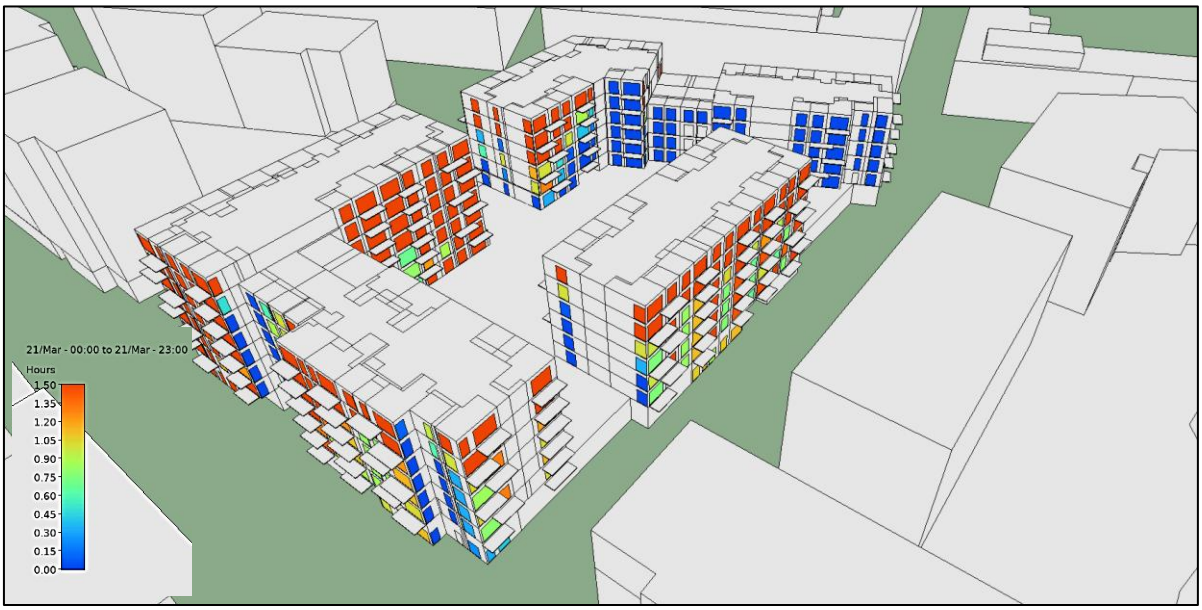


Figure 16.121 Sunlight Exposure (2022 Methodology Min Level) – NE Elevation (Zone 8)

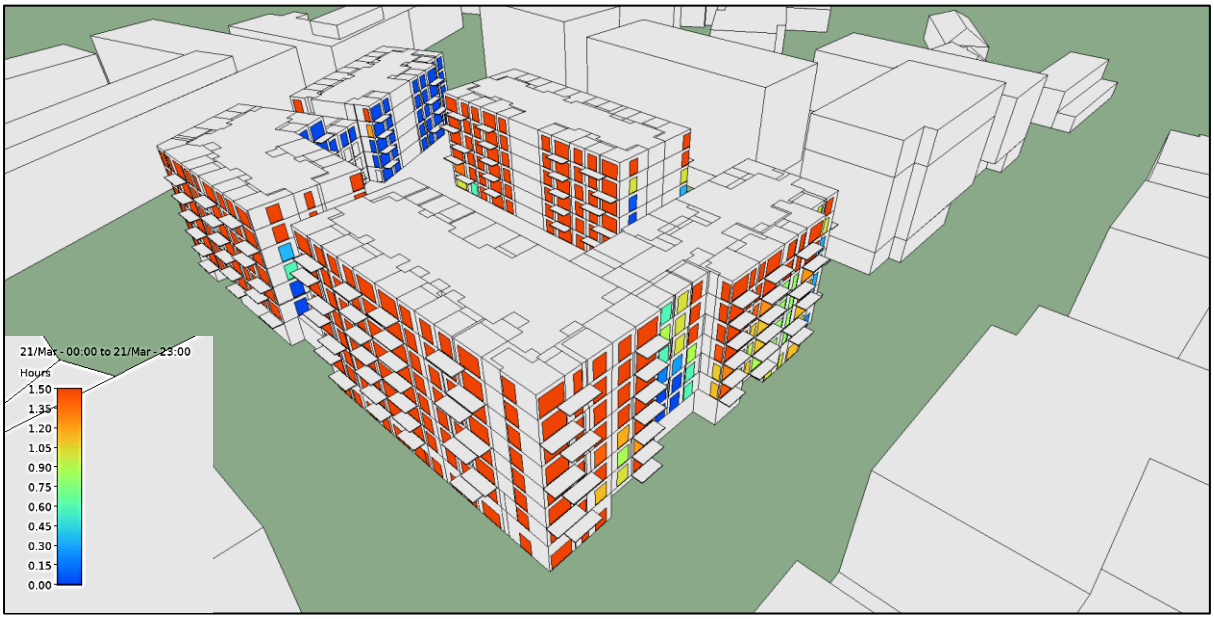


Figure 16.122 Sunlight Exposure (2022 Methodology Medium Level) – SE Elevation (Zone 8)



Figure 16.123 Sunlight Exposure (2022 Methodology Medium Level) – SW Elevation (Zone 8)

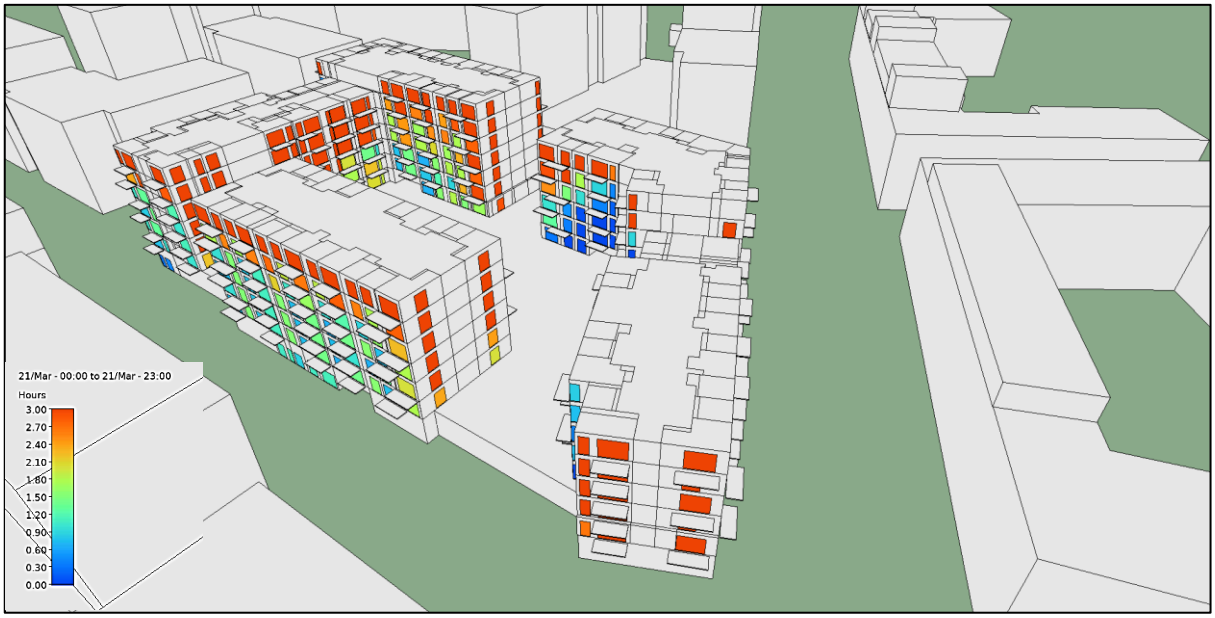


Figure 16.124 Sunlight Exposure (2022 Methodology Medium Level) – NW Elevation (Zone 8)

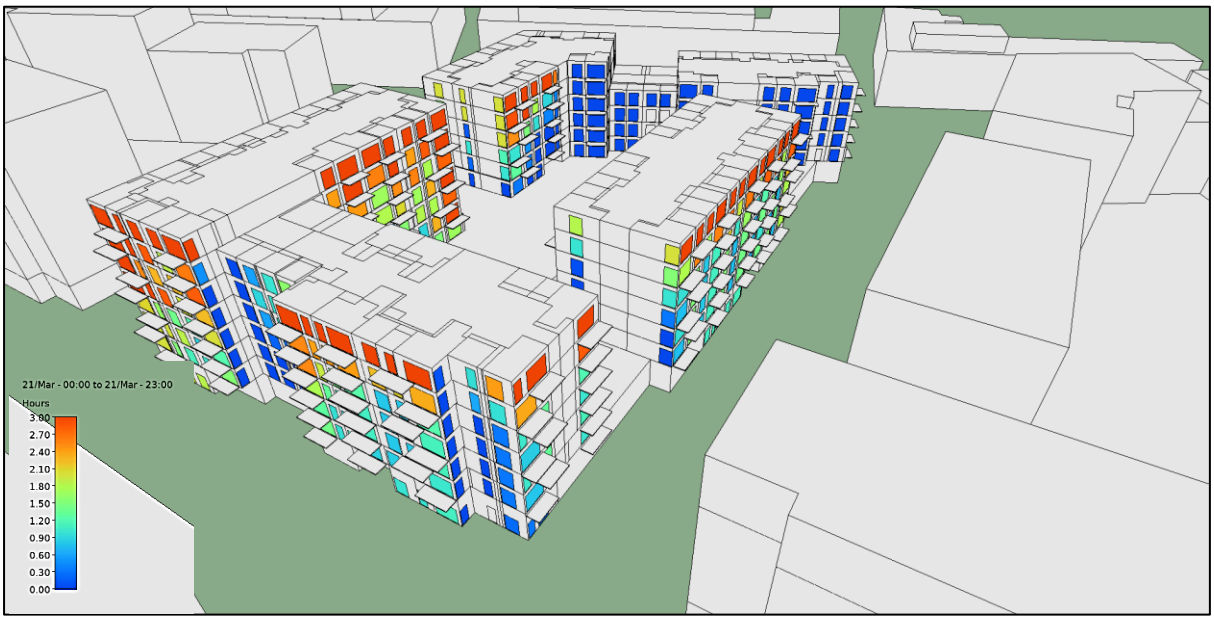


Figure 16.125 Sunlight Exposure (2022 Methodology Medium Level) – NE Elevation (Zone 8)

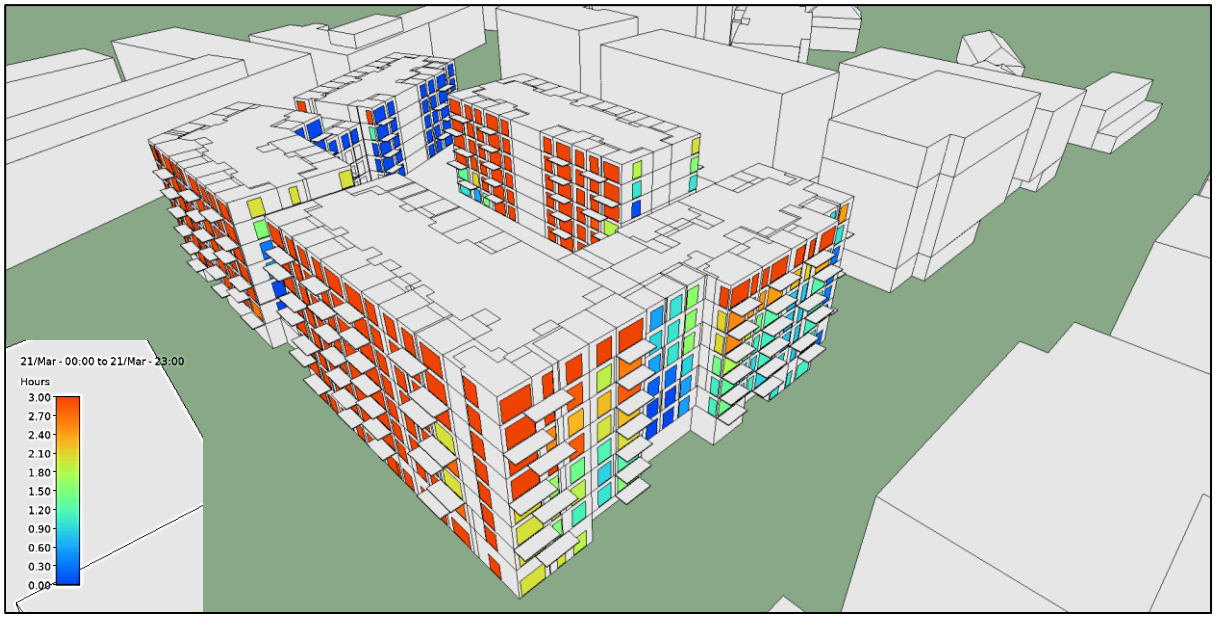


Figure 16.126 Sunlight Exposure (2022 Methodology High Level) – SE Elevation (Zone 8)

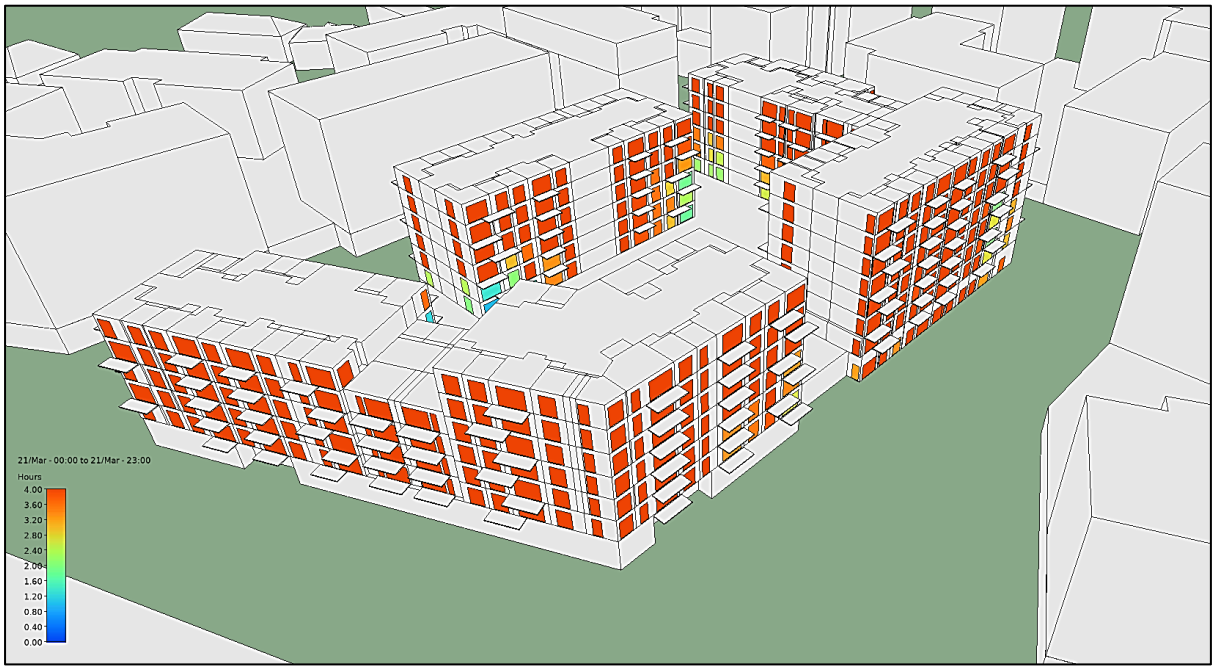


Figure 16.127 Sunlight Exposure (2022 Methodology High Level) – SW Elevation (Zone 8)

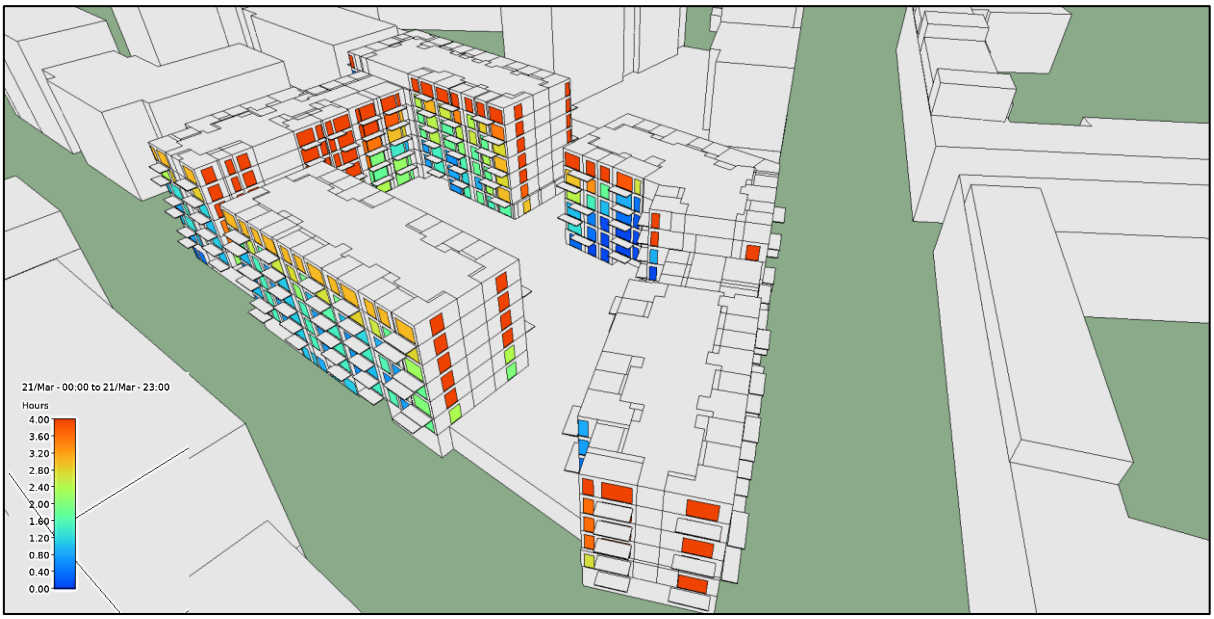


Figure 16.128 Sunlight Exposure (2022 Methodology High Level) – NW Elevation (Zone 8)

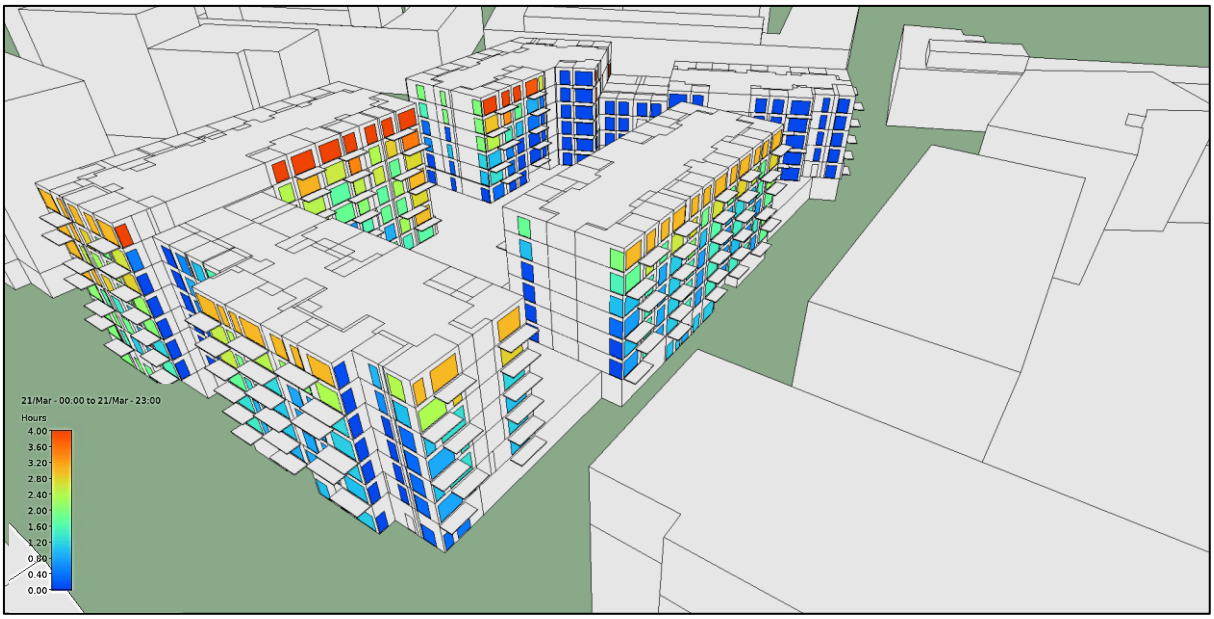


Figure 16.129 Sunlight Exposure (2022 Methodology High Level) – NE Elevation (Zone 8)

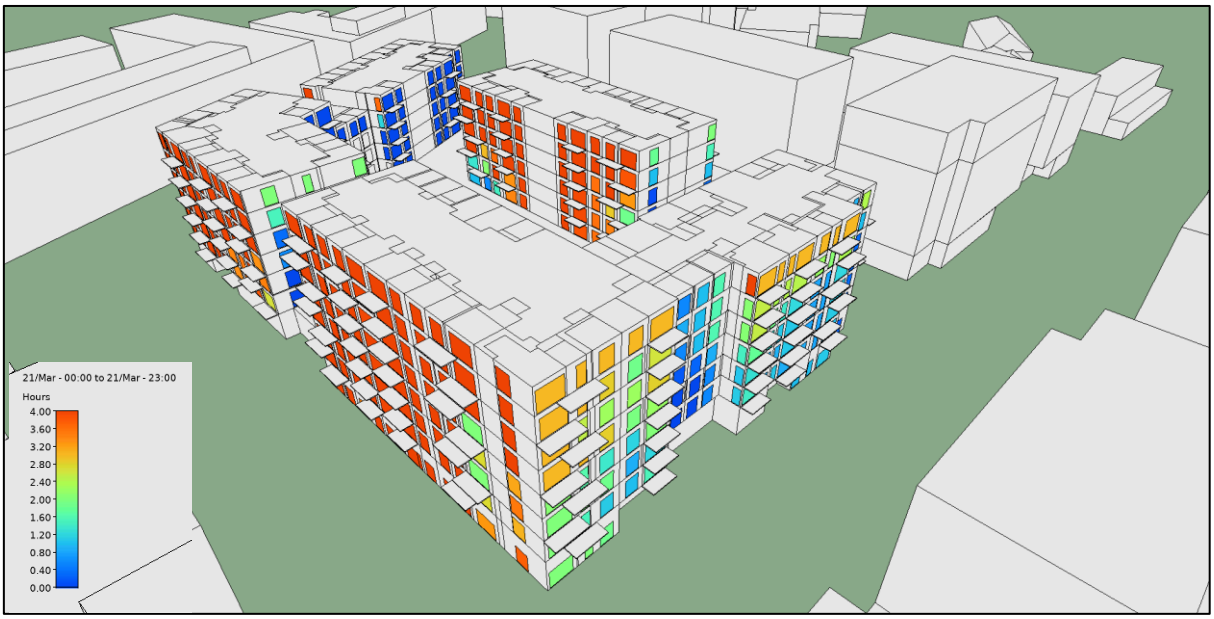


Figure 16.130 Sunlight Exposure (2022 Methodology Min Level) – SE Elevation (Zone 9)



Figure 16.131 Sunlight Exposure (2022 Methodology Min Level) – SW Elevation (Zone 9)



Figure 16.132 Sunlight Exposure (2022 Methodology Min Level) – NW Elevation (Zone 9)

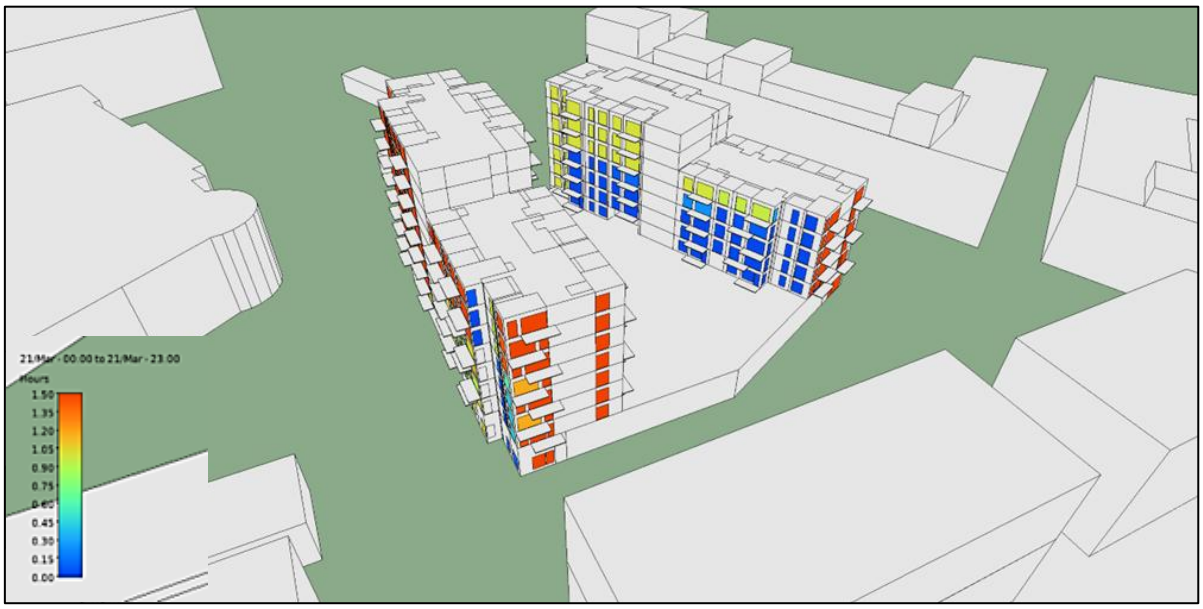


Figure 16.133 Sunlight Exposure (2022 Methodology Min Level) – NE Elevation (Zone 9)



Figure 16.134 Sunlight Exposure (2022 Methodology Medium Level) – SE Elevation (Zone 9)



Figure 16.135 Sunlight Exposure (2022 Methodology Medium Level) – SW Elevation (Zone 9)



Figure 16.136 Sunlight Exposure (2022 Methodology Medium Level) – NW Elevation (Zone 9)

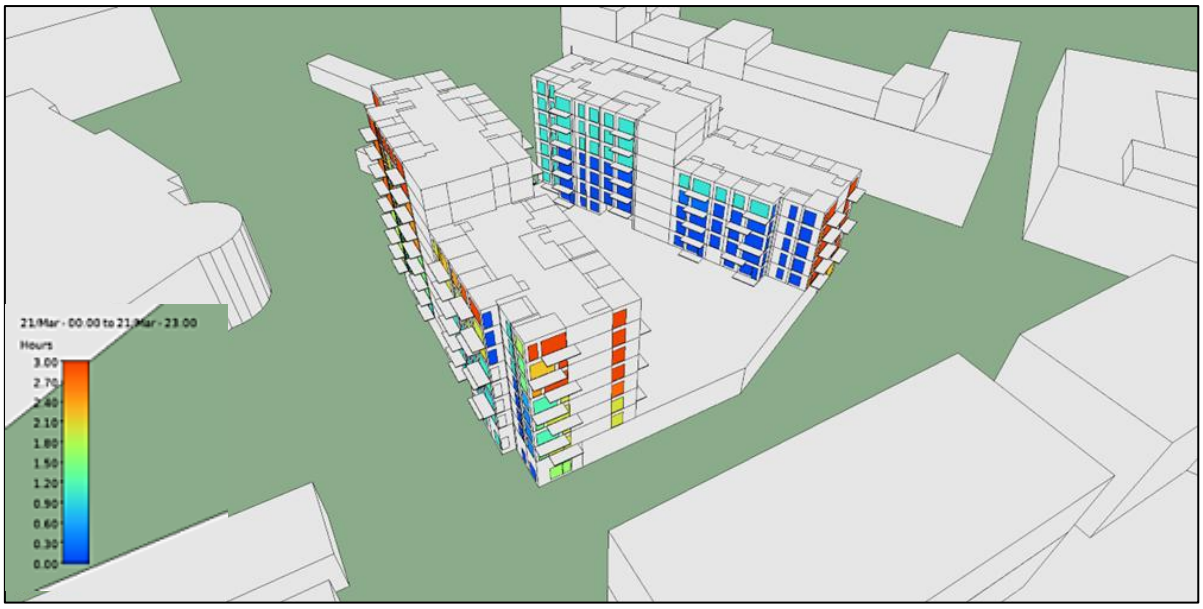


Figure 16.137 Sunlight Exposure (2022 Methodology Medium Level) – NE Elevation (Zone 9)

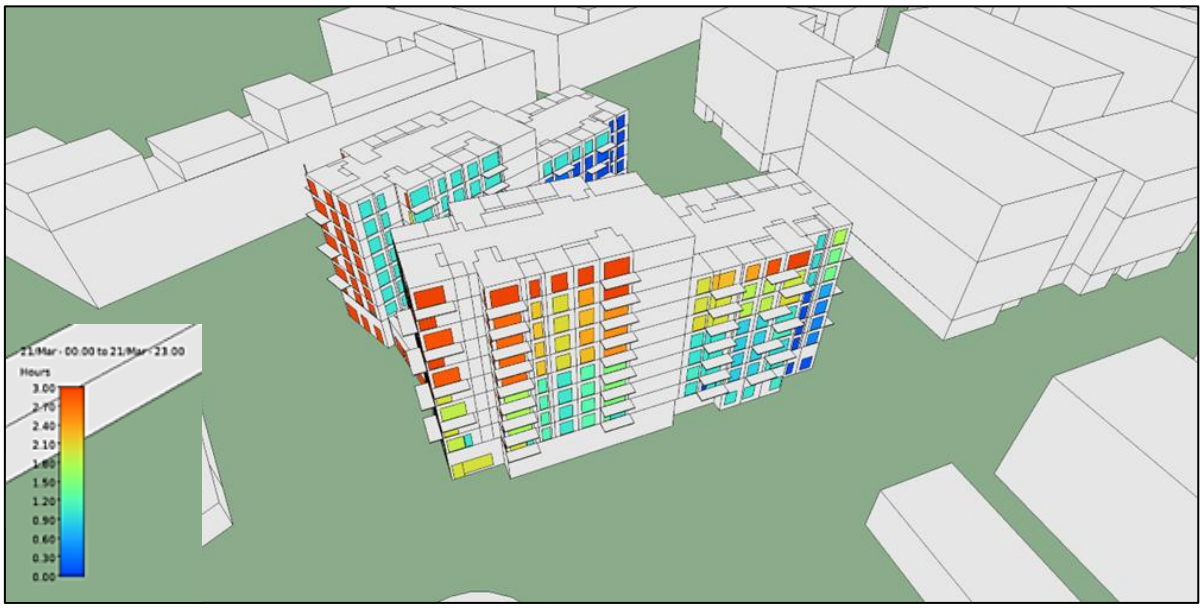


Figure 16.138 Sunlight Exposure (2022 Methodology High Level) – SE Elevation (Zone 9)



Figure 16.139 Sunlight Exposure (2022 Methodology High Level) – SW Elevation (Zone 9)

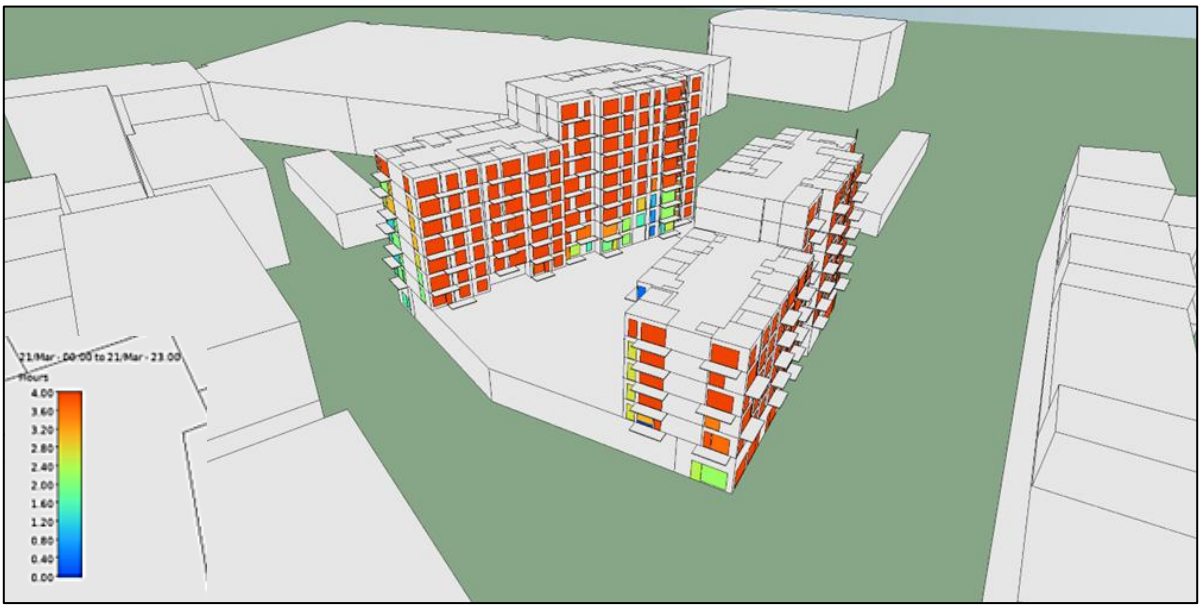
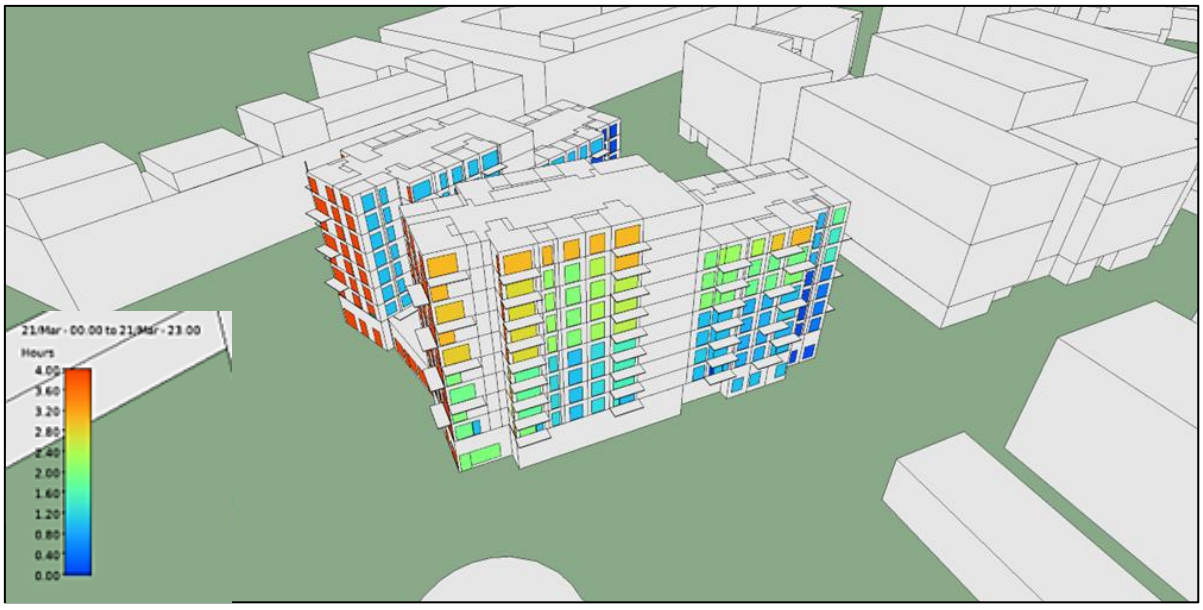


Figure 16.140 Sunlight Exposure (2022 Methodology High Level) – NW Elevation (Zone 9)



Figure 16.141 Sunlight Exposure (2022 Methodology High Level) – NE Elevation (Zone 9)



Appendix 18.1 Traffic Survey Information



IDASO

Survey Name:	24260 - Belmayne and Clongriffin			Arm A - R107 Malahide Road
Site:	Site 1			Arm B - R139
Location:	R107/R139			Arm C - R107 Malahide Road
Date:	Thu 11-Apr-2024			Arm D - R139
AM Peak:	08:00 — 09:00	**Total:**	4395	
PM Peak:	17:15 — 18:15	**Total:**	4754	
15 Min Peak:	18:00 — 18:15	**Total:**	1229	

A => A

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	1	0	0	0	0	1	1
11:30	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
12:00	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
18:00	0	0	1	0	0	0	0	1	1
18:15	1	0	0	0	0	0	0	1	0.2
18:30	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0
H/TOT	1	0	1	0	0	0	0	2	1.2
19:00	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14 TOT	1	0	2	0	0	0	0	3	2.2

A => B

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	3	0	0	1	0	4	5.3
06:15	0	0	4	1	0	0	0	5	5
06:30	0	0	0	4	0	1	0	5	6.3
06:45	0	0	5	2	0	0	0	7	7
H/TOT	0	0	12	7	0	2	0	21	23.6
07:00	0	0	6	2	0	1	0	9	10.3
07:15	1	0	9	2	0	0	0	12	11.2
07:30	0	0	7	2	0	0	0	9	9
07:45	2	0	12	1	1	0	0	16	14.9
H/TOT	3	0	34	7	1	1	0	46	45.4
08:00	1	0	18	0	0	0	0	19	18.2
08:15	3	0	13	2	0	0	0	18	15.6
08:30	1	0	19	0	0	0	0	20	19.2
08:45	1	0	12	1	0	0	0	14	13.2
H/TOT	6	0	62	3	0	0	0	71	66.2
09:00	0	0	13	2	0	1	0	16	17.3
09:15	1	0	10	0	2	0	0	13	13.2
09:30	1	0	13	3	0	0	0	17	16.2
09:45	0	0	12	3	1	0	0	16	16.5
H/TOT	2	0	48	8	3	1	0	62	63.2
10:00	0	0	9	2	0	0	1	12	13
10:15	1	0	10	0	1	1	0	13	14
10:30	2	0	10	0	1	0	0	13	11.9
10:45	1	0	10	0	0	0	0	11	10.2
H/TOT	4	0	39	2	2	1	1	49	49.1
11:00	1	0	6	1	1	0	0	9	8.7
11:15	1	0	12	4	0	1	0	18	18.5
11:30	0	0	8	1	1	0	0	10	10.5
11:45	0	0	7	1	0	0	0	8	8
H/TOT	2	0	33	7	2	1	0	45	45.7
12:00	1	0	9	2	0	0	0	12	11.2
12:15	0	0	9	1	0	0	0	10	10
12:30	0	0	11	3	1	0	0	15	15.5
12:45	0	0	14	0	0	0	0	14	14
H/TOT	1	0	43	6	1	0	0	51	50.7
13:00	0	1	11	4	0	0	0	16	15.4
13:15	0	0	9	2	0	0	0	11	11
13:30	0	0	4	1	0	0	0	5	5
13:45	0	0	10	2	0	1	0	13	14.3
H/TOT	0	1	34	9	0	1	0	45	45.7
14:00	0	0	6	3	1	0	0	10	10.5
14:15	0	0	10	2	0	1	0	13	14.3
14:30	0	0	10	0	0	0	0	10	10
14:45	0	0	7	0	0	0	1	8	9
H/TOT	0	0	33	5	1	1	1	41	43.8
15:00	0	0	8	1	0	0	0	9	9
15:15	0	0	9	1	0	0	0	10	10
15:30	2	0	10	3	0	0	0	15	13.4
15:45	1	0	2	3	0	1	0	7	7.5
H/TOT	3	0	29	8	0	1	0	41	39.9
16:00	0	0	7	2	0	0	0	9	9
16:15	0	0	17	2	2	0	0	21	22
16:30	0	0	11	1	0	0	0	12	12
16:45	0	0	5	0	1	0	0	6	6.5
H/TOT	0	0	40	5	3	0	0	48	49.5
17:00	0	0	8	1	0	0	0	9	9
17:15	1	0	4	2	0	0	0	7	6.2
17:30	1	0	12	0	0	0	0	13	12.2
17:45	1	0	6	0	0	0	0	7	6.2
H/TOT	3	0	30	3	0	0	0	36	33.6
18:00	0	0	14	0	0	0	0	14	14
18:15	1	0	9	0	0	0	0	10	9.2
18:30	1	0	15	0	0	0	0	16	15.2
18:45	0	0	13	1	0	0	0	14	14
H/TOT	2	0	51	1	0	0	0	54	52.4
19:00	0	0	13	1	0	0	0	14	14
19:15	0	0	16	1	0	0	0	17	17
19:30	0	0	19	2	0	0	0	21	21
19:45	0	0	17	0	0	0	0	17	17
H/TOT	0	0	65	4	0	0	0	69	69
14 TOT	26	1	553	75	13	9	2	679	677.8

A => C

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	1	1	33	4	0	0	0	39	37.6
06:15	2	0	50	10	0	0	1	63	62.4
06:30	5	3	86	14	0	0	0	108	102.2
06:45	2	1	79	12	0	0	2	96	95.8
H/TOT	10	5	248	40	0	0	3	306	298
07:00	4	1	99	16	0	0	2	122	120.2
07:15	2	3	105	9	1	1	2	123	123.4
07:30	6	0	117	11	3	1	4	142	144
07:45	10	3	147	9	2	0	2	173	166.2
H/TOT	22	7	468	45	6	2	10	560	553.8
08:00	11	5	186	9	2	0	2	215	206.2
08:15	13	1	167	7	4	0	1	193	185
08:30	10	4	166	10	1	0	2	193	185.1
08:45	9	4	127	9	3	0	1	153	145.9
H/TOT	43	14	646	35	10	0	6	754	722.2
09:00	1	3	124	13	4	0	2	147	148.4
09:15	2	2	106	13	0	1	2	126	126.5
09:30	3	2	96	9	3	1	1	115	115.2
09:45	2	0	87	6	4	0	2	101	103.4
H/TOT	8	7	413	41	11	2	7	489	493.5
10:00	0	1	108	14	1	1	2	127	130.2
10:15	1	2	69	12	2	0	0	86	85
10:30	2	2	98	10	3	0	1	116	115.7
10:45	2	1	110	3	3	0	0	119	118.3
H/TOT	5	6	385	39	9	1	3	448	449.2
11:00	0	1	94	9	2	1	1	108	110.7
11:15	0	0	102	8	1	2	1	114	118.1
11:30	1	1	96	11	1	0	1	111	111.1
11:45	1	1	75	9	1	0	1	88	88.1
H/TOT	2	3	367	37	5	3	4	421	428
12:00	1	1	94	7	0	0	0	103	101.6
12:15	0	0	108	10	4	1	1	124	128.3
12:30	1	1	79	11	1	0	1	94	94.1
12:45	2	2	104	10	2	0	1	121	120.2
H/TOT	4	4	385	38	7	1	3	442	444.2
13:00	5	3	104	4	1	0	1	118	113.7
13:15	2	0	102	6	2	0	1	113	113.4
13:30	1	0	108	10	3	0	1	123	124.7
13:45	3	1	110	9	0	0	1	124	122
H/TOT	11	4	424	29	6	0	4	478	473.8
14:00	1	2	124	9	3	2	0	141	143.1
14:15	0	2	88	4	1	0	2	97	98.3
14:30	0	0	114	13	2	0	0	129	130
14:45	1	0	116	16	0	1	1	135	136.5
H/TOT	2	4	442	42	6	3	3	502	507.9
15:00	4	1	108	10	1	1	0	125	123
15:15	1	0	100	12	2	0	2	117	119.2
15:30	2	1	89	14	1	0	1	108	107.3
15:45	1	3	84	12	0	0	3	103	103.4
H/TOT	8	5	381	48	4	1	6	453	452.9
16:00	4	1	115	19	0	0	0	139	135.2
16:15	3	1	78	14	1	0	2	99	98.5
16:30	3	2	95	17	0	0	3	120	119.4
16:45	0	0	79	12	0	0	2	93	95
H/TOT	10	4	367	62	1	0	7	451	448.1
17:00	2	0	92	10	1	0	1	106	105.9
17:15	2	1	110	7	0	0	0	120	117.8
17:30	2	2	125	5	1	0	2	137	136.7
17:45	5	3	94	4	0	0	2	108	104.2
H/TOT	11	6	421	26	2	0	5	471	464.6
18:00	1	1	114	7	0	0	2	125	125.6
18:15	1	0	97	1	1	0	0	100	99.7
18:30	2	1	101	4	1	0	2	111	111.3
18:45	1	4	100	7	0	0	1	113	110.8
H/TOT	5	6	412	19	2	0	5	449	447.4
19:00	2	0	80	6	0	0	1	89	88.4
19:15	3	3	80	7	0	0	1	94	90.8
19:30	2	2	99	8	0	0	1	112	110.2
19:45	3	0	84	2	0	0	2	91	90.6
H/TOT	10	5	343	23	0	0	5	386	380
14 TOT	151	80	5702	524	69	13	71	6610	6563.6

A => D

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	1	33	5	1	0	0	40	39.9
06:15	0	0	35	9	4	1	0	49	52.3
06:30	0	1	51	15	5	0	0	72	73.9
06:45	0	1	45	12	0	0	0	58	57.4
H/TOT	0	3	164	41	10	1	0	219	223.5
07:00	0	1	52	12	3	1	0	69	71.2
07:15	0	0	46	6	1	0	0	53	53.5
07:30	0	0	70	7	3	1	0	81	83.8
07:45	0	0	51	5	1	1	0	58	59.8
H/TOT	0	1	219	30	8	3	0	261	268.3
08:00	0	0	60	3	2	0	0	65	66
08:15	0	0	41	3	1	2	0	47	50.1
08:30	0	0	77	6	0	0	0	83	83
08:45	0	1	54	4	2	0	0	61	61.4
H/TOT	0	1	232	16	5	2	0	256	260.5
09:00	0	0	64	7	3	2	0	76	80.1
09:15	0	1	50	6	4	4	1	66	73.6
09:30	0	0	36	5	4	2	0	47	51.6
09:45	0	0	31	2	3	3	0	39	44.4
H/TOT	0	1	181	20	14	11	1	228	249.7
10:00	0	0	31	7	1	3	0	42	46.4
10:15	0	0	40	5	4	7	1	57	69.1
10:30	0	0	31	9	3	3	0	46	51.4
10:45	0	0	28	10	3	3	0	44	49.4
H/TOT	0	0	130	31	11	16	1	189	216.3
11:00	0	0	28	7	3	6	0	44	53.3
11:15	0	1	44	7	5	0	0	57	58.9
11:30	0	0	35	7	5	3	0	50	56.4
11:45	0	0	39	8	3	2	0	52	56.1
H/TOT	0	1	146	29	16	11	0	203	224.7
12:00	0	0	30	11	1	5	0	47	54
12:15	0	0	38	8	3	6	0	55	64.3
12:30	0	1	37	9	5	3	0	55	60.8
12:45	0	0	41	5	2	3	1	52	57.9
H/TOT	0	1	146	33	11	17	1	209	237
13:00	0	1	43	4	2	1	0	51	52.7
13:15	0	0	38	4	3	2	2	49	55.1
13:30	0	0	38	10	1	4	2	55	62.7
13:45	0	0	28	10	1	5	1	45	53
H/TOT	0	1	147	28	7	12	5	200	223.5
14:00	0	0	45	9	6	3	0	63	69.9
14:15	0	0	33	14	3	6	0	56	65.3
14:30	0	0	47	13	2	3	0	65	69.9
14:45	0	0	36	8	2	0	0	46	47
H/TOT	0	0	161	44	13	12	0	230	252.1
15:00	0	0	44	7	4	2	0	57	61.6
15:15	1	0	32	16	2	6	0	57	65
15:30	0	0	24	13	5	2	0	44	49.1
15:45	0	0	31	13	0	3	0	47	50.9
H/TOT	1	0	131	49	11	13	0	205	226.6
16:00	1	0	37	10	8	1	0	57	61.5
16:15	0	0	18	10	1	1	0	30	31.8
16:30	0	0	39	5	1	2	1	48	52.1
16:45	0	0	28	6	3	0	0	37	38.5
H/TOT	1	0	122	31	13	4	1	172	183.9
17:00	0	0	28	5	3	3	0	39	44.4
17:15	0	0	17	4	1	1	0	23	24.8
17:30	0	2	27	13	0	0	1	43	42.8
17:45	0	0	15	4	0	0	0	19	19
H/TOT	0	2	87	26	4	4	1	124	131
18:00	0	0	34	3	0	0	0	37	37
18:15	0	0	33	2	2	0	1	38	40
18:30	0	0	33	3	1	0	0	37	37.5
18:45	0	0	40	2	1	0	0	43	43.5
H/TOT	0	0	140	10	4	0	1	155	158
19:00	0	1	23	3	2	0	0	29	29.4
19:15	0	0	42	1	2	0	0	45	46
19:30	0	0	29	1	0	0	0	30	30
19:45	1	0	35	3	2	0	0	41	41.2
H/TOT	1	1	129	8	6	0	0	145	146.6
14 TOT	3	12	2135	396	133	106	11	2796	3001.7

B => A

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	5	0	0	0	0	5	5
06:15	0	0	5	1	0	0	1	7	8
06:30	0	0	4	1	1	0	0	6	6.5
06:45	1	0	4	0	1	0	0	6	5.7
H/TOT	1	0	18	2	2	0	1	24	25.2
07:00	0	0	3	2	0	0	0	5	5
07:15	1	0	7	1	1	0	1	11	11.7
07:30	0	0	7	3	0	0	0	10	10
07:45	1	0	11	5	0	0	0	17	16.2
H/TOT	2	0	28	11	1	0	1	43	42.9
08:00	1	0	4	0	0	0	0	5	4.2
08:15	0	0	13	0	1	1	0	15	16.8
08:30	1	0	10	2	0	1	0	14	14.5
08:45	0	1	20	2	1	0	0	24	23.9
H/TOT	2	1	47	4	2	2	0	58	59.4
09:00	1	0	7	1	1	0	0	10	9.7
09:15	0	0	14	1	0	0	0	15	15
09:30	0	0	6	2	0	0	0	8	8
09:45	0	0	14	0	0	0	0	14	14
H/TOT	1	0	41	4	1	0	0	47	46.7
10:00	0	0	11	1	0	0	0	12	12
10:15	0	0	13	0	1	0	0	14	14.5
10:30	0	0	6	3	1	0	0	10	10.5
10:45	1	1	17	1	0	0	0	20	18.6
H/TOT	1	1	47	5	2	0	0	56	55.6
11:00	2	0	8	1	0	0	0	11	9.4
11:15	1	0	10	3	0	0	0	14	13.2
11:30	0	0	9	3	0	1	0	13	14.3
11:45	0	0	16	0	0	0	0	16	16
H/TOT	3	0	43	7	0	1	0	54	52.9
12:00	1	0	12	2	0	1	0	16	16.5
12:15	0	1	11	3	0	0	0	15	14.4
12:30	0	0	9	1	0	0	0	10	10
12:45	0	0	9	0	0	0	0	9	9
H/TOT	1	1	41	6	0	1	0	50	49.9
13:00	1	0	10	2	0	0	0	13	12.2
13:15	0	0	6	1	0	0	0	7	7
13:30	0	0	10	0	1	0	0	11	11.5
13:45	0	0	8	1	0	0	0	9	9
H/TOT	1	0	34	4	1	0	0	40	39.7
14:00	0	0	7	2	0	0	0	9	9
14:15	1	0	10	1	1	0	1	14	14.7
14:30	0	0	10	0	0	0	0	10	10
14:45	0	1	8	2	0	0	0	11	10.4
H/TOT	1	1	35	5	1	0	1	44	44.1
15:00	0	0	9	1	0	0	0	10	10
15:15	0	0	12	2	0	0	0	14	14
15:30	0	0	11	2	0	0	0	13	13
15:45	0	0	16	1	0	0	0	17	17
H/TOT	0	0	48	6	0	0	0	54	54
16:00	2	0	15	1	1	0	0	19	17.9
16:15	2	1	14	2	0	1	0	20	19.1
16:30	2	0	9	2	0	0	0	13	11.4
16:45	2	0	15	1	0	0	0	18	16.4
H/TOT	8	1	53	6	1	1	0	70	64.8
17:00	0	0	16	0	0	0	0	16	16
17:15	1	1	10	0	0	0	0	12	10.6
17:30	1	0	10	1	0	0	0	12	11.2
17:45	0	0	16	1	0	1	0	18	19.3
H/TOT	2	1	52	2	0	1	0	58	57.1
18:00	1	0	13	0	0	0	0	14	13.2
18:15	1	0	14	1	0	0	0	16	15.2
18:30	0	0	12	1	0	0	0	13	13
18:45	0	0	11	2	0	0	0	13	13
H/TOT	2	0	50	4	0	0	0	56	54.4
19:00	0	0	22	1	0	0	0	23	23
19:15	0	0	9	0	0	0	0	9	9
19:30	0	0	7	1	0	0	0	8	8
19:45	0	0	8	0	0	0	0	8	8
H/TOT	0	0	46	2	0	0	0	48	48
14 TOT	25	6	583	68	11	6	3	702	694.7

B => B

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0
06:45	1	0	0	0	0	0	0	1	0.2
H/TOT	1	0	0	0	0	0	0	1	0.2
07:00	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14 TOT	1	0	0	0	0	0	0	1	0.2

B => C

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	2	2	25	2	0	0	3	34	34.2
06:15	2	0	39	7	0	0	3	51	52.4
06:30	2	0	52	14	1	0	3	72	73.9
06:45	2	1	46	9	1	0	2	61	61.3
H/TOT	8	3	162	32	2	0	11	218	221.8
07:00	4	0	45	9	0	0	5	63	64.8
07:15	3	0	47	16	1	0	3	70	71.1
07:30	3	1	92	17	1	0	3	117	117.5
07:45	3	2	82	17	0	0	5	109	110.4
H/TOT	13	3	266	59	2	0	16	359	363.8
08:00	7	2	109	5	0	0	6	129	128.2
08:15	4	1	107	6	0	0	2	120	118.2
08:30	2	1	102	3	1	0	4	113	115.3
08:45	3	0	89	9	3	0	2	106	107.1
H/TOT	16	4	407	23	4	0	14	468	468.8
09:00	1	0	97	7	2	0	3	110	113.2
09:15	0	0	85	6	2	0	3	96	100
09:30	2	1	73	12	6	0	5	99	104.8
09:45	1	2	74	12	3	0	4	96	99.5
H/TOT	4	3	329	37	13	0	15	401	417.5
10:00	1	0	74	11	1	0	3	90	92.7
10:15	1	2	68	3	3	0	5	82	86.5
10:30	1	1	67	9	0	0	2	80	80.6
10:45	0	0	67	10	2	0	3	82	86
H/TOT	3	3	276	33	6	0	13	334	345.8
11:00	0	0	74	10	2	0	3	89	93
11:15	0	0	77	6	2	0	3	88	92
11:30	1	0	79	9	5	0	3	97	101.7
11:45	1	1	68	5	2	0	3	80	82.6
H/TOT	2	1	298	30	11	0	12	354	369.3
12:00	1	0	77	5	2	0	4	89	93.2
12:15	1	0	70	11	2	1	3	88	92.5
12:30	2	0	70	12	4	0	3	91	94.4
12:45	0	1	94	10	2	0	3	110	113.4
H/TOT	4	1	311	38	10	1	13	378	393.5
13:00	0	3	77	8	2	0	3	93	95.2
13:15	1	0	76	8	4	0	3	92	96.2
13:30	1	1	83	4	1	0	3	93	95.1
13:45	1	2	74	12	3	1	3	96	99.8
H/TOT	3	6	310	32	10	1	12	374	386.3
14:00	0	1	58	5	3	0	3	70	73.9
14:15	1	0	71	8	3	0	2	85	87.7
14:30	1	0	90	4	0	0	4	99	102.2
14:45	2	1	101	10	0	0	2	116	115.8
H/TOT	4	2	320	27	6	0	11	370	379.6
15:00	2	0	55	10	2	0	4	73	76.4
15:15	0	1	84	14	0	0	2	101	102.4
15:30	3	2	87	9	0	0	7	108	111.4
15:45	2	0	91	7	1	0	3	104	105.9
H/TOT	7	3	317	40	3	0	16	386	396.1
16:00	4	0	85	11	1	0	4	105	106.3
16:15	4	0	74	10	1	0	2	91	90.3
16:30	1	1	88	7	1	1	4	103	107.4
16:45	2	1	91	6	0	0	2	102	101.8
H/TOT	11	2	338	34	3	1	12	401	405.8
17:00	1	1	89	4	2	0	4	101	104.6
17:15	0	0	86	7	1	0	2	96	98.5
17:30	2	0	90	11	0	0	4	107	109.4
17:45	1	2	101	7	1	0	2	114	114.5
H/TOT	4	3	366	29	4	0	12	418	427
18:00	3	1	99	5	1	0	3	112	112.5
18:15	0	2	90	5	1	0	3	101	103.3
18:30	1	1	103	7	0	0	4	116	118.6
18:45	1	0	94	5	0	0	3	103	105.2
H/TOT	5	4	386	22	2	0	13	432	439.6
19:00	0	1	88	8	0	0	4	101	104.4
19:15	0	1	76	10	0	0	2	89	90.4
19:30	0	0	75	3	0	0	2	80	82
19:45	1	1	82	3	2	0	3	92	94.6
H/TOT	1	3	321	24	2	0	11	362	371.4
14 TOT	85	41	4407	460	78	3	181	5255	5386.3

B => D

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	68	22	2	0	0	92	93
06:15	0	1	106	22	2	1	0	132	133.7
06:30	0	1	120	34	3	0	0	158	158.9
06:45	0	0	160	38	7	3	0	208	215.4
H/TOT	0	2	454	116	14	4	0	590	601
07:00	0	2	141	24	4	1	0	172	174.1
07:15	0	0	119	35	4	2	0	160	164.6
07:30	1	1	123	28	3	4	0	160	165.3
07:45	1	2	109	16	6	6	0	140	148.8
H/TOT	2	5	492	103	17	13	0	632	652.8
08:00	0	0	146	16	4	3	1	170	176.9
08:15	0	1	129	15	5	5	0	155	163.4
08:30	0	2	88	20	5	3	3	121	129.2
08:45	0	0	79	22	10	5	2	118	131.5
H/TOT	0	3	442	73	24	16	6	564	601
09:00	0	1	112	15	5	3	2	138	145.8
09:15	0	0	100	18	9	5	2	134	147
09:30	0	0	115	15	10	4	1	145	156.2
09:45	1	1	105	21	6	2	0	136	140.2
H/TOT	1	2	432	69	30	14	5	553	589.2
10:00	0	0	102	18	6	2	4	132	141.6
10:15	0	0	104	11	9	4	0	128	137.7
10:30	1	0	75	10	8	2	0	96	101.8
10:45	0	0	82	17	8	3	1	111	119.9
H/TOT	1	0	363	56	31	11	5	467	501
11:00	0	2	92	30	8	3	2	137	145.7
11:15	0	1	77	24	9	3	1	115	123.8
11:30	0	4	69	25	6	3	0	107	111.5
11:45	1	2	81	19	7	1	1	112	115.8
H/TOT	1	9	319	98	30	10	4	471	496.8
12:00	0	1	99	28	6	4	0	138	145.6
12:15	0	0	91	28	8	3	0	130	137.9
12:30	0	0	96	26	9	1	0	132	137.8
12:45	1	0	98	20	7	5	0	131	140.2
H/TOT	1	1	384	102	30	13	0	531	561.5
13:00	0	0	90	15	14	7	0	126	142.1
13:15	0	0	93	21	6	2	1	123	129.6
13:30	0	0	87	30	9	2	1	129	137.1
13:45	0	0	92	22	6	3	3	126	135.9
H/TOT	0	0	362	88	35	14	5	504	544.7
14:00	0	0	109	20	7	4	1	141	150.7
14:15	1	0	84	30	6	4	1	126	134.4
14:30	1	0	107	25	6	2	2	143	149.8
14:45	0	2	94	29	6	0	0	131	132.8
H/TOT	2	2	394	104	25	10	4	541	567.7
15:00	1	1	118	43	4	2	0	169	172.2
15:15	0	0	115	26	6	3	0	150	156.9
15:30	0	0	105	37	9	3	0	154	162.4
15:45	0	1	100	31	1	1	0	134	135.2
H/TOT	1	2	438	137	20	9	0	607	626.7
16:00	1	0	137	31	6	1	0	176	179.5
16:15	0	1	79	29	1	4	0	114	119.1
16:30	0	0	120	31	2	3	0	156	160.9
16:45	0	0	79	22	1	1	0	103	104.8
H/TOT	1	1	415	113	10	9	0	549	564.3
17:00	0	0	113	16	1	3	0	133	137.4
17:15	0	2	130	24	0	0	0	156	154.8
17:30	1	2	127	31	0	2	0	163	163.6
17:45	0	1	110	17	0	1	0	129	129.7
H/TOT	1	5	480	88	1	6	0	581	585.5
18:00	0	0	130	20	1	0	0	151	151.5
18:15	0	2	97	23	0	0	0	122	120.8
18:30	0	1	106	14	0	0	1	122	122.4
18:45	0	0	90	17	0	0	0	107	107
H/TOT	0	3	423	74	1	0	1	502	501.7
19:00	0	0	96	15	0	0	0	111	111
19:15	0	0	118	17	1	0	1	137	138.5
19:30	0	0	85	8	0	0	1	94	95
19:45	0	0	65	10	1	0	1	77	78.5
H/TOT	0	0	364	50	2	0	3	419	423
14 TOT	11	35	5762	1271	270	129	33	7511	7816.9



IDASO

Survey Name: 24260 - Belmayne and Clongriffin
Site: Site 1
Location: R107/R139
Date: Thu 11-Apr-2024
AM Peak: 08:00 — 09:00 **Total:** 4395
PM Peak: 17:15 — 18:15 **Total:** 4754
15 Min Peak: 18:00 — 18:15 **Total:** 1229

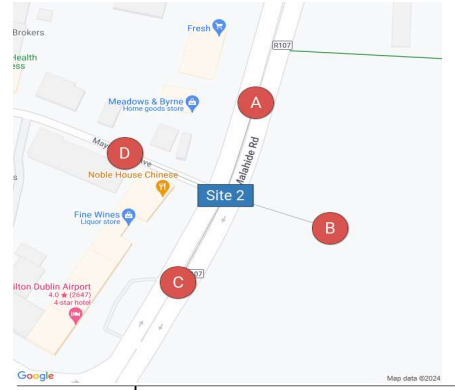
Arm A - R107 Malahide Road
Arm B - R139
Arm C - R107 Malahide Road
Arm D - R139

	C => A									C => B								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	2	0	9	2	0	0	0	13	11.4	0	0	12	0	1	0	1	14	15.5
06:15	0	0	7	2	1	0	0	10	10.5	0	0	18	2	2	0	1	23	25
06:30	0	0	22	5	0	0	3	30	33	1	0	19	5	2	1	3	31	35.5
06:45	2	1	37	5	2	0	1	48	47.8	2	0	17	3	0	1	0	23	22.7
H/TOT	4	1	75	14	3	0	4	101	102.7	3	0	66	10	5	2	5	91	98.7
07:00	2	1	44	6	0	0	2	55	54.8	1	0	32	6	1	0	3	43	45.7
07:15	1	0	36	6	2	0	1	46	47.2	3	0	27	9	0	0	3	42	42.6
07:30	3	0	66	9	0	0	2	80	79.6	0	0	26	7	0	1	0	34	35.3
07:45	1	0	79	17	0	1	1	99	100.5	0	1	56	13	2	0	4	76	80.4
H/TOT	7	1	225	38	2	1	6	280	282.1	4	1	141	35	3	1	10	195	204
08:00	2	1	105	13	0	1	1	123	123.1	1	0	58	7	1	0	2	69	70.7
08:15	5	0	79	7	2	0	2	95	94	3	0	58	7	2	0	4	74	76.6
08:30	3	0	75	8	4	0	1	91	91.6	0	0	56	7	2	0	5	70	76
08:45	2	0	96	13	4	0	1	116	117.4	1	1	52	3	2	0	1	60	60.6
H/TOT	12	1	355	41	10	1	5	425	426.1	5	1	224	24	7	0	12	273	283.9
09:00	2	0	94	7	1	1	1	106	107.2	1	0	57	4	2	0	4	68	72.2
09:15	0	1	96	11	3	0	2	113	115.9	0	0	43	14	3	0	4	64	69.5
09:30	4	0	80	13	1	1	1	100	99.6	2	0	43	10	0	0	4	59	61.4
09:45	1	1	80	11	1	1	2	97	99.4	0	1	47	3	3	0	4	58	62.9
H/TOT	7	2	350	42	6	3	6	416	422.1	3	1	190	31	8	0	16	249	266
10:00	0	0	91	8	3	0	0	102	103.5	0	1	54	7	4	0	4	70	75.4
10:15	0	0	69	8	2	0	0	79	80	0	0	44	5	0	0	6	55	61
10:30	1	1	112	16	2	1	2	135	137.9	0	0	50	6	4	0	3	63	68
10:45	0	0	84	7	3	0	1	95	97.5	1	0	55	10	2	0	3	71	74.2
H/TOT	1	1	356	39	10	1	3	411	418.9	1	1	203	28	10	0	16	259	278.6
11:00	0	1	73	10	1	0	0	85	84.9	0	0	49	7	3	0	3	62	66.5
11:15	1	1	75	9	2	0	1	89	89.6	0	0	56	12	1	0	4	73	77.5
11:30	4	1	100	13	5	0	1	124	123.7	0	0	67	9	3	0	0	79	80.5
11:45	0	4	114	15	2	0	0	135	133.6	2	0	68	10	3	0	6	89	94.9
H/TOT	5	7	362	47	10	0	2	433	431.8	2	0	240	38	10	0	13	303	319.4
12:00	1	0	94	5	5	1	3	109	115	0	0	66	8	1	0	4	79	83.5
12:15	1	0	105	11	3	0	1	121	122.7	2	0	65	13	3	0	1	84	84.9
12:30	1	1	100	7	3	0	1	113	114.1	0	0	55	9	1	0	5	70	75.5
12:45	2	1	145	9	5	0	1	163	164.3	0	0	70	7	3	0	1	81	83.5
H/TOT	5	2	444	32	16	1	6	506	516.1	2	0	256	37	8	0	11	314	327.4
13:00	1	2	113	12	3	0	1	132	132.5	0	2	76	6	1	0	5	90	94.3
13:15	1	1	106	5	1	0	0	114	113.1	1	0	65	6	2	0	1	75	76.2
13:30	1	0	119	9	1	0	1	131	131.7	3	2	76	3	3	0	6	93	96.9
13:45	2	0	111	9	2	0	0	124	123.4	0	0	86	7	0	1	3	97	101.3
H/TOT	5	3	449	35	7	0	2	501	500.7	4	4	303	22	6	1	15	355	368.7
14:00	3	4	103	11	2	0	2	125	123.2	1	0	64	9	4	0	3	81	85.2
14:15	1	1	125	12	0	2	0	141	142.2	0	0	79	7	2	0	2	90	93
14:30	2	1	109	7	5	1	1	126	128.6	2	0	64	12	0	0	2	80	80.4
14:45	0	1	131	8	2	0	4	146	150.4	0	2	82	3	1	0	4	92	95.3
H/TOT	6	7	468	38	9	3	7	538	544.4	3	2	289	31	7	0	11	343	353.9
15:00	1	0	119	8	2	0	2	132	134.2	0	2	79	9	2	0	2	94	95.8
15:15	0	7	146	12	4	1	0	170	169.1	2	0	83	11	1	1	4	102	106.2
15:30	1	0	121	15	0	0	2	139	140.2	0	0	86	11	3	0	2	102	105.5
15:45	2	0	127	11	3	0	1	144	144.9	1	0	79	15	0	1	5	101	106.5
H/TOT	4	7	513	46	9	1	5	585	588.4	3	2	327	46	6	2	13	399	414
16:00	3	4	132	17	0	0	2	158	155.2	0	0	80	6	1	0	2	89	91.5
16:15	2	2	163	25	0	1	2	195	195.5	2	0	86	9	0	0	2	99	99.4
16:30	3	1	158	12	0	0	0	174	171	2	0	78	10	0	0	3	93	94.4
16:45	3	2	175	14	2	0	2	198	197.4	1	3	100	11	0	0	3	118	118.4
H/TOT	11	9	628	68	2	1	6	725	719.1	5	3	344	36	1	0	10	399	403.7
17:00	1	2	172	11	0	0	2	188	188	5	0	79	8	1	0	4	97	97.5
17:15	7	0	174	10	3	0	1	195	191.9	0	1	94	9	0	0	3	107	109.4
17:30	9	3	167	9	0	0	3	191	185	6	1	84	10	0	0	3	104	101.6
17:45	6	4	179	8	1	0	1	199	193.3	6	1	92	12	0	0	3	114	111.6
H/TOT	23	9	692	38	4	0	7	773	758.2	17	3	349	39	1	0	13	422	420.1
18:00	8	3	176	9	0	0	1	197	189.8	3	4	97	9	0	0	3	116	114.2
18:15	6	3	167	10	0	0	2	188	183.4	2	0	111	6	0	0	3	122	123.4
18:30	6	1	129	7	0	0	1	144	139.6	3	1	95	6	0	0	6	111	114
18:45	5	6	114	10	0	0	0	135	127.4	4	0	96	5	1	0	1	107	105.3
H/TOT	25	13	586	36	0	0	4	664	640.2	12	5	399	26	1	0	13	456	456.9
19:00	3	6	139	9	1	0	2	160	156.5	1	1	92	7	1	0	5	107	111.1
19:15	9	3	133	10	0	0	1	156	148	0	0	100	6	0	0	2	108	110
19:30	2	2	150	6	1	0	1	162	160.7	2	0	79	3	1	0	2	87	87.9
19:45	1	4	138	9	0	0	1	153	150.8	0	0	69	4	0	0	4	77	81
H/TOT	15	15	560	34	2	0	5	631	616	3	1	340	20	2	0	13	379	390
14 TOT	130	78	6063	548	90	12	68	6989	6966.8	67	24	3671	423	75	6	171	4437	4585.3

	C => C									C => D								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0	0	0	33	11	2	1	0	47	49.3
06:15	0	0	0	0	0	0	0	0	0	0	0	57	13	5	0	0	75	77.5
06:30	0	0	0	0	0	0	0	0	0	0	2	72	21	4	1	1	101	104.1
06:45	0	0	0	0	0	0	0	0	0	0	0	66	17	5	0	0	88	90.5
H/TOT	0	0	0	0	0	0	0	0	0	0	2	228	62	16	2	1	311	321.4
07:00	0	0	0	0	0	0	0	0	0	0	0	88	25	1	6	0	120	128.3
07:15	0	0	1	0	0	0	0	1	1	0	0	66	21	1	1	0	89	90.8
07:30	0	0	0	0	0	0	0	0	0	0	0	86	23	3	1	0	113	115.8
07:45	0	0	0	0	0	0	0	0	0	0	0	91	18	4	3	0	116	121.9
H/TOT	0	0	1	0	0	0	0	1	1	0	0	331	87	9	11	0	438	456.8
08:00	0	0	0	0	0	0	0	0	0	0	0	78	10	2	3	0	93	97.9
08:15	0	0	0	0	0	0	0	0	0	0	0	74	24	2	1	0	101	103.3
08:30	0	0	0	0	0	0	0	0	0	0	2	86	16	6	4	0	114	121
08:45	0	0	0	0	0	0	0	0	0	0	0	78	12	6	4	0	100	108.2
H/TOT	0	0	0	0	0	0	0	0	0	0	2	316	62	16	12	0	408	430.4
09:00	0	0	0	0	0	0	0	0	0	0	1	104	14	8	3	0	130	137.3
09:15	0	0	0	0	0	0	0	0	0	0	1	105	16	7	3	0	132	138.8
09:30	0	0	0	0	0	0	0	0	0	1	0	95	15	7	3	0	121	127.6
09:45	0	0	0	0	0	0	0	0	0	0	1	76	15	5	8	0	105	117.3
H/TOT	0	0	0	0	0	0	0	0	0	1	3	380	60	27	17	0	488	521
10:00	0	0	0	0	0	0	0	0	0	0	0	90	23	9	3	0	125	133.4
10:15	0	0	1	0	0	0	0	1	1	0	0	77	13	9	5	0	104	115
10:30	0	0	0	0	0	0	0	0	0	0	0	60	14	1	1	1	77	79.8
10:45	0	0	0	0	0	0	0	0	0	0	0	68	10	7	4	0	89	97.7
H/TOT	0	0	1	0	0	0	0	1	1	0	0	295	60	26	13	1	395	425.9
11:00	0	0	0	0	0	0	0	0	0	0	0	70	19	7	1	0	97	101.8
11:15	0	0	0	0	0	0	0	0	0	0	0	82	15	8	1	0	106	111.3
11:30	0	0	0	0	0	0	0	0	0	0	2	73	21	4	0	0	100	100.8
11:45	0	0	1	0	0	0	0	1	1	0	6	76	23	9	4	0	118	124.1
H/TOT	0	0	1	0	0	0	0	1	1	0	8	301	78	28	6	0	421	438
12:00	0	0	0	0	0	0	0	0	0	0	0	74	20	7	2	0	103	109.1
12:15	0	0	0	0	0	0	0	0	0	0	0	93	21	3	1	0	118	120.8
12:30	0	0	0	0	0	0	0	0	0	0	1	79	24	4	3	0	111	116.3
12:45	0	0	1	0	0	0	0	1	1	0	0	94	29	6	2	0	131	136.6
H/TOT	0	0	1	0	0	0	0	1	1	0	1	340	94	20	8	0	463	482.8
13:00	0	0	0	0	0	0	0	0	0	0	0	73	24	3	6	0	106	115.3
13:15	0	0	0	0	0	0	0	0	0	0	1	81	20	3	1	0	106	108.2
13:30	0	0	0	0	0	0	0	0	0	0	0	90	23	5	2	0	120	125.1
13:45	0	0	1	0	0	0	0	1	1	0	0	94	20	7	5	1	127	138
H/TOT	0	0	1	0	0	0	0	1	1	0	1	338	87	18	14	1	459	486.6
14:00	0	0	0	0	0	0	0	0	0	0	0	103	15	1	3	0	122	126.4
14:15	0	0	0	0	0	0	0	0	0	0	1	98	17	6	4	0	126	133.6
14:30	0	0	0	0	0	0	0	0	0	0	1	102	24	4	2	0	133	137
14:45	0	0	1	0	0	0	0	1	1	0	0	108	26	3	2	0	139	143.1
H/TOT	0	0	1	0	0	0	0	1	1	0	2	411	82	14	11	0	520	540.1
15:00	0	0	0	0	0	0	0	0	0	0	1	131	33	8	1	0	174	178.7
15:15	0	0	0	0	0	0	0	0	0	0	0	126	29	6	4	0	165	173.2
15:30	0	0	0	0	0	0	0	0	0	0	0	108	44	6	1	2	161	167.3
15:45	0	0	0	0	0	0	0	0	0	1	0	116	32	9	1	1	160	166
H/TOT	0	0	0	0	0	0	0	0	0	1	1	481	138	29	7	3	660	685.2
16:00	0	0	0	0	0	0	0	0	0	0	2	100	32	4	3	0	141	145.7
16:15	0	0	0	0	0	0	0	0	0	0	0	101	29	3	1	1	135	138.8
16:30	0	0	0	0	0	0	0	0	0	0	0	83	22	2	2	0	109	112.6
16:45	0	0	0	0	0	0	0	0	0	1	0	84	15	0	1	0	101	101.5
H/TOT	0	0	0	0	0	0	0	0	0	1	2	368	98	9	7	1	486	498.6
17:00	0	0	0	0	0	0	0	0	0	0	0	109	19	3	0	0	131	132.5
17:15	0	0	0	0	0	0	0	0	0	0	0	94	10	1	2	0	107	110.1
17:30	0	0	0	0	0	0	0	0	0	0	0	98	8	0	0	0	106	106
17:45	0	0	0	0	0	0	0	0	0	0	0	91	12	2	4	0	109	115.2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	392	49	6	6	0	453	463.8
18:00	0	0	0	0	0	0	0	0	0	0	1	97	16	1	2	0	117	119.5
18:15	0	0	0	0	0	0	0	0	0	1	0	82	9	0	1	0	93	93.5
18:30	0	0	0	0	0	0	0	0	0	0	0	76	10	2	0	0	88	89
18:45	0	0	1	0	0	0	0	1	1	0	1	82	6	1	0	0	90	89.9
H/TOT	0	0	1	0	0	0	0	1	1	1	2	337	41	4	3	0	388	391.9
19:00	0	0	0	0	0	0	0	0	0	0	0	76	5	2	1	0	84	86.3
19:15	0	0	0	0	0	0	0	0	0	0	0	76	10	0	0	0	86	86
19:30	0	0	0	0	0	0	0	0	0	0	0	79	8	0	1	0	88	89.3
19:45	0	0	0	0	0	0	0	0	0	0	0	60	5	1	0	0	66	66.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	291	28	3	2	0	324	328.1
14 TOT	0	0	7	0	0	0	0	7	7	4	24	4809	1026	225	119	7	6214	6470.6

	D => A									D => B								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	18	6	2	1	1	28	31.3	0	0	66	13	3	1	1	84	87.8
06:15	0	0	23	8	2	1	0	34	36.3	0	0	92	30	3	5	2	132	142
06:30	0	2	31	18	4	1	0	56	58.1	0	1	118	40	4	2	0	165	169
06:45	0	0	40	13	2	3	0	58	62.9	1	1	123	52	9	1	1	188	193.4
H/TOT	0	2	112	45	10	6	1	176	188.6	1	2	399	135	19	9	4	569	592.2
07:00	0	1	37	23	4	4	1	70	77.6	0	0	78	37	5	4	2	126	135.7
07:15	0	0	46	20	5	1	1	73	77.8	0	0	110	54	6	4	1	175	184.2
07:30	0	0	39	12	2	3	1	57	62.9	0	4	96	48	7	8	1	164	176.5
07:45	0	0	20	5	0	2	0	27	29.6	0	0	107	35	9	4	2	157	168.7
H/TOT	0	1	142	60	11	10	3	227	247.9	0	4	391	174	27	20	6	622	665.1
08:00	0	0	4	9	1	2	0	16	19.1	0	0	106	25	6	4	1	142	151.2
08:15	1	0	23	14	1	2	0	41	43.3	1	0	90	18	7	8	0	124	137.1
08:30	0	0	21	9	5	3	0	38	44.4	0	0	89	18	13	1	0	121	128.8
08:45	0	0	36	20	7	3	0	66	73.4	0	1	86	36	9	8	1	141	156.3
H/TOT	1	0	84	52	14	10	0	161	180.2	1	1	371	97	35	21	2	528	573.4
09:00	0	0	60	17	3	4	0	84	90.7	0	0	87	31	10	3	0	131	139.9
09:15	0	0	42	11	2	6	0	61	69.8	0	0	91	22	9	3	1	126	135.4
09:30	0	0	31	13	5	2	2	53	60.1	0	0	73	43	7	0	0	123	126.5
09:45	0	0	47	12	1	3	0	63	67.4	0	0	96	34	9	3	0	142	150.4
H/TOT	0	0	180	53	11	15	2	261	288	0	0	347	130	35	9	1	522	552.2
10:00	0	0	45	10	2	0	0	57	58	0	1	69	24	9	4	1	108	118.1
10:15	0	0	48	7	1	3	3	62	69.4	0	0	89	34	5	4	1	133	141.7
10:30	0	1	53	9	2	3	2	70	76.3	0	1	80	27	10	1	1	120	126.7
10:45	0	1	43	14	5	2	0	65	69.5	0	0	79	15	8	5	0	107	117.5
H/TOT	0	2	189	40	10	8	5	254	273.2	0	2	317	100	32	14	3	468	504
11:00	0	0	37	12	4	2	0	55	59.6	1	0	64	35	5	2	2	109	115.3
11:15	0	0	55	11	1	7	0	74	83.6	0	1	94	29	3	2	1	130	134.5
11:30	0	0	48	9	2	5	0	64	71.5	0	0	79	21	13	4	0	117	128.7
11:45	0	0	53	6	3	2	0	64	68.1	0	0	82	13	9	2	0	106	113.1
H/TOT	0	0	193	38	10	16	0	257	282.8	1	1	319	98	30	10	3	462	491.6
12:00	0	1	52	13	4	6	0	76	85.2	0	0	103	26	12	6	0	147	160.8
12:15	0	0	44	8	2	1	0	55	57.3	0	0	85	34	6	3	0	128	134.9
12:30	0	0	50	7	3	4	1	65	72.7	0	0	94	21	4	8	0	127	139.4
12:45	0	0	47	6	2	2	1	58	62.6	1	0	110	20	8	0	1	140	144.2
H/TOT	0	1	193	34	11	13	2	254	277.8	1	0	392	101	30	17	1	542	579.3
13:00	0	0	49	10	4	0	1	64	67	0	0	101	12	7	2	0	122	128.1
13:15	0	0	45	5	2	5	0	57	64.5	0	2	106	26	4	1	0	139	141.1
13:30	0	0	37	8	7	0	1	53	57.5	0	2	81	14	4	4	3	108	117
13:45	0	1	46	8	6	2	1	64	70	0	0	125	25	7	2	0	159	165.1
H/TOT	0	1	177	31	19	7	3	238	259	0	4	413	77	22	9	3	528	551.3
14:00	0	0	54	7	5	3	0	69	75.4	1	3	97	23	6	2	1	133	137
14:15	0	0	57	7	0	7	0	71	80.1	0	1	123	16	4	1	2	147	151.7
14:30	0	0	52	8	3	3	1	67	73.4	0	0	90	15	7	2	1	115	122.1
14:45	0	0	48	8	3	6	0	65	74.3	0	0	112	25	5	3	4	149	159.4
H/TOT	0	0	211	30	11	19	1	272	303.2	1	4	422	79	22	8	8	544	570.2
15:00	1	0	44	13	3	1	0	62	64	0	0	102	18	4	2	0	126	130.6
15:15	0	1	43	6	4	4	1	59	66.6	0	0	127	18	1	4	0	150	155.7
15:30	0	0	47	6	1	0	1	55	56.5	0	1	94	23	4	2	1	125	130
15:45	0	0	42	6	0	0	0	48	48	0	0	104	26	1	0	0	131	131.5
H/TOT	1	1	176	31	8	5	2	224	235.1	0	1	427	85	10	8	1	532	547.8
16:00	0	1	46	10	3	1	0	61	63.2	0	0	114	16	3	1	0	134	136.8
16:15	0	0	38	3	1	0	0	42	42.5	0	0	113	21	2	0	2	138	141
16:30	1	0	25	0	0	2	0	28	29.8	1	1	81	21	5	0	0	109	110.1
16:45	1	0	28	5	1	0	0	35	34.7	0	0	129	13	0	0	0	142	142
H/TOT	2	1	137	18	5	3	0	166	170.2	1	1	437	71	10	1	2	523	529.9
17:00	0	0	46	4	1	0	0	51	51.5	0	0	124	14	2	0	0	140	141
17:15	0	0	35	5	1	0	0	41	41.5	1	1	120	20	1	0	0	143	142.1
17:30	2	1	64	5	3	0	0	75	74.3	0	0	120	17	0	0	0	137	137
17:45	1	0	47	4	2	0	0	54	54.2	0	1	154	15	1	0	0	171	170.9
H/TOT	3	1	192	18	7	0	0	221	221.5	1	2	518	66	4	0	0	591	591
18:00	0	1	76	5	2	1	0	85	86.7	0	1	146	9	0	0	0	156	155.4
18:15	0	0	48	4	1	0	0	53	53.5	0	3	166	20	0	0	0	189	187.2
18:30	1	0	59	7	1	1	0	69	70	1	1	145	11	3	0	1	162	163.1
18:45	0	1	75	6	0	1	0	83	83.7	0	1	118	16	1	0	0	136	135.9
H/TOT	1	2	258	22	4	3	0	290	293.9	1	6	575	56	4	0	1	643	641.6
19:00	0	0	65	4	1	0	0	70	70.5	0	0	123	15	2	1	0	141	143.3
19:15	0	0	65	2	1	0	0	68	68.5	0	0	104	9	2	0	0	115	116
19:30	0	0	67	5	1	0	0	73	73.5	0	1	121	4	0	0	0	126	125.4
19:45	0	2	57	5	1	0	0	65	64.3	0	1	94	4	1	0	0	100	99.9
H/TOT	0	2	254	16	4	0	0	276	276.8	0	2	442	32	5	1	0	482	484.6
14 TOT	8	14	2498	488	135	115	19	3277	3498.2	8	30	5770	1301	285	127	35	7556	7874.2

	D => C									D => D								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	1	0	20	4	1	1	2	29	32	0	0	0	0	0	0	0	0	0
06:15	0	0	21	5	2	7	0	35	45.1	0	0	0	0	0	0	0	0	0
06:30	0	0	35	13	0	1	0	49	50.3	0	0	0	0	0	0	0	0	0
06:45	0	0	46	23	1	3	0	73	77.4	0	0	0	0	0	0	0	0	0
H/TOT	1	0	122	45	4	12	2	186	204.8	0	0	0	0	0	0	0	0	0
07:00	0	0	45	31	1	1	0	78	79.8	0	0	0	0	0	0	0	0	0
07:15	0	0	64	29	3	1	0	97	99.8	0	0	0	0	0	0	0	0	0
07:30	0	0	60	11	9	3	1	84	93.4	0	0	0	0	0	0	0	0	0
07:45	1	0	67	16	2	3	0	89	93.1	0	0	0	0	0	0	0	0	0
H/TOT	1	0	236	87	15	8	1	348	366.1	0	0	0	0	0	0	0	0	0
08:00	0	0	70	17	4	2	0	93	97.6	0	0	0	0	0	0	0	0	0
08:15	0	1	79	15	4	8	0	107	118.8	0	0	0	0	0	0	0	0	0
08:30	0	0	82	15	10	0	0	107	112	0	0	0	0	0	0	0	0	0
08:45	1	0	91	19	9	2	0	122	128.3	0	0	0	0	0	0	0	0	0
H/TOT	1	1	322	66	27	12	0	429	456.7	0	0	0	0	0	0	0	0	0
09:00	0	1	77	23	4	2	0	107	111	0	0	0	0	0	0	0	0	0
09:15	2	0	88	18	4	2	2	116	121	0	0	0	0	0	0	0	0	0
09:30	0	0	65	12	2	1	0	80	82.3	0	0	0	0	0	0	0	0	0
09:45	0	0	67	18	6	5	0	96	105.5	0	0	0	0	0	0	0	0	0
H/TOT	2	1	297	71	16	10	2	399	419.8	0	0	0	0	0	0	0	0	0
10:00	0	0	45	18	4	4	0	71	78.2	0	0	0	0	0	0	0	0	0
10:15	0	0	55	13	9	2	0	79	86.1	0	0	0	0	0	0	0	0	0
10:30	0	0	53	12	6	5	0	76	85.5	0	0	0	0	0	0	0	0	0
10:45	0	0	44	14	4	4	0	66	73.2	0	0	0	0	0	0	0	0	0
H/TOT	0	0	197	57	23	15	0	292	323	0	0	0	0	0	0	0	0	0
11:00	0	0	55	16	2	2	0	75	78.6	0	0	1	0	0	0	0	1	1
11:15	0	0	66	14	3	3	0	86	91.4	0	0	0	0	0	0	0	0	0
11:30	0	0	60	16	9	1	0	86	91.8	0	0	0	0	0	0	0	0	0
11:45	0	0	59	16	10	1	0	86	92.3	0	0	0	0	0	0	0	0	0
H/TOT	0	0	240	62	24	7	0	333	354.1	0	0	1	0	0	0	0	1	1
12:00	0	0	70	21	3	0	0	94	95.5	0	0	0	0	0	0	0	0	0
12:15	1	0	65	16	5	2	0	89	93.3	0	0	0	0	0	0	0	0	0
12:30	0	0	75	20	2	2	1	100	104.6	0	0	0	0	0	0	0	0	0
12:45	0	0	76	15	2	1	0	94	96.3	0	0	0	0	0	0	0	0	0
H/TOT	1	0	286	72	12	5	1	377	389.7	0	0	0	0	0	0	0	0	0
13:00	0	0	80	12	6	1	0	99	103.3	0	0	0	0	0	0	0	0	0
13:15	0	0	82	15	3	5	0	105	113	0	0	0	0	0	0	0	0	0
13:30	0	1	74	9	2	1	0	87	88.7	0	0	0	0	0	0	0	0	0
13:45	0	0	107	26	2	2	0	137	140.6	0	0	0	0	0	0	0	0	0
H/TOT	0	1	343	62	13	9	0	428	445.6	0	0	0	0	0	0	0	0	0
14:00	0	0	79	10	4	1	0	94	97.3	0	0	0	0	0	0	0	0	0
14:15	0	0	110	15	3	0	0	128	129.5	0	0	0	0	0	0	0	0	0
14:30	0	0	73	14	8	3	0	98	105.9	0	0	0	0	0	0	0	0	0
14:45	0	0	104	12	3	1	0	120	122.8	0	0	0	0	0	0	0	0	0
H/TOT	0	0	366	51	18	5	0	440	455.5	0	0	0	0	0	0	0	0	0
15:00	0	1	82	15	5	0	1	104	106.9	0	0	0	0	0	0	0	0	0
15:15	0	0	83	18	1	0	1	103	104.5	0	0	0	0	0	0	0	0	0
15:30	0	2	105	12	5	2	0	126	129.9	0	0	0	0	0	0	0	0	0
15:45	0	1	97	14	6	0	0	118	120.4	0	0	0	0	0	0	0	0	0
H/TOT	0	4	367	59	17	2	2	451	461.7	0	0	0	0	0	0	0	0	0
16:00	0	0	85	11	3	0	0	99	100.5	0	0	0	0	0	0	0	0	0
16:15	0	1	113	19	3	3	1	140	145.8	0	0	0	0	0	0	0	0	0
16:30	1	0	99	17	2	1	0	120	121.5	0	0	0	0	0	0	0	0	0
16:45	0	0	133	23	1	0	0	157	157.5	0	0	0	0	0	0	0	0	0
H/TOT	1	1	430	70	9	4	1	516	525.3	0	0	0	0	0	0	0	0	0
17:00	0	0	117	10	1	1	0	129	130.8	0	0	0	0	0	0	0	0	0
17:15	0	1	127	19	2	1	0	150	151.7	0	0	0	0	0	0	0	0	0
17:30	1	0	88	14	2	0	0	105	105.2	0	0	0	0	0	0	0	0	0
17:45	1	0	116	13	3	0	0	133	133.7	0	0	0	0	0	0	0	0	0
H/TOT	2	1	448	56	8	2	0	517	521.4	0	0	0	0	0	0	0	0	0
18:00	0	1	95	6	2	0	0	104	104.4	0	0	0	0	0	0	0	0	0
18:15	1	0	105	10	0	0	0	116	115.2	0	0	0	0	0	0	0	0	0
18:30	0	0	95	7	0	0	1	103	104	0	0	0	0	0	0	0	0	0
18:45	0	2	69	6	0	0	1	78	77.8	0	0	0	0	0	0	0	0	0
H/TOT	1	3	364	29	2	0	2	401	401.4	0	0	0	0	0	0	0	0	0
19:00	0	0	85	9	1	1	1	97	99.8	0	0	0	0	0	0	0	0	0
19:15	0	0	68	12	2	0	0	82	83	0	0	0	0	0	0	0	0	0
19:30	0	0	84	2	0	0	0	86	86	0	0	0	0	0	0	0	0	0
19:45	0	1	55	10	1	0	0	67	66.9	0	0	0	0	0	0	0	0	0
H/TOT	0	1	292	33	4	1	1	332	335.7	0	0	0	0	0	0	0	0	0
14 TOT	10	13	4310	820	192	92	12	5449	5660.8	0	0	1	0	0	0	0	1	1



IDASO

Survey Name: 24260 - Belmayne and Clongriffin
Site: Site 2
Location: R107 Malahide Road / Main Street / Mayne River Avenue
Date: Thu 11-Apr-2024
AM Peak: 08:00 — 09:00 **Total:** 2084
PM Peak: 17:30 — 18:30 **Total:** 2064
15 Min Peak: 08:15 — 08:30 **Total:** 553

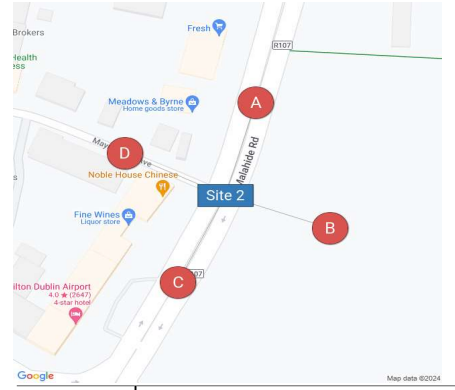
Arm A - R107 Malahide Road
Arm B - Main Street
Arm C - R107 Malahide Road
Arm D - Mayne River Avenue

	A => A									A => B								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
H/TOT	0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
07:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
07:15	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
07:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
07:45	0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0
H/TOT	0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
08:00	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
08:15	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
08:30	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
08:45	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
H/TOT	0	0	21	0	0	0	0	21	21	0	0	0	0	0	0	0	0	0
09:00	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
09:15	0	0	6	0	0	0	0	6	6	0	0	0	1	0	0	0	1	1
09:30	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
09:45	0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
H/TOT	0	0	25	1	0	0	0	26	26	0	0	0	1	0	0	0	1	1
10:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
10:15	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
10:30	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
10:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	7	2	0	0	0	9	9	0	0	0	0	0	0	0	0	0
11:00	0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
11:15	0	0	4	2	0	0	0	6	6	0	0	0	0	0	0	0	0	0
11:30	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
11:45	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
H/TOT	0	0	22	3	0	0	0	25	25	0	0	0	0	0	0	0	0	0
12:00	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
12:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
12:30	0	1	2	0	0	0	0	3	2.4	0	0	0	0	0	0	0	0	0
12:45	0	0	5	2	0	0	0	7	7	0	0	0	0	0	0	0	0	0
H/TOT	0	1	11	2	0	0	0	14	13.4	0	0	0	0	0	0	0	0	0
13:00	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
13:15	0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
13:30	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
13:45	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
H/TOT	0	0	26	0	0	0	0	26	26	0	0	0	0	0	0	0	0	0
14:00	0	1	4	1	0	0	0	6	5.4	0	0	0	0	0	0	0	0	0
14:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
14:30	0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0
14:45	0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0
H/TOT	0	1	15	3	0	0	0	19	18.4	0	0	0	0	0	0	0	0	0
15:00	0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
15:15	0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
15:30	0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0
15:45	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
H/TOT	0	0	25	4	0	0	0	29	29	0	0	0	0	0	0	0	0	0
16:00	0	0	5	2	0	0	0	7	7	0	0	0	0	0	0	0	0	0
16:15	0	1	4	2	0	0	0	7	6.4	0	0	0	0	0	0	0	0	0
16:30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
16:45	0	0	3	1	0	0	0	4	4	0	0	1	0	0	0	0	1	1
H/TOT	0	1	14	5	0	0	0	20	19.4	0	0	1	0	0	0	0	1	1
17:00	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
17:15	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
17:30	0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
17:45	0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
H/TOT	0	0	27	0	0	0	0	27	27	0	0	0	0	0	0	0	0	0
18:00	0	0	3	2	0	0	0	5	5	0	0	0	0	0	0	0	0	0
18:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
18:30	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
18:45	0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
H/TOT	0	0	19	3	0	0	0	22	22	0	0	0	0	0	0	0	0	0
19:00	0	0	4	2	0	0	0	6	6	0	0	0	0	0	0	0	0	0
19:15	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
19:30	0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
19:45	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
H/TOT	0	0	20	3	0	0	0	23	23	0	0	0	0	0	0	0	0	0
14 TOT	0	3	248	28	0	0	0	279	277.2	0	0	1	1	0	0	0	2	2

	A => C									A => D								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	1	2	66	8	1	1	0	79	78.8	0	0	6	1	0	0	0	7	7
06:15	2	0	98	21	5	1	1	128	131.2	0	0	15	1	0	0	0	16	16
06:30	4	4	122	30	4	1	0	165	162.7	0	0	23	2	0	0	0	25	25
06:45	3	3	131	25	0	0	2	164	161.8	0	0	38	6	0	0	0	44	44
H/TOT	10	9	417	84	10	3	3	536	534.5	0	0	82	10	0	0	0	92	92
07:00	3	1	152	26	3	2	2	189	192.1	0	0	34	4	0	0	0	38	38
07:15	3	2	163	19	3	2	2	194	196.5	0	0	31	4	0	0	0	35	35
07:30	5	1	173	18	5	1	4	207	210.2	0	1	55	4	1	0	0	61	60.9
07:45	12	2	221	16	4	1	2	258	252.5	0	3	42	1	2	0	0	48	47.2
H/TOT	23	6	709	79	15	6	10	848	851.3	0	4	162	13	3	0	0	182	181.1
08:00	12	3	219	6	4	0	2	246	238.6	0	0	47	2	1	0	0	50	50.5
08:15	13	1	245	11	5	2	1	278	273.1	0	0	60	3	0	0	0	63	63
08:30	11	4	213	12	1	0	2	243	234.3	0	0	56	3	0	0	0	59	59
08:45	9	6	194	16	6	1	1	233	227.5	0	0	44	4	1	0	0	49	49.5
H/TOT	45	14	871	45	16	3	6	1000	973.5	0	0	207	12	2	0	0	221	222
09:00	2	2	174	18	5	2	2	205	209.3	0	0	38	1	1	0	0	40	40.5
09:15	1	3	174	19	6	5	3	211	220.9	1	0	28	2	1	0	0	32	31.7
09:30	3	2	126	15	8	4	1	159	165.6	0	0	24	1	1	0	0	26	26.5
09:45	2	0	123	10	7	3	2	147	154.8	0	0	19	1	0	0	0	20	20
H/TOT	8	7	597	62	26	14	8	722	750.6	1	0	109	5	3	0	0	118	118.7
10:00	0	1	130	22	1	3	3	160	166.8	0	0	19	6	0	1	0	26	27.3
10:15	1	2	108	16	7	8	1	143	155.9	0	0	19	1	0	0	0	20	20
10:30	3	2	134	20	8	3	1	171	176.3	1	0	13	2	0	0	0	16	15.2
10:45	3	1	126	12	5	4	0	151	155.7	0	1	14	0	0	0	0	15	14.4
H/TOT	7	6	498	70	21	18	5	625	654.7	1	1	65	9	0	1	0	77	76.9
11:00	0	1	115	16	8	7	2	149	163.5	1	0	14	1	0	0	0	16	15.2
11:15	1	1	158	19	4	2	0	185	188.2	0	0	10	4	1	0	0	15	15.5
11:30	1	1	129	17	7	3	1	159	166	0	0	7	0	0	0	0	7	7
11:45	0	1	126	19	4	2	1	153	158	1	0	16	0	0	0	0	17	16.2
H/TOT	2	4	528	71	23	14	4	646	675.7	2	0	47	5	1	0	0	55	53.9
12:00	2	1	128	20	3	7	1	162	171.4	1	0	18	0	1	0	0	20	19.7
12:15	1	1	141	17	5	5	0	170	177.6	0	0	25	2	1	0	0	28	28.5
12:30	0	1	121	20	8	3	1	154	162.3	0	0	16	2	0	0	0	18	18
12:45	2	2	147	15	3	3	2	174	178.6	0	0	26	1	0	0	0	27	27
H/TOT	5	5	537	72	19	18	4	660	689.9	1	0	85	5	2	0	0	93	93.2
13:00	5	4	144	10	4	1	1	169	166.9	0	0	17	3	0	0	0	20	20
13:15	2	0	140	13	4	5	3	167	176.9	0	0	21	4	0	0	0	25	25
13:30	1	0	146	19	4	2	4	176	183.8	0	0	19	0	0	0	0	19	19
13:45	3	1	141	22	2	5	1	175	180.5	0	0	35	3	1	0	0	39	39.5
H/TOT	11	5	571	64	14	13	9	687	708.1	0	0	92	10	1	0	0	103	103.5
14:00	1	2	154	19	10	6	0	192	202.8	0	0	25	3	0	0	0	28	28
14:15	0	2	144	20	3	6	2	177	187.1	0	0	31	3	0	0	0	34	34
14:30	0	0	138	26	4	3	0	171	176.9	1	1	20	1	2	0	0	25	24.6
14:45	1	0	161	22	2	1	2	189	192.5	0	0	24	2	0	0	1	27	28
H/TOT	2	4	597	87	19	16	4	729	759.3	1	1	100	9	2	0	1	114	114.6
15:00	4	1	143	20	6	4	1	179	184.4	0	0	26	6	0	0	0	32	32
15:15	1	0	134	25	6	6	1	173	184	0	0	42	6	1	0	0	49	49.5
15:30	4	1	121	32	3	2	1	164	165.3	1	0	17	9	1	0	0	28	27.7
15:45	2	3	122	25	0	3	3	158	161.5	0	0	44	9	0	0	0	53	53
H/TOT	11	5	520	102	15	15	6	674	695.2	1	0	129	30	2	0	0	162	162.2
16:00	5	1	110	25	8	1	0	150	150.7	1	1	29	5	1	0	0	37	36.1
16:15	3	1	110	23	4	2	3	146	150.6	0	0	14	3	0	0	0	17	17
16:30	3	1	122	20	1	1	3	151	152.8	0	0	21	3	0	0	0	24	24
16:45	0	0	121	18	4	2	2	147	153.6	0	0	23	0	0	0	0	23	23
H/TOT	11	3	463	86	17	6	8	594	607.7	1	1	87	11	1	0	0	101	100.1
17:00	3	0	112	12	4	1	1	133	134.9	0	0	38	0	0	0	0	38	38
17:15	2	2	132	12	1	1	0	150	149	0	0	35	5	0	0	0	40	40
17:30	3	3	134	19	1	0	3	163	162.3	0	0	47	6	0	0	0	53	53
17:45	6	2	116	7	0	0	2	133	129	0	0	40	4	1	0	0	45	45.5
H/TOT	14	7	494	50	6	2	6	579	575.2	0	0	160	15	1	0	0	176	176.5
18:00	2	1	137	10	0	0	2	152	151.8	0	0	29	1	0	0	0	30	30
18:15	1	0	130	5	4	0	3	143	147.2	0	0	28	1	0	0	0	29	29
18:30	2	0	137	5	1	0	0	145	143.9	0	0	33	3	0	0	0	36	36
18:45	1	3	116	9	2	0	1	132	131.4	0	0	32	1	0	0	0	33	33
H/TOT	6	4	520	29	7	0	6	572	574.3	0	0	122	6	0	0	0	128	128
19:00	2	1	118	10	1	0	1	133	132.3	1	0	15	0	0	0	0	16	15.2
19:15	3	3	116	7	2	0	1	132	129.8	0	0	17	0	0	0	0	17	17
19:30	2	2	132	8	0	0	1	145	143.2	0	0	14	1	0	0	0	15	15
19:45	4	0	123	4	2	0	2	135	134.8	0	0	13	0	0	0	0	13	13
H/TOT	11	6	489	29	5	0	5	545	540.1	1	0	59	1	0	0	0	61	60.2
14 TOT	166	85	7811	930	213	128	84	9417	9590.1	9	7	1506	141	18	1	1	1683	1682.9

	B => A									B => B								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	B => C									B => D								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 TOT	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0



IDASO

Survey Name: 24260 - Belmayne and Clongriffin
Site: Site 2
Location: R107 Malahide Road / Main Street / Mayne River Avenue
Date: Thu 11-Apr-2024
AM Peak: 08:00 — 09:00 **Total:** 2084
PM Peak: 17:30 — 18:30 **Total:** 2064
15 Min Peak: 08:15 — 08:30 **Total:** 553

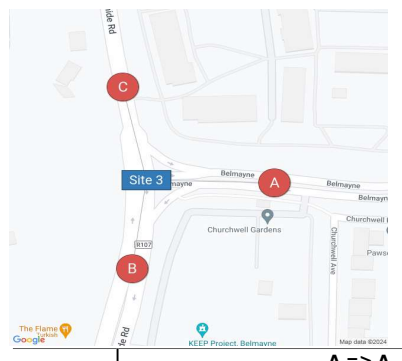
Arm A - R107 Malahide Road
Arm B - Main Street
Arm C - R107 Malahide Road
Arm D - Mayne River Avenue

	C => A									C => B								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	1	1	29	8	2	1	0	42	42.9	0	0	0	0	0	0	0	0	0
06:15	1	0	31	11	3	1	1	48	51	0	0	1	0	0	0	0	1	1
06:30	0	2	52	24	5	1	3	87	92.6	0	0	0	0	0	0	0	0	0
06:45	3	1	78	17	5	3	1	108	112.4	0	0	0	0	0	0	0	0	0
H/TOT	5	4	190	60	15	6	5	285	298.9	0	0	1	0	0	0	0	1	1
07:00	2	2	72	27	4	4	3	114	121.4	0	0	0	0	0	0	0	0	0
07:15	2	0	90	29	6	1	3	131	136.7	0	0	0	0	0	0	0	0	0
07:30	2	0	86	23	4	3	3	121	128.3	0	0	0	0	0	0	0	0	0
07:45	1	0	98	24	0	3	1	127	131.1	0	0	0	0	0	0	0	0	0
H/TOT	7	2	346	103	14	11	10	493	517.5	0	0	0	0	0	0	0	0	0
08:00	3	1	89	21	1	3	1	119	121.4	0	0	0	0	0	0	0	0	0
08:15	4	0	95	21	4	3	2	129	133.7	0	0	0	0	0	0	0	0	0
08:30	3	0	94	19	9	4	1	130	138.3	0	0	0	0	0	0	0	0	0
08:45	1	0	133	33	12	3	1	183	193.1	0	0	0	0	0	0	0	0	0
H/TOT	11	1	411	94	26	13	5	561	586.5	0	0	0	0	0	0	0	0	0
09:00	2	0	139	24	5	5	1	176	184.4	0	0	0	0	0	0	0	0	0
09:15	1	1	139	21	5	6	2	175	185.9	0	0	0	0	0	0	0	0	0
09:30	3	0	99	24	7	2	3	138	144.7	0	0	0	0	0	0	0	0	0
09:45	2	1	138	22	2	5	2	172	179.3	0	0	0	0	0	0	0	0	0
H/TOT	8	2	515	91	19	18	8	661	694.3	0	0	0	0	0	0	0	0	0
10:00	0	0	123	15	5	0	0	143	145.5	0	0	0	0	0	0	0	0	0
10:15	0	0	118	18	4	3	3	146	154.9	0	0	0	0	0	0	0	0	0
10:30	1	2	161	26	5	4	4	203	212.7	0	0	0	0	0	0	0	0	0
10:45	0	2	120	21	7	2	1	153	158.9	0	0	0	0	0	0	0	0	0
H/TOT	1	4	522	80	21	9	8	645	672	0	0	0	0	0	0	0	0	0
11:00	2	1	120	20	6	2	0	151	154.4	0	0	0	0	0	0	0	0	0
11:15	2	1	127	21	3	7	1	162	171.4	0	0	0	0	0	0	0	0	0
11:30	2	1	146	21	6	5	1	182	190.3	0	0	0	0	0	0	0	0	0
11:45	0	4	168	20	5	3	0	200	204	0	0	0	0	0	0	0	0	0
H/TOT	6	7	561	82	20	17	2	695	720.1	0	0	0	0	0	0	0	0	0
12:00	2	1	147	21	8	8	3	190	205.2	0	0	0	0	0	0	0	0	0
12:15	1	0	149	21	5	1	1	178	182	0	0	0	0	0	0	0	0	0
12:30	0	1	149	13	6	4	2	175	184.6	0	0	0	0	0	0	0	0	0
12:45	1	0	187	16	7	2	1	214	220.3	0	0	0	0	0	0	0	0	0
H/TOT	4	2	632	71	26	15	7	757	792.1	0	0	0	0	0	0	0	0	0
13:00	1	2	154	24	6	0	2	189	192	0	0	0	0	0	0	0	0	0
13:15	1	0	152	9	3	5	0	170	177.2	0	0	0	0	0	0	0	0	0
13:30	1	0	149	17	9	0	2	178	183.7	0	0	0	0	0	0	0	0	0
13:45	2	1	148	18	8	2	1	180	185.4	0	0	0	0	0	0	0	0	0
H/TOT	5	3	603	68	26	7	5	717	738.3	0	0	0	0	0	0	0	0	0
14:00	3	4	148	17	7	3	2	184	188.6	0	0	0	0	0	0	0	0	0
14:15	2	1	180	20	1	9	1	214	225	0	0	0	0	0	0	0	0	0
14:30	0	1	159	14	8	4	1	187	196.6	0	0	0	0	0	0	0	0	0
14:45	1	2	174	15	4	6	4	206	217.8	0	0	0	0	0	0	0	0	0
H/TOT	6	8	661	66	20	22	8	791	828	0	0	0	0	0	0	0	0	0
15:00	2	0	153	22	5	1	2	185	189.2	0	0	0	0	0	0	0	0	0
15:15	0	8	190	17	7	5	1	228	234.2	0	0	0	0	0	0	0	0	0
15:30	1	0	156	22	2	0	2	183	185.2	0	0	0	0	0	0	0	0	0
15:45	2	0	166	16	1	0	1	186	185.9	0	0	0	0	0	0	0	0	0
H/TOT	5	8	665	77	15	6	6	782	794.5	0	0	0	0	0	0	0	0	0
16:00	4	5	177	25	5	1	2	219	218.6	0	0	0	0	0	0	0	0	0
16:15	2	3	197	28	1	2	2	235	236.7	0	0	0	0	0	0	0	0	0
16:30	5	1	177	14	0	2	0	199	197	0	0	0	0	0	0	0	0	0
16:45	6	2	198	19	3	0	2	230	227.5	0	0	0	0	0	0	0	0	0
H/TOT	17	11	749	86	9	5	6	883	879.8	0	0	0	0	0	0	0	0	0
17:00	1	2	204	11	1	0	2	221	221.5	0	0	0	0	0	0	0	0	0
17:15	7	1	203	16	3	0	1	231	227.3	0	0	0	0	0	0	0	0	0
17:30	11	4	219	14	3	0	3	254	247.3	0	0	0	0	0	0	0	0	0
17:45	6	3	229	12	3	1	1	255	252.2	0	0	0	0	0	0	0	0	0
H/TOT	25	10	855	53	10	1	7	961	948.3	0	0	0	0	0	0	0	0	0
18:00	7	3	240	12	2	1	1	266	261.9	0	0	0	0	0	0	0	0	0
18:15	6	4	218	14	1	0	2	245	240.3	0	0	0	0	0	0	0	0	0
18:30	7	1	177	14	1	1	1	202	198.6	0	0	0	0	0	0	0	0	0
18:45	4	7	190	18	0	1	0	220	213.9	0	0	0	0	0	0	0	0	0
H/TOT	24	15	825	58	4	3	4	933	914.7	0	0	0	0	0	0	0	0	0
19:00	3	5	210	12	2	0	2	234	231.6	0	0	0	0	0	0	0	0	0
19:15	9	1	191	9	1	0	1	212	205.7	0	0	0	0	0	0	0	0	0
19:30	1	4	210	10	2	0	1	228	226.8	0	0	0	0	0	0	0	0	0
19:45	1	6	173	13	1	0	1	195	192.1	0	0	0	0	0	0	0	0	0
H/TOT	14	16	784	44	6	0	5	869	856.2	0	0	0	0	0	0	0	0	0
14 TOT	138	93	8319	1033	231	133	86	10033	10241	0	0	1	0	0	0	0	1	1

	C => C									C => D								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
06:15	0	0	1	0	0	0	0	1	1	0	0	5	0	0	0	1	6	7
06:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
06:45	0	0	0	1	0	0	0	1	1	0	0	3	0	0	0	0	3	3
H/TOT	0	0	1	1	0	0	0	2	2	0	0	15	0	0	0	1	16	17
07:00	0	0	1	0	0	0	0	1	1	0	0	7	2	0	0	0	9	9
07:15	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
07:30	0	0	4	0	0	0	0	4	4	1	0	12	1	0	0	0	14	13.2
07:45	0	0	1	0	0	0	0	1	1	1	0	21	3	0	0	0	25	24.2
H/TOT	0	0	6	0	0	0	0	6	6	2	0	47	6	0	0	0	55	53.4
08:00	0	0	2	1	0	0	0	3	3	0	0	16	0	0	0	0	16	16
08:15	0	0	1	0	0	0	0	1	1	2	0	21	0	0	0	0	23	21.4
08:30	0	0	1	0	0	0	0	1	1	1	0	9	0	0	0	0	10	9.2
08:45	0	0	1	0	0	0	0	1	1	1	1	20	1	0	0	0	23	21.6
H/TOT	0	0	5	1	0	0	0	6	6	4	1	66	1	0	0	0	72	68.2
09:00	0	0	0	0	0	0	0	0	0	0	0	16	1	0	0	0	17	17
09:15	0	0	1	0	0	0	0	1	1	0	0	17	3	0	0	0	20	20
09:30	0	0	4	0	0	0	0	4	4	0	0	6	2	0	0	0	8	8
09:45	0	0	1	0	0	0	0	1	1	0	0	12	3	0	0	0	15	15
H/TOT	0	0	6	0	0	0	0	6	6	0	0	51	9	0	0	0	60	60
10:00	0	0	6	0	0	0	0	6	6	0	0	15	1	0	0	0	16	16
10:15	0	0	3	0	0	0	0	3	3	0	0	8	0	0	0	0	8	8
10:30	0	0	2	0	0	0	0	2	2	0	0	9	2	0	0	0	11	11
10:45	0	0	2	0	0	0	0	2	2	1	0	8	1	0	0	0	10	9.2
H/TOT	0	0	13	0	0	0	0	13	13	1	0	40	4	0	0	0	45	44.2
11:00	0	0	4	0	0	0	0	4	4	0	0	6	3	0	0	0	9	9
11:15	0	0	1	0	0	0	0	1	1	0	0	11	1	0	0	0	12	12
11:30	0	0	2	0	0	0	0	2	2	2	0	10	5	1	0	0	18	16.9
11:45	0	0	3	0	0	0	0	3	3	0	0	15	0	0	0	0	15	15
H/TOT	0	0	10	0	0	0	0	10	10	2	0	42	9	1	0	0	54	52.9
12:00	0	0	0	0	0	0	0	0	0	0	0	9	0	1	0	0	10	10.5
12:15	0	0	0	0	0	0	0	0	0	0	1	13	1	0	0	0	15	14.4
12:30	0	0	3	0	0	0	0	3	3	1	0	9	1	0	0	0	11	10.2
12:45	0	0	3	0	0	0	0	3	3	1	1	12	0	0	0	0	14	12.6
H/TOT	0	0	6	0	0	0	0	6	6	2	2	43	2	1	0	0	50	47.7
13:00	0	0	3	0	0	0	0	3	3	1	0	7	0	1	0	0	9	8.7
13:15	0	0	0	0	0	0	0	0	0	0	1	12	1	0	0	1	15	15.4
13:30	0	0	1	0	0	0	0	1	1	0	0	16	0	0	0	0	16	16
13:45	0	0	1	0	0	0	0	1	1	0	0	17	1	0	0	0	18	18
H/TOT	0	0	5	0	0	0	0	5	5	1	1	52	2	1	0	1	58	58.1
14:00	0	0	1	0	0	0	0	1	1	0	0	10	3	0	0	0	13	13
14:15	0	0	3	0	0	0	0	3	3	0	0	10	0	0	0	0	10	10
14:30	0	0	2	0	0	0	0	2	2	0	0	12	0	0	0	0	12	12
14:45	0	0	2	1	0	0	0	3	3	1	0	12	1	0	0	1	15	15.2
H/TOT	0	0	8	1	0	0	0	9	9	1	0	44	4	0	0	1	50	50.2
15:00	0	0	4	0	0	0	0	4	4	0	0	12	2	0	0	0	14	14
15:15	0	0	3	1	0	0	0	4	4	0	0	11	2	1	0	0	14	14.5
15:30	0	0	0	0	0	0	0	0	0	0	0	18	1	0	0	1	20	21
15:45	0	0	2	1	0	0	0	3	3	0	0	17	1	1	0	0	19	19.5
H/TOT	0	0	9	2	0	0	0	11	11	0	0	58	6	2	0	1	67	69
16:00	0	0	2	1	0	0	0	3	3	1	0	11	2	0	0	0	14	13.2
16:15	0	0	2	0	0	0	0	2	2	2	0	16	2	0	0	0	20	18.4
16:30	0	0	3	0	0	0	0	3	3	1	0	13	0	0	0	0	14	13.2
16:45	0	0	2	0	0	0	0	2	2	0	0	17	1	0	0	0	18	18
H/TOT	0	0	9	1	0	0	0	10	10	4	0	57	5	0	0	0	66	62.8
17:00	0	0	1	2	0	0	0	3	3	0	0	24	1	0	0	0	25	25
17:15	0	0	2	0	0	0	0	2	2	0	0	21	0	1	0	0	22	22.5
17:30	0	0	5	0	0	0	0	5	5	2	0	6	0	0	0	0	8	6.4
17:45	0	1	2	0	0	0	0	3	2.4	1	0	22	2	0	0	0	25	24.2
H/TOT	0	1	10	2	0	0	0	13	12.4	3	0	73	3	1	0	0	80	78.1
18:00	0	0	3	0	0	0	0	3	3	2	0	12	2	0	0	0	16	14.4
18:15	0	0	0	0	0	0	0	0	0	2	0	20	1	0	0	0	23	21.4
18:30	0	0	2	0	0	0	0	2	2	0	0	14	1	0	0	0	15	15
18:45	0	0	0	0	0	0	0	0	0	1	0	17	0	0	0	0	18	17.2
H/TOT	0	0	5	0	0	0	0	5	5	5	0	63	4	0	0	0	72	68
19:00	0	0	1	0	0	0	0	1	1	0	1	17	1	0	0	0	19	18.4
19:15	0	0	6	1	0	0	0	7	7	0	0	9	1	0	0	0	10	10
19:30	0	0	3	1	0	0	0	4	4	1	0	14	3	0	0	0	18	17.2
19:45	0	0	4	0	0	0	0	4	4	0	0	11	0	0	0	0	11	11
H/TOT	0	0	14	2	0	0	0	16	16	1	1	51	5	0	0	0	58	56.6
14 TOT	0	1	107	10	0	0	0	118	117.4	26	5	702	60	6	0	4	803	786.2

	D => A									D => B								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
06:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
06:30	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
06:45	0	0	6	3	0	0	0	9	9	0	0	0	0	0	0	0	0	0
H/TOT	0	0	11	3	0	0	0	14	14	0	0	0	0	0	0	0	0	0
07:00	0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
07:15	0	0	13	4	0	0	0	17	17	0	0	0	0	0	0	0	0	0
07:30	0	0	12	7	0	0	0	19	19	0	0	0	0	0	0	0	0	0
07:45	0	1	30	6	0	0	0	37	36.4	0	0	0	0	0	0	0	0	0
H/TOT	0	1	61	19	0	0	0	81	80.4	0	0	0	0	0	0	0	0	0
08:00	0	0	36	5	0	0	0	41	41	0	0	0	0	0	0	0	0	0
08:15	0	0	30	4	0	0	0	34	34	0	0	0	0	0	0	0	0	0
08:30	1	0	23	6	0	0	0	30	29.2	0	0	0	0	0	0	0	0	0
08:45	1	0	21	8	1	2	0	33	35.3	0	0	0	0	0	0	0	0	0
H/TOT	2	0	110	23	1	2	0	138	139.5	0	0	0	0	0	0	0	0	0
09:00	0	0	12	3	0	0	0	15	15	0	0	0	0	0	0	0	0	0
09:15	0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
09:30	0	0	15	1	0	0	0	16	16	0	0	0	0	0	0	0	0	0
09:45	0	0	9	3	0	0	0	12	12	0	0	0	0	0	0	0	0	0
H/TOT	0	0	46	8	0	0	0	54	54	0	0	0	0	0	0	0	0	0
10:00	0	0	7	0	0	1	0	8	9.3	0	0	0	0	0	0	0	0	0
10:15	0	0	12	1	0	0	0	13	13	0	0	0	0	0	0	0	0	0
10:30	0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
10:45	0	0	9	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0
H/TOT	0	0	36	3	0	1	0	40	41.3	0	0	0	0	0	0	0	0	0
11:00	0	0	10	2	1	0	0	13	13.5	0	0	0	0	0	0	0	0	0
11:15	0	0	11	4	0	0	0	15	15	0	0	0	0	0	0	0	0	0
11:30	0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
11:45	1	0	10	0	0	0	0	11	10.2	0	0	0	0	0	0	0	0	0
H/TOT	1	0	39	6	1	0	0	47	46.7	0	0	0	0	0	0	0	0	0
12:00	0	0	7	4	0	0	0	11	11	0	0	0	0	0	0	0	0	0
12:15	0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0
12:30	0	0	16	4	0	0	0	20	20	0	0	0	0	0	0	0	0	0
12:45	0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
H/TOT	0	0	35	11	0	0	0	46	46	0	0	0	0	0	0	0	0	0
13:00	0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
13:15	0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
13:30	0	0	28	2	0	0	0	30	30	0	0	0	0	0	0	0	0	0
13:45	0	0	17	2	2	0	0	21	22	0	0	0	0	0	0	0	0	0
H/TOT	0	0	68	4	2	0	0	74	75	0	0	0	0	0	0	0	0	0
14:00	0	0	8	4	0	0	0	12	12	0	0	0	0	0	0	0	0	0
14:15	0	1	13	0	0	0	0	14	13.4	0	0	0	0	0	0	0	0	0
14:30	0	0	16	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0
14:45	0	0	11	3	0	0	0	14	14	0	0	0	0	0	0	0	0	0
H/TOT	0	1	48	7	0	0	0	56	55.4	0	0	0	0	0	0	0	0	0
15:00	0	0	10	1	1	0	0	12	12.5	0	0	0	0	0	0	0	0	0
15:15	0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
15:30	0	0	27	0	1	0	0	28	28.5	0	0	0	0	0	0	0	0	0
15:45	0	0	15	1	0	0	0	16	16	0	0	0	0	0	0	0	0	0
H/TOT	0	0	67	2	2	0	0	71	72	0	0	0	0	0	0	0	0	0
16:00	0	0	27	7	0	0	0	34	34	0	0	0	0	0	0	0	0	0
16:15	0	0	35	9	0	0	0	44	44	0	0	0	0	0	0	0	0	0
16:30	0	0	48	6	0	0	0	54	54	0	0	0	0	0	0	0	0	0
16:45	0	0	46	3	0	0	0	49	49	0	0	0	0	0	0	0	0	0
H/TOT	0	0	156	25	0	0	0	181	181	0	0	0	0	0	0	0	0	0
17:00	0	0	53	3	1	0	0	57	57.5	0	0	0	0	0	0	0	0	0
17:15	0	1	20	5	0	0	0	26	25.4	0	0	0	0	0	0	0	0	0
17:30	0	0	30	2	0	0	0	32	32	0	0	0	0	0	0	0	0	0
17:45	0	0	27	0	0	0	0	27	27	0	0	0	0	0	0	0	0	0
H/TOT	0	1	130	10	1	0	0	142	141.9	0	0	0	0	0	0	0	0	0
18:00	0	0	43	3	0	0	0	46	46	0	0	0	0	0	0	0	0	0
18:15	1	0	37	2	0	0	0	40	39.2	0	0	0	0	0	0	0	0	0
18:30	0	0	27	4	0	0	0	31	31	0	0	0	0	0	0	0	0	0
18:45	1	0	6	1	1	0	0	9	8.7	0	0	0	0	0	0	0	0	0
H/TOT	2	0	113	10	1	0	0	126	124.9	0	0	0	0	0	0	0	0	0
19:00	0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
19:15	0	0	14	3	0	0	0	17	17	0	0	0	0	0	0	0	0	0
19:30	0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
19:45	0	0	9	0	1	0	0	10	10.5	0	0	0	0	0	0	0	0	0
H/TOT	0	0	37	4	1	0	0	42	42.5	0	0	0	0	0	0	0	0	0
14 TOT	5	3	957	135	9	3	0	1112	1114.6	0	0	0	0	0	0	0	0	0

	D => C									D => D								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
06:15	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
06:30	1	0	2	1	0	0	0	4	3.2	0	0	0	0	0	0	0	0	0
06:45	0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0
H/TOT	1	0	13	4	0	0	0	18	17.2	0	0	0	0	0	0	0	0	0
07:00	0	0	3	3	0	0	0	6	6	0	0	0	0	0	0	0	0	0
07:15	1	1	8	0	0	0	0	10	8.6	0	0	0	0	0	0	0	0	0
07:30	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
07:45	1	0	14	2	0	0	0	17	16.2	0	0	0	0	0	0	0	0	0
H/TOT	2	1	28	5	0	0	0	36	33.8	0	0	0	0	0	0	0	0	0
08:00	1	2	14	2	0	0	0	19	17	0	0	0	0	0	0	0	0	0
08:15	1	0	15	3	0	0	0	19	18.2	0	0	0	0	0	0	0	0	0
08:30	1	0	13	2	0	0	0	16	15.2	0	0	0	0	0	0	0	0	0
08:45	0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
H/TOT	3	2	52	8	0	0	0	65	61.4	0	0	0	0	0	0	0	0	0
09:00	0	0	9	1	1	0	0	11	11.5	0	0	0	0	0	0	0	0	0
09:15	1	0	5	0	0	0	0	6	5.2	0	0	0	0	0	0	0	0	0
09:30	1	0	7	1	1	0	0	10	9.7	0	0	0	0	0	0	0	0	0
09:45	0	0	14	1	0	0	0	15	15	0	0	0	0	0	0	0	0	0
H/TOT	2	0	35	3	2	0	0	42	41.4	0	0	0	0	0	0	0	0	0
10:00	0	0	9	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0
10:15	1	0	5	1	0	0	0	7	6.2	0	0	0	0	0	0	0	0	0
10:30	1	0	8	0	0	0	0	9	8.2	0	0	0	0	0	0	0	0	0
10:45	0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
H/TOT	2	0	30	2	0	0	0	34	32.4	0	0	0	0	0	0	0	0	0
11:00	1	0	8	1	0	0	0	10	9.2	0	0	0	0	0	0	0	0	0
11:15	0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0
11:30	0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
11:45	1	0	1	1	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0
H/TOT	2	0	20	4	0	0	0	26	24.4	0	0	0	0	0	0	0	0	0
12:00	0	0	12	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0
12:15	0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
12:30	0	0	12	2	0	0	0	14	14	0	0	0	0	0	0	0	0	0
12:45	0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
H/TOT	0	0	39	4	0	0	0	43	43	0	0	0	0	0	0	0	0	0
13:00	0	1	12	1	0	0	0	14	13.4	0	0	0	0	0	0	0	0	0
13:15	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
13:30	0	0	9	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0
13:45	0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
H/TOT	0	1	32	3	0	0	0	36	35.4	0	0	0	0	0	0	0	0	0
14:00	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
14:15	0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
14:30	0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
14:45	0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
H/TOT	0	0	30	1	0	0	0	31	31	0	0	0	0	0	0	0	0	0
15:00	0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0
15:15	1	0	10	2	0	0	0	13	12.2	0	0	0	0	0	0	0	0	0
15:30	0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
15:45	0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
H/TOT	1	0	34	4	0	0	0	39	38.2	0	0	0	0	0	0	0	0	0
16:00	0	0	9	2	0	0	0	11	11	0	0	0	0	0	0	0	0	0
16:15	0	1	14	3	0	0	0	18	17.4	0	0	0	0	0	0	0	0	0
16:30	0	0	13	3	0	0	0	16	16	0	0	0	0	0	0	0	0	0
16:45	0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
H/TOT	0	1	46	9	0	0	0	56	55.4	0	0	0	0	0	0	0	0	0
17:00	0	0	13	1	0	0	0	14	14	0	0	0	0	0	0	0	0	0
17:15	0	0	18	1	0	0	0	19	19	0	0	0	0	0	0	0	0	0
17:30	0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
17:45	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
H/TOT	0	0	49	2	0	0	0	51	51	0	0	0	0	0	0	0	0	0
18:00	0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
18:15	2	1	9	0	0	0	0	12	9.8	0	0	0	0	0	0	0	0	0
18:30	0	0	12	0	0	0	0	12	12	0	0	0	0	0	0	0	0	0
18:45	0	1	15	1	0	0	0	17	16.4	0	0	0	0	0	0	0	0	0
H/TOT	2	2	46	1	0	0	0	51	48.2	0	0	0	0	0	0	0	0	0
19:00	0	0	11	0	0	0	0	11	11	0	0	0	0	0	0	0	0	0
19:15	0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0
19:30	0	0	16	2	0	0	0	18	18	0	0	0	0	0	0	0	0	0
19:45	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
H/TOT	0	0	36	4	0	0	0	40	40	0	0	0	0	0	0	0	0	0
14 TOT	15	7	490	54	2	0	0	568	552.8	0	0	0	0	0	0	0	0	0



IDASO

Survey Name:	24260 - Belmayne and Clongriffin			Arm A - Belmayne
Site:	Site 3			Arm B - R107 Malahide Road
Location:	R107 Malahide Road / Belmayne			Arm C - R107 Malahide Road
Date:	Thu 11-Apr-2024			
AM Peak:	08:00 — 09:00	**Total:**	2192	
PM Peak:	17:00 — 18:00	**Total:**	2168	
15 Min Peak:	08:45 — 09:00	**Total:**	578	

A => A

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0
19:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	1	0	0	0	0	1	1
14 TOT	0	0	1	0	0	0	0	1	1

A => B

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	1	33	2	0	0	0	36	35.4
06:15	1	0	49	12	2	0	0	64	64.2
06:30	0	3	49	10	0	0	0	62	60.2
06:45	0	1	54	17	0	0	0	72	71.4
H/TOT	1	5	185	41	2	0	0	234	231.2
07:00	0	0	63	15	0	1	0	79	80.3
07:15	2	0	81	14	0	0	0	97	95.4
07:30	2	3	89	11	1	0	0	106	103.1
07:45	4	1	93	7	0	0	0	105	101.2
H/TOT	8	4	326	47	1	1	0	387	380
08:00	6	1	116	6	0	0	0	129	123.6
08:15	4	0	141	4	1	0	0	150	147.3
08:30	4	2	127	4	1	0	0	138	134.1
08:45	3	3	94	6	0	0	0	106	101.8
H/TOT	17	6	478	20	2	0	0	523	506.8
09:00	1	1	76	7	1	0	0	86	85.1
09:15	2	2	62	8	0	1	0	75	73.5
09:30	0	0	44	3	1	0	0	48	48.5
09:45	1	0	52	1	2	1	0	57	58.5
H/TOT	4	3	234	19	4	2	0	266	265.6
10:00	0	0	40	8	1	0	0	49	49.5
10:15	0	2	32	4	1	0	0	39	38.3
10:30	2	2	29	7	0	0	0	40	37.2
10:45	2	0	34	2	1	1	0	40	40.2
H/TOT	4	4	135	21	3	1	0	168	165.2
11:00	0	0	50	2	3	0	0	55	56.5
11:15	0	0	51	4	0	0	0	55	55
11:30	0	1	42	4	1	0	0	48	47.9
11:45	1	1	42	8	0	0	0	52	50.6
H/TOT	1	2	185	18	4	0	0	210	210
12:00	0	0	31	5	1	1	0	38	39.8
12:15	0	0	37	2	1	0	0	40	40.5
12:30	0	0	41	3	1	0	0	45	45.5
12:45	0	1	51	2	0	0	0	54	53.4
H/TOT	0	1	160	12	3	1	0	177	179.2
13:00	1	2	42	3	2	0	0	50	49
13:15	1	0	47	6	1	0	0	55	54.7
13:30	0	0	46	4	1	0	0	51	51.5
13:45	0	1	49	5	1	0	0	56	55.9
H/TOT	2	3	184	18	5	0	0	212	211.1
14:00	1	1	51	6	1	0	0	60	59.1
14:15	0	1	44	1	0	0	0	46	45.4
14:30	0	0	51	8	2	0	0	61	62
14:45	1	0	50	3	0	0	1	55	55.2
H/TOT	2	2	196	18	3	0	1	222	221.7
15:00	3	0	52	7	0	0	0	62	59.6
15:15	0	0	46	6	0	0	0	52	52
15:30	1	0	41	7	0	0	0	49	48.2
15:45	1	2	42	5	0	0	0	50	48
H/TOT	5	2	181	25	0	0	0	213	207.8
16:00	1	0	35	9	2	0	0	47	47.2
16:15	0	0	36	9	0	0	1	46	47
16:30	1	0	46	3	0	0	0	50	49.2
16:45	0	0	41	3	1	0	0	45	45.5
H/TOT	2	0	158	24	3	0	1	188	188.9
17:00	0	0	49	2	0	0	0	51	51
17:15	0	1	53	2	0	0	0	56	55.4
17:30	0	0	56	6	1	0	0	63	63.5
17:45	2	1	51	0	0	0	0	54	51.8
H/TOT	2	2	209	10	1	0	0	224	221.7
18:00	0	1	45	3	0	0	0	49	48.4
18:15	0	0	50	1	1	0	0	52	52.5
18:30	1	0	59	3	1	0	0	64	63.7
18:45	0	1	37	7	0	0	0	45	44.4
H/TOT	1	2	191	14	2	0	0	210	209
19:00	2	1	39	5	0	0	0	47	44.8
19:15	1	1	41	2	1	0	0	46	45.1
19:30	0	2	41	1	0	0	0	44	42.8
19:45	0	0	38	1	2	0	0	41	42
H/TOT	3	4	159	9	3	0	0	178	174.7
14 TOT	52	40	2981	296	36	5	2	3412	3372.9

A => C

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	4	1	0	0	0	5	5
06:15	0	0	2	1	0	0	0	3	3
06:30	0	0	2	0	0	0	0	2	2
06:45	0	0	2	1	0	0	0	3	3
H/TOT	0	0	10	3	0	0	0	13	13
07:00	0	0	7	1	1	0	0	9	9.5
07:15	0	0	9	2	0	0	0	11	11
07:30	0	0	19	3	0	0	1	23	24
07:45	0	1	39	1	0	0	0	41	40.4
H/TOT	0	1	74	7	1	0	1	84	84.9
08:00	2	0	34	0	0	0	0	36	34.4
08:15	0	0	18	0	1	0	0	19	19.5
08:30	0	0	18	3	0	0	0	21	21
08:45	0	1	35	2	2	0	0	40	40.4
H/TOT	2	1	105	5	3	0	0	116	115.3
09:00	1	0	17	1	1	0	0	20	19.7
09:15	0	0	10	3	0	0	0	13	13
09:30	0	0	8	0	0	0	0	8	8
09:45	0	0	6	1	0	0	0	7	7
H/TOT	1	0	41	5	1	0	0	48	47.7
10:00	0	0	6	1	2	0	0	9	10
10:15	0	0	4	1	0	0	0	5	5
10:30	1	0	5	0	0	1	0	7	7.5
10:45	0	0	10	2	1	0	0	13	13.5
H/TOT	1	0	25	4	3	1	0	34	36
11:00	0	0	6	2	0	1	0	9	10.3
11:15	0	0	3	2	0	0	0	5	5
11:30	0	0	13	0	0	0	0	13	13
11:45	0	0	9	2	0	0	0	11	11
H/TOT	0	0	31	6	0	1	0	38	39.3
12:00	0	0	11	2	1	0	0	14	14.5
12:15	0	0	9	2	1	0	0	12	12.5
12:30	0	0	8	0	0	0	0	8	8
12:45	0	0	11	0	0	0	0	11	11
H/TOT	0	0	39	4	2	0	0	45	46
13:00	0	0	11	0	0	0	0	11	11
13:15	0	0	12	0	0	0	0	12	12
13:30	0	0	16	3	0	0	0	19	19
13:45	0	0	11	4	2	0	0	17	18
H/TOT	0	0	50	7	2	0	0	59	60
14:00	0	0	12	0	0	0	0	12	12
14:15	0	0	17	2	1	1	0	21	22.8
14:30	0	0	13	1	1	0	0	15	15.5
14:45	0	0	11	2	0	0	0	13	13
H/TOT	0	0	53	5	2	1	0	61	63.3
15:00	1	0	8	2	0	0	0	11	10.2
15:15	0	0	13	0	0	0	0	13	13
15:30	0	0	10	3	2	1	0	16	18.3
15:45	0	0	20	1	1	0	1	23	24.5
H/TOT	1	0	51	6	3	1	1	63	66
16:00	0	0	26	4	0	1	0	31	32.3
16:15	0	0	17	1	0	0	0	18	18
16:30	0	0	22	4	1	0	0	27	27.5
16:45	0	0	11	2	0	0	0	13	13
H/TOT	0	0	76	11	1	1	0	89	90.8
17:00	0	0	23	1	0	0	0	24	24
17:15	0	0	24	2	0	0	0	26	26
17:30	0	0	21	3	0	0	0	24	24
17:45	0	0	12	1	0	1	0	14	15.3
H/TOT	0	0	80	7	0	1	0	88	89.3
18:00	0	0	10	0	0	0	0	10	10
18:15	0	0	23	0	0	0	0	23	23
18:30	0	0	19	2	0	0	0	21	21
18:45	0	0	12	0	0	0	0	12	12
H/TOT	0	0	64	2	0	0	0	66	66
19:00	0	0	11	0	0	0	0	11	11
19:15	0	0	17	0	0	0	0	17	17
19:30	0	0	12	1	2	0	0	15	16
19:45	1	0	7	0	0	0	0	8	7.2
H/TOT	1	0	47	1	2	0	0	51	51.2
14 TOT	6	2	746	73	20	6	2	855	868.8

B => A

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	1	1	6	0	1	0	0	9	8.1
06:15	0	0	4	4	0	0	0	8	8
06:30	0	1	15	3	0	0	0	19	18.4
06:45	0	1	14	4	0	1	0	20	20.7
H/TOT	1	3	39	11	1	1	0	56	55.2
07:00	0	1	19	4	0	0	0	24	23.4
07:15	0	0	27	7	0	0	0	34	34
07:30	0	0	37	8	3	0	0	48	49.5
07:45	0	0	34	8	0	0	0	42	42
H/TOT	0	1	117	27	3	0	0	148	148.9
08:00	0	0	37	5	0	0	0	42	42
08:15	2	0	57	5	0	1	0	65	64.7
08:30	2	1	53	3	2	0	0	61	59.8
08:45	0	0	47	8	1	0	0	56	56.5
H/TOT	4	1	194	21	3	1	0	224	223
09:00	0	0	43	8	1	0	0	52	52.5
09:15	0	0	45	5	1	0	0	51	51.5
09:30	0	0	40	4	1	0	0	45	45.5
09:45	1	0	30	6	1	0	0	38	37.7
H/TOT	1	0	158	23	4	0	0	186	187.2
10:00	0	0	33	3	0	0	0	36	36
10:15	0	0	26	5	0	0	0	31	31
10:30	0	2	31	3	1	0	1	38	38.3
10:45	0	0	26	2	1	0	0	29	29.5
H/TOT	0	2	116	13	2	0	1	134	134.8
11:00	0	0	27	3	2	0	0	32	33
11:15	0	0	46	5	2	0	0	53	54
11:30	1	1	35	4	0	0	0	41	39.6
11:45	0	0	39	5	2	0	0	46	47
H/TOT	1	1	147	17	6	0	0	172	173.6
12:00	1	0	35	4	1	1	0	42	43
12:15	1	0	34	4	0	0	0	39	38.2
12:30	0	1	41	4	0	0	0	46	45.4
12:45	0	0	39	5	1	0	0	45	45.5
H/TOT	2	1	149	17	2	1	0	172	172.1
13:00	1	0	47	3	0	0	0	51	50.2
13:15	0	0	33	5	1	0	0	39	39.5
13:30	1	0	55	2	1	0	1	60	60.7
13:45	0	1	48	3	0	0	1	53	53.4
H/TOT	2	1	183	13	2	0	2	203	203.8
14:00	1	1	36	6	1	0	0	45	44.1
14:15	1	1	48	7	0	0	0	57	55.6
14:30	0	0	45	5	0	0	0	50	50
14:45	2	1	68	5	1	0	0	77	75.3
H/TOT	4	3	197	23	2	0	0	229	225
15:00	2	0	46	6	1	0	2	57	57.9
15:15	0	5	75	4	1	0	0	85	82.5
15:30	0	0	75	4	0	0	0	79	79
15:45	0	0	59	7	2	0	0	68	69
H/TOT	2	5	255	21	4	0	2	289	288.4
16:00	3	0	60	12	2	0	0	77	75.6
16:15	0	0	54	12	0	0	0	66	66
16:30	2	0	79	10	1	0	0	92	90.9
16:45	1	1	93	5	0	0	0	100	98.6
H/TOT	6	1	286	39	3	0	0	335	331.1
17:00	0	1	88	8	0	0	0	97	96.4
17:15	1	1	77	13	0	0	0	92	90.6
17:30	6	3	104	6	0	0	0	119	112.4
17:45	1	0	78	5	0	0	0	84	83.2
H/TOT	8	5	347	32	0	0	0	392	382.6
18:00	4	1	104	12	0	0	0	121	117.2
18:15	4	2	91	3	2	0	0	102	98.6
18:30	2	0	79	6	0	0	0	87	85.4
18:45	1	3	73	6	0	0	0	83	80.4
H/TOT	11	6	347	27	2	0	0	393	381.6
19:00	1	0	67	3	1	0	0	72	71.7
19:15	3	2	86	6	1	0	0	98	94.9
19:30	0	2	71	4	2	0	0	79	78.8
19:45	0	0	48	6	1	0	0	55	55.5
H/TOT	4	4	272	19	5	0	0	304	300.9
14 TOT	46	34	2807	303	39	3	5	3237	3208.2

B => B

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	1	0	0	0	0	1	1
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
14 TOT	0	0	1	0	0	0	0	1	1

B => C

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	23	5	1	0	0	29	29.5
06:15	1	0	26	4	2	2	1	36	39.8
06:30	0	1	36	16	5	1	3	62	68.2
06:45	0	0	60	16	4	2	1	83	88.6
H/TOT	1	1	145	41	12	5	5	210	226.1
07:00	0	1	58	23	4	4	2	92	100.6
07:15	2	0	75	27	5	1	3	113	118.2
07:30	3	1	68	25	3	3	4	107	113.4
07:45	2	0	115	26	0	3	1	147	150.3
H/TOT	7	2	316	101	12	11	10	459	482.5
08:00	3	0	110	21	1	3	1	139	142
08:15	1	0	79	18	4	2	2	106	111.8
08:30	3	0	80	23	7	4	1	118	125.3
08:45	1	0	118	32	12	5	1	169	181.7
H/TOT	8	0	387	94	24	14	5	532	560.8
09:00	2	0	115	23	4	5	1	150	157.9
09:15	0	1	100	16	4	3	2	126	133.3
09:30	3	0	80	19	6	5	3	116	126.1
09:45	1	1	117	18	1	5	2	145	152.6
H/TOT	6	2	412	76	15	18	8	537	569.9
10:00	0	0	92	12	5	1	0	110	113.8
10:15	0	0	114	15	4	3	3	139	147.9
10:30	1	0	136	21	4	4	3	169	178.4
10:45	1	2	114	17	5	2	1	142	146.1
H/TOT	2	2	456	65	18	10	7	560	586.2
11:00	3	1	96	18	5	2	0	125	127.1
11:15	2	1	107	20	2	7	1	140	148.9
11:30	2	0	124	19	6	5	1	157	165.9
11:45	0	4	140	19	4	3	0	170	173.5
H/TOT	7	6	467	76	17	17	2	592	615.4
12:00	1	1	129	16	7	7	3	164	178.2
12:15	0	0	130	16	6	1	1	154	159.3
12:30	1	0	142	11	6	4	2	166	175.4
12:45	1	0	140	15	5	2	0	163	167.3
H/TOT	3	1	541	58	24	14	6	647	680.2
13:00	0	2	145	18	6	0	3	174	178.8
13:15	1	0	123	6	2	4	0	136	141.4
13:30	0	0	134	16	9	1	1	161	167.8
13:45	1	0	123	17	10	2	0	153	159.8
H/TOT	2	2	525	57	27	7	4	624	647.8
14:00	3	3	131	15	6	3	2	163	167.7
14:15	0	1	131	15	1	9	1	158	170.6
14:30	0	1	137	13	7	4	1	163	172.1
14:45	0	2	129	13	4	5	3	156	166.3
H/TOT	3	7	528	56	18	21	7	640	676.7
15:00	0	0	130	19	5	2	1	157	163.1
15:15	0	3	127	16	5	5	0	156	163.2
15:30	1	0	122	16	4	0	3	146	150.2
15:45	2	0	127	11	1	0	1	142	141.9
H/TOT	3	3	506	62	15	7	5	601	618.4
16:00	1	5	175	24	4	1	2	212	213.5
16:15	2	3	182	30	1	2	1	221	221.7
16:30	2	0	177	12	0	2	1	194	196
16:45	1	1	171	15	3	0	2	193	195.1
H/TOT	6	9	705	81	8	5	6	820	826.3
17:00	1	1	230	11	2	0	2	247	248.6
17:15	6	0	174	8	3	0	1	192	189.7
17:30	4	1	169	13	3	0	3	193	193.7
17:45	3	3	185	10	3	0	1	205	203.3
H/TOT	14	5	758	42	11	0	7	837	835.3
18:00	4	2	207	7	0	1	1	222	219.9
18:15	2	2	186	14	1	0	2	207	206.7
18:30	4	1	154	12	1	1	1	174	173
18:45	3	4	141	12	2	1	0	163	160.5
H/TOT	13	9	688	45	4	3	4	766	760.1
19:00	2	2	141	6	0	0	2	153	152.2
19:15	7	0	141	8	1	0	1	158	153.9
19:30	1	2	148	7	0	0	1	159	158
19:45	1	4	135	7	1	0	1	149	147.3
H/TOT	11	8	565	28	2	0	5	619	611.4
14 TOT	86	57	6999	882	207	132	81	8444	8697.1

C => A

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	2	1	1	0	0	4	4.5
06:15	0	0	3	0	0	0	0	3	3
06:30	0	0	4	0	0	0	0	4	4
06:45	0	0	4	2	0	0	0	6	6
H/TOT	0	0	13	3	1	0	0	17	17.5
07:00	0	0	6	0	0	0	0	6	6
07:15	0	0	7	5	0	0	0	12	12
07:30	1	0	10	1	0	0	0	12	11.2
07:45	0	0	10	3	0	0	0	13	13
H/TOT	1	0	33	9	0	0	0	43	42.2
08:00	1	0	20	0	0	0	0	21	20.2
08:15	0	0	21	2	0	0	0	23	23
08:30	0	0	20	0	0	0	0	20	20
08:45	0	0	22	2	2	0	0	26	27
H/TOT	1	0	83	4	2	0	0	90	90.2
09:00	0	0	12	0	0	0	0	12	12
09:15	0	0	10	1	0	0	0	11	11
09:30	0	0	7	1	0	0	0	8	8
09:45	0	0	9	1	0	0	0	10	10
H/TOT	0	0	38	3	0	0	0	41	41
10:00	0	0	3	2	0	0	0	5	5
10:15	0	0	9	0	0	0	0	9	9
10:30	0	0	6	2	1	0	0	9	9.5
10:45	0	0	14	2	0	0	0	16	16
H/TOT	0	0	32	6	1	0	0	39	39.5
11:00	0	0	8	2	0	0	0	10	10
11:15	0	0	10	1	0	0	0	11	11
11:30	0	0	11	1	1	0	0	13	13.5
11:45	0	0	12	2	1	0	0	15	15.5
H/TOT	0	0	41	6	2	0	0	49	50
12:00	0	0	10	1	1	0	0	12	12.5
12:15	0	0	11	2	0	0	0	13	13
12:30	0	0	3	1	1	0	0	5	5.5
12:45	0	1	8	1	0	0	0	10	9.4
H/TOT	0	1	32	5	2	0	0	40	40.4
13:00	0	0	12	1	0	0	0	13	13
13:15	0	0	15	0	1	0	0	16	16.5
13:30	0	0	7	2	0	0	0	9	9
13:45	0	0	11	0	2	0	0	13	14
H/TOT	0	0	45	3	3	0	0	51	52.5
14:00	1	0	20	1	0	0	0	22	21.2
14:15	0	0	14	0	1	0	0	15	15.5
14:30	0	0	9	2	1	0	0	12	12.5
14:45	0	0	14	1	1	0	0	16	16.5
H/TOT	1	0	57	4	3	0	0	65	65.7
15:00	0	0	7	2	1	0	0	10	10.5
15:15	0	0	18	4	0	0	0	22	22
15:30	0	0	11	0	0	0	0	11	11
15:45	0	0	11	2	0	0	0	13	13
H/TOT	0	0	47	8	1	0	0	56	56.5
16:00	0	0	17	2	0	0	0	19	19
16:15	0	0	20	1	0	0	0	21	21
16:30	0	0	21	2	1	0	0	24	24.5
16:45	0	0	22	1	1	0	0	24	24.5
H/TOT	0	0	80	6	2	0	0	88	89
17:00	0	1	9	0	0	1	0	11	11.7
17:15	0	0	18	0	0	0	0	18	18
17:30	0	0	22	1	0	0	0	23	23
17:45	0	0	31	2	0	0	0	33	33
H/TOT	0	1	80	3	0	1	0	85	85.7
18:00	0	0	21	1	0	0	0	22	22
18:15	0	0	9	2	1	0	0	12	12.5
18:30	0	0	16	2	0	0	0	18	18
18:45	0	0	15	1	0	0	0	16	16
H/TOT	0	0	61	6	1	0	0	68	68.5
19:00	0	1	17	2	0	0	0	20	19.4
19:15	0	0	13	0	0	0	0	13	13
19:30	0	0	15	0	0	0	0	15	15
19:45	1	0	9	1	0	0	0	11	10.2
H/TOT	1	1	54	3	0	0	0	59	57.6
14 TOT	4	3	696	69	18	1	0	791	796.3

C => B

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	1	37	6	1	1	0	46	47.2
06:15	2	0	69	11	3	1	1	87	89.2
06:30	3	2	108	18	4	1	1	137	137.7
06:45	3	2	121	17	0	0	1	144	141.4
H/TOT	8	5	335	52	8	3	3	414	415.5
07:00	1	1	132	16	3	1	2	156	159.4
07:15	1	2	130	14	3	2	2	154	158.1
07:30	3	0	142	15	6	1	4	171	176.9
07:45	6	3	177	12	5	1	2	206	205.2
H/TOT	11	6	581	57	17	5	10	687	699.6
08:00	7	2	154	5	5	0	2	175	172.7
08:15	5	1	168	11	4	2	2	193	195
08:30	4	2	141	9	1	0	1	158	155.1
08:45	4	3	153	13	6	1	1	181	181.3
H/TOT	20	8	616	38	16	3	6	707	704.1
09:00	1	1	138	13	6	2	2	163	169.2
09:15	0	1	142	16	6	5	3	173	184.9
09:30	2	2	113	12	8	3	1	141	147.1
09:45	1	0	100	9	6	3	2	121	129.1
H/TOT	4	4	493	50	26	13	8	598	630.3
10:00	1	1	103	20	0	3	3	131	136.5
10:15	1	0	111	13	6	8	1	140	153.6
10:30	0	0	114	14	8	3	1	140	148.9
10:45	1	2	107	8	4	3	0	125	128.9
H/TOT	3	3	435	55	18	17	5	536	567.9
11:00	1	1	81	14	4	7	2	110	121.7
11:15	1	1	117	20	5	2	0	146	149.7
11:30	0	0	94	14	5	3	1	117	124.4
11:45	0	0	105	11	4	2	1	123	128.6
H/TOT	2	2	397	59	18	14	4	496	524.4
12:00	0	1	118	15	3	7	1	145	156
12:15	0	1	121	16	5	5	0	148	156.4
12:30	0	2	91	17	8	2	2	122	129.4
12:45	0	0	129	14	3	3	1	150	156.4
H/TOT	0	4	459	62	19	17	4	565	598.2
13:00	3	2	119	11	1	2	1	139	139.5
13:15	1	0	112	11	3	5	3	135	145.2
13:30	1	0	135	14	3	2	4	159	166.3
13:45	2	1	117	18	3	5	1	147	153.8
H/TOT	7	3	483	54	10	14	9	580	604.8
14:00	1	1	135	18	8	6	0	169	179.4
14:15	1	1	131	18	3	5	2	161	169.6
14:30	0	1	116	20	4	3	0	144	149.3
14:45	0	0	133	20	3	2	2	160	166.1
H/TOT	2	3	515	76	18	16	4	634	664.4
15:00	1	1	119	19	7	5	1	153	162.6
15:15	1	0	120	23	5	5	1	155	164.2
15:30	1	1	103	34	4	2	1	146	150.2
15:45	1	1	119	27	1	2	3	154	158.7
H/TOT	4	3	461	103	17	14	6	608	635.7
16:00	1	2	91	21	6	1	0	122	124.3
16:15	1	2	95	17	4	3	2	124	129.9
16:30	1	1	93	16	1	0	3	115	117.1
16:45	0	0	106	15	3	2	2	128	134.1
H/TOT	3	5	385	69	14	6	7	489	505.4
17:00	3	0	109	14	4	1	1	132	133.9
17:15	2	0	113	13	1	1	0	130	130.2
17:30	0	3	122	17	0	0	3	145	146.2
17:45	4	1	114	13	1	0	2	135	133.7
H/TOT	9	4	458	57	6	2	6	542	544
18:00	1	0	101	9	0	0	2	113	114.2
18:15	1	0	106	5	3	0	3	118	121.7
18:30	0	0	130	5	0	0	0	135	135
18:45	1	2	99	4	2	0	1	109	109
H/TOT	3	2	436	23	5	0	6	475	479.9
19:00	1	0	94	4	1	0	1	101	101.7
19:15	0	1	97	6	1	0	1	106	106.9
19:30	3	0	103	8	0	0	1	115	113.6
19:45	2	0	105	3	1	0	2	113	113.9
H/TOT	6	1	399	21	3	0	5	435	436.1
14 TOT	82	53	6453	776	195	124	83	7766	8010.3

C => C

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14 TOT	0	0	0	0	0	0	0	0	0



IDASO

Survey Name: 24260 - Belmayne and Clongriffin
Site: Site 4
Location: R139 Clarehall Avenue / Belmayne Avenue / Clare Hall
Date: Thu 11-Apr-2024
AM Peak: 07:45 — 08:45 **Total:** 2663
PM Peak: 17:30 — 18:30 **Total:** 2689
15 Min Peak: 08:15 — 08:30 **Total:** 741

Arm A - Belmayne Avenue
Arm B - R139
Arm C - Clare Hall
Arm D - R139

A => A

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
08:00	0	0	1	0	0	0	0	1	1
08:15	0	0	3	0	0	0	0	3	3
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	4	0	0	0	0	4	4
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	1	0	0	0	0	1	1
10:30	0	0	0	0	1	0	0	1	1.5
10:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	1	0	0	2	2.5
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	1	1	0	1	0	3	4.3
11:30	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	1	0	1	0	3	4.3
12:00	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0
13:30	0	0	1	0	0	0	0	1	1
13:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
14:00	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0
15:15	0	0	1	1	0	0	0	2	2
15:30	0	0	0	1	0	0	0	1	1
15:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	2	0	0	0	3	3
16:00	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	1	0	0	0	0	1	1
17:30	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0
18:30	0	0	2	0	0	0	0	2	2
18:45	0	0	2	0	0	0	0	2	2
H/TOT	0	0	4	0	0	0	0	4	4
19:00	0	0	2	0	0	0	0	2	2
19:15	0	0	1	0	0	0	0	1	1
19:30	0	0	0	0	0	0	0	0	0
19:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	4	0	0	0	0	4	4
14 TOT	0	0	17	3	1	1	0	22	23.8

A => B

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	7	0	0	0	0	7	7
06:15	0	0	3	0	0	0	0	3	3
06:30	0	0	6	1	0	0	0	7	7
06:45	0	0	7	0	0	0	0	7	7
H/TOT	0	0	23	1	0	0	0	24	24
07:00	0	0	12	0	0	0	0	12	12
07:15	0	0	10	2	0	0	0	12	12
07:30	0	0	9	3	1	0	0	13	13.5
07:45	0	0	34	2	0	0	0	36	36
H/TOT	0	0	65	7	1	0	0	73	73.5
08:00	0	0	43	2	0	0	1	46	47
08:15	0	1	68	1	0	0	0	70	69.4
08:30	0	0	52	2	0	0	0	54	54
08:45	1	0	28	1	0	0	0	30	29.2
H/TOT	1	1	191	6	0	0	1	200	199.6
09:00	1	0	13	1	1	0	0	16	15.7
09:15	0	0	14	1	0	0	0	15	15
09:30	0	0	12	2	0	0	0	14	14
09:45	1	0	14	3	0	0	0	18	17.2
H/TOT	2	0	53	7	1	0	0	63	61.9
10:00	0	1	12	3	1	0	0	17	16.9
10:15	0	0	10	0	0	0	0	10	10
10:30	0	0	10	3	0	0	0	13	13
10:45	0	0	14	0	0	0	0	14	14
H/TOT	0	1	46	6	1	0	0	54	53.9
11:00	0	0	9	3	0	0	0	12	12
11:15	0	0	7	3	0	0	0	10	10
11:30	0	1	13	0	0	0	0	14	13.4
11:45	0	0	13	1	2	0	0	16	17
H/TOT	0	1	42	7	2	0	0	52	52.4
12:00	0	1	13	4	0	0	0	18	17.4
12:15	0	0	3	0	0	0	0	3	3
12:30	0	0	8	1	0	0	0	9	9
12:45	0	0	13	2	0	0	0	15	15
H/TOT	0	1	37	7	0	0	0	45	44.4
13:00	0	0	13	0	2	0	0	15	16
13:15	0	0	25	1	0	0	0	26	26
13:30	1	0	14	2	0	0	0	17	16.2
13:45	1	0	24	1	1	0	0	27	26.7
H/TOT	2	0	76	4	3	0	0	85	84.9
14:00	1	0	16	2	0	0	0	19	18.2
14:15	6	0	17	0	0	0	0	23	18.2
14:30	3	0	25	1	0	0	0	29	26.6
14:45	1	0	24	4	0	0	0	29	28.2
H/TOT	11	0	82	7	0	0	0	100	91.2
15:00	2	0	14	3	1	0	0	20	18.9
15:15	0	0	19	1	0	0	0	20	20
15:30	0	0	18	0	0	0	0	18	18
15:45	1	0	26	1	0	0	0	28	27.2
H/TOT	3	0	77	5	1	0	0	86	84.1
16:00	0	0	22	2	0	0	0	24	24
16:15	0	0	20	1	0	0	0	21	21
16:30	0	0	24	2	1	0	0	27	27.5
16:45	0	0	22	1	0	0	0	23	23
H/TOT	0	0	88	6	1	0	0	95	95.5
17:00	1	0	14	1	0	0	0	16	15.2
17:15	0	0	24	0	0	0	0	24	24
17:30	0	0	26	2	0	0	0	28	28
17:45	1	0	22	0	0	0	0	23	22.2
H/TOT	2	0	86	3	0	0	0	91	89.4
18:00	2	0	22	1	0	0	0	25	23.4
18:15	0	0	21	0	1	0	0	22	22.5
18:30	1	0	25	1	0	0	0	27	26.2
18:45	0	0	26	3	0	0	0	29	29
H/TOT	3	0	94	5	1	0	0	103	101.1
19:00	0	0	12	1	0	0	0	13	13
19:15	0	0	15	0	1	0	0	16	16.5
19:30	0	0	18	0	0	0	0	18	18
19:45	0	0	19	1	0	0	0	20	20
H/TOT	0	0	64	2	1	0	0	67	67.5
14 TOT	24	4	1024	73	12	0	1	1138	1123.4

A => C

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	2	0	0	0	0	2	2
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0
06:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	3	0	0	0	0	3	3
07:00	0	0	0	0	0	0	0	0	0
07:15	0	0	2	0	0	0	0	2	2
07:30	0	0	2	0	0	0	0	2	2
07:45	0	0	3	0	0	0	0	3	3
H/TOT	0	0	7	0	0	0	0	7	7
08:00	0	0	9	0	0	0	0	9	9
08:15	0	0	8	1	0	0	0	9	9
08:30	0	0	8	0	0	0	0	8	8
08:45	0	0	10	0	0	0	0	10	10
H/TOT	0	0	35	1	0	0	0	36	36
09:00	0	0	3	0	0	0	0	3	3
09:15	0	0	8	0	0	0	0	8	8
09:30	0	0	1	1	0	0	0	2	2
09:45	0	0	4	0	0	0	0	4	4
H/TOT	0	0	16	1	0	0	0	17	17
10:00	0	0	0	1	0	0	0	1	1
10:15	0	0	2	0	0	0	0	2	2
10:30	0	0	2	0	0	0	0	2	2
10:45	0	0	6	1	0	0	0	7	7
H/TOT	0	0	10	2	0	0	0	12	12
11:00	1	0	4	0	0	0	0	5	4.2
11:15	0	0	2	0	0	0	0	2	2
11:30	0	0	3	0	0	0	0	3	3
11:45	0	0	4	1	0	0	0	5	5
H/TOT	1	0	13	1	0	0	0	15	14.2
12:00	0	0	6	1	0	0	0	7	7
12:15	0	0	4	0	0	0	0	4	4
12:30	0	0	2	0	0	0	0	2	2
12:45	0	0	2	0	0	0	0	2	2
H/TOT	0	0	14	1	0	0	0	15	15
13:00	0	0	1	1	0	0	0	2	2
13:15	0	0	2	0	0	0	0	2	2
13:30	0	0	7	0	0	0	0	7	7
13:45	0	0	6	0	0	0	0	6	6
H/TOT	0	0	16	1	0	0	0	17	17
14:00	0	0	3	1	0	0	0	4	4
14:15	0	1	11	0	0	0	0	12	11.4
14:30	2	0	11	0	0	0	0	13	11.4
14:45	1	0	8	0	0	0	0	9	8.2
H/TOT	3	1	33	1	0	0	0	38	35
15:00	1	0	3	1	0	0	0	5	4.2
15:15	0	0	4	2	0	0	0	6	6
15:30	1	0	5	0	0	0	0	6	5.2
15:45	0	0	6	1	0	0	0	7	7
H/TOT	2	0	18	4	0	0	0	24	22.4
16:00	0	0	4	0	0	0	0	4	4
16:15	0	1	6	0	0	0	0	7	6.4
16:30	0	0	9	1	0	0	0	10	10
16:45	0	0	7	1	0	0	0	8	8
H/TOT	0	1	26	2	0	0	0	29	28.4
17:00	0	0	10	0	0	0	0	10	10
17:15	0	0	8	0	0	0	0	8	8
17:30	0	1	8	0	0	0	0	9	8.4
17:45	0	1	7	1	0	0	0	9	8.4
H/TOT	0	2	33	1	0	0	0	36	34.8
18:00	0	0	6	0	0	0	0	6	6
18:15	0	0	10	1	0	0	0	11	11
18:30	0	0	13	0	0	0	0	13	13
18:45	0	0	11	1	0	0	0	12	12
H/TOT	0	0	40	2	0	0	0	42	42
19:00	0	0	7	0	0	0	0	7	7
19:15	0	0	4	1	0	0	0	5	5
19:30	1	0	12	1	0	0	0	14	13.2
19:45	0	0	7	1	1	0	0	9	9.5
H/TOT	1	0	30	3	1	0	0	35	34.7
14 TOT	7	4	294	20	1	0	0	326	318.5

A => D

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	1	11	4	0	0	0	16	15.4
06:15	0	0	24	1	1	0	0	26	26.5
06:30	1	1	18	8	0	0	0	28	26.6
06:45	3	0	19	1	1	0	0	24	22.1
H/TOT	4	2	72	14	2	0	0	94	90.6
07:00	1	1	14	2	0	1	0	19	18.9
07:15	2	0	15	4	0	0	0	21	19.4
07:30	2	1	33	5	0	0	0	41	38.8
07:45	1	0	25	2	0	3	0	31	34.1
H/TOT	6	2	87	13	0	4	0	112	111.2
08:00	1	1	31	0	1	0	0	34	33.1
08:15	1	0	50	4	0	1	0	56	56.5
08:30	2	0	50	1	2	0	0	55	54.4
08:45	3	0	37	3	0	0	0	43	40.6
H/TOT	7	1	168	8	3	1	0	188	184.6
09:00	2	0	23	2	0	1	0	28	27.7
09:15	0	0	19	2	1	1	0	23	24.8
09:30	0	0	17	2	4	1	0	24	27.3
09:45	1	1	8	0	0	0	0	10	8.6
H/TOT	3	1	67	6	5	3	0	85	88.4
10:00	1	0	17	1	0	1	0	20	20.5
10:15	1	0	18	1	2	0	0	22	22.2
10:30	2	1	15	2	1	1	0	22	21.6
10:45	0	0	19	2	0	1	0	22	23.3
H/TOT	4	1	69	6	3	3	0	86	87.6
11:00	0	0	21	3	0	0	0	24	24
11:15	0	0	16	4	0	1	0	21	22.3
11:30	0	0	16	9	0	0	0	25	25
11:45	0	1	12	1	1	0	0	15	14.9
H/TOT	0	1	65	17	1	1	0	85	86.2
12:00	0	0	20	1	0	1	0	22	23.3
12:15	1	0	20	5	1	1	0	28	29
12:30	0	0	20	4	1	0	0	25	25.5
12:45	0	1	28	2	1	2	0	34	36.5
H/TOT	1	1	88	12	3	4	0	109	114.3
13:00	0	1	12	1	0	0	0	14	13.4
13:15	1	0	19	6	0	0	0	26	25.2
13:30	1	0	22	3	0	0	0	26	25.2
13:45	0	1	24	4	2	0	0	31	31.4
H/TOT	2	2	77	14	2	0	0	97	95.2
14:00	0	0	15	2	1	1	0	19	20.8
14:15	1	0	30	8	0	0	0	39	38.2
14:30	0	0	31	2	0	0	0	33	33
14:45	0	1	30	4	0	0	0	35	34.4
H/TOT	1	1	106	16	1	1	0	126	126.4
15:00	1	0	26	5	0	1	0	33	33.5
15:15	0	0	28	7	0	0	0	35	35
15:30	1	0	25	12	0	0	0	38	37.2
15:45	0	0	32	6	1	0	0	39	39.5
H/TOT	2	0	111	30	1	1	0	145	145.2
16:00	2	0	34	7	0	0	0	43	41.4
16:15	2	0	33	6	0	0	0	41	39.4
16:30	0	0	34	7	0	0	0	41	41
16:45	1	0	23	3	0	0	0	27	26.2
H/TOT	5	0	124	23	0	0	0	152	148
17:00	0	0	49	3	1	0	0	53	53.5
17:15	0	0	33	1	1	1	0	36	37.8
17:30	0	0	37	5	0	0	0	42	42
17:45	0	1	59	3	1	1	0	65	66.2
H/TOT	0	1	178	12	3	2	0	196	199.5
18:00	1	0	21	5	0	0	0	27	26.2
18:15	0	0	29	3	0	0	0	32	32
18:30	1	0	23	1	0	0	0	25	24.2
18:45	0	0	25	5	0	0	0	30	30
H/TOT	2	0	98	14	0	0	0	114	112.4
19:00	0	1	19	4	0	0	0	24	23.4
19:15	0	0	27	2	0	0	0	29	29
19:30	0	0	22	3	0	0	0	25	25
19:45	0	0	18	1	0	0	0	19	19
H/TOT	0	1	86	10	0	0	0	97	96.4
14 TOT	37	14	1396	195	24	20	0	1686	1686

B => A

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	2	0	0	0	0	2	2
06:15	1	0	1	0	0	0	0	2	1.2
06:30	0	0	3	1	0	0	0	4	4
06:45	1	0	5	2	0	0	0	8	7.2
H/TOT	2	0	11	3	0	0	0	16	14.4
07:00	2	0	5	0	0	0	0	7	5.4
07:15	0	1	6	2	0	0	0	9	8.4
07:30	0	0	10	0	0	0	0	10	10
07:45	0	0	14	0	0	1	0	15	16.3
H/TOT	2	1	35	2	0	1	0	41	40.1
08:00	2	0	23	1	0	0	0	26	24.4
08:15	2	0	47	1	0	0	0	50	48.4
08:30	1	1	27	0	1	0	0	30	29.1
08:45	0	0	21	2	0	0	0	23	23
H/TOT	5	1	118	4	1	0	0	129	124.9
09:00	0	0	17	1	0	0	0	18	18
09:15	0	0	15	0	1	0	0	16	16.5
09:30	0	0	12	0	0	0	0	12	12
09:45	0	0	8	1	0	1	0	10	11.3
H/TOT	0	0	52	2	1	1	0	56	57.8
10:00	0	0	7	0	0	0	0	7	7
10:15	0	0	5	3	0	0	0	8	8
10:30	0	1	6	1	0	0	0	8	7.4
10:45	0	0	10	2	2	0	0	14	15
H/TOT	0	1	28	6	2	0	0	37	37.4
11:00	0	0	8	1	0	0	0	9	9
11:15	0	0	8	0	0	0	0	8	8
11:30	0	0	11	0	0	0	0	11	11
11:45	0	0	10	3	0	0	0	13	13
H/TOT	0	0	37	4	0	0	0	41	41
12:00	0	0	12	1	0	0	0	13	13
12:15	0	0	11	2	0	0	0	13	13
12:30	0	0	12	0	0	0	0	12	12
12:45	0	0	13	0	0	0	0	13	13
H/TOT	0	0	48	3	0	0	0	51	51
13:00	0	0	17	2	0	0	0	19	19
13:15	0	0	13	2	0	0	0	15	15
13:30	0	0	20	2	0	0	0	22	22
13:45	0	0	18	0	0	0	0	18	18
H/TOT	0	0	68	6	0	0	0	74	74
14:00	0	0	22	2	0	0	0	24	24
14:15	0	0	17	3	0	0	0	20	20
14:30	0	0	23	0	0	0	0	23	23
14:45	0	0	15	1	0	0	0	16	16
H/TOT	0	0	77	6	0	0	0	83	83
15:00	0	0	19	3	0	0	0	22	22
15:15	0	0	9	0	1	0	0	10	10.5
15:30	1	0	16	2	0	0	0	19	18.2
15:45	0	0	30	1	0	0	0	31	31
H/TOT	1	0	74	6	1	0	0	82	81.7
16:00	0	0	23	4	0	0	1	28	29
16:15	0	0	20	0	0	0	0	20	20
16:30	0	0	17	0	0	0	0	17	17
16:45	0	0	18	1	0	0	0	19	19
H/TOT	0	0	78	5	0	0	1	84	85
17:00	0	1	23	3	0	0	0	27	26.4
17:15	0	0	16	0	0	0	0	16	16
17:30	0	0	21	3	0	0	0	24	24
17:45	1	0	17	1	0	0	0	19	18.2
H/TOT	1	1	77	7	0	0	0	86	84.6
18:00	0	0	16	3	1	0	0	20	20.5
18:15	0	0	19	1	0	0	0	20	20
18:30	0	0	23	2	0	0	0	25	25
18:45	0	0	15	0	0	0	0	15	15
H/TOT	0	0	73	6	1	0	0	80	80.5
19:00	0	1	12	0	0	0	0	13	12.4
19:15	1	0	15	1	0	0	0	17	16.2
19:30	1	1	19	0	0	0	0	21	19.6
19:45	0	0	22	0	0	0	0	22	22
H/TOT	2	2	68	1	0	0	0	73	70.2
14 TOT	13	6	844	61	6	2	1	933	925.6

B => B

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	1	0	0	0	0	1	1
06:30	0	0	0	0	0	0	0	0	0
06:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	2	0	0	0	0	2	2
07:00	0	0	1	0	0	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	1	0	0	0	1	1
07:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	1	0	0	0	2	2
08:00	0	0	1	0	0	0	0	1	1
08:15	0	0	1	0	0	0	1	2	3
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	0	0	0	1	3	4
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	2	0	0	0	0	2	2
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	0	0	0	0	2	2
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
12:00	0	0	1	0	0	0	0	1	1
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	1	0	0	0	0	1	1
13:30	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
14:00	0	0	1	0	0	0	0	1	1
14:15	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	1	1	2
H/TOT	0	0	1	0	0	0	1	2	3
15:00	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0
16:15	0	0	1	0	0	0	0	1	1
16:30	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	2	0	0	0	0	2	2
17:30	0	0	2	0	0	0	0	2	2
17:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	4	0	0	0	0	4	4
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	1	0	0	0	0	1	1
18:30	0	0	1	0	0	0	0	1	1
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	0	0	0	0	2	2
19:00	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	1	0	0	0	0	1	1
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
14 TOT	0	0	18	1	0	0	2	21	23

B => C

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	1	2	0	0	0	3	3
06:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	2	2	0	0	0	4	4
07:00	0	0	3	0	0	0	0	3	3
07:15	0	0	4	0	1	0	0	5	5.5
07:30	0	0	6	3	0	0	0	9	9
07:45	0	0	8	1	1	0	0	10	10.5
H/TOT	0	0	21	4	2	0	0	27	28
08:00	0	0	13	2	0	0	0	15	15
08:15	0	0	11	1	0	0	1	13	14
08:30	0	0	15	1	0	0	0	16	16
08:45	0	0	23	1	0	0	0	24	24
H/TOT	0	0	62	5	0	0	1	68	69
09:00	0	0	31	2	2	0	0	35	36
09:15	0	0	18	3	0	0	0	21	21
09:30	0	0	18	1	0	0	0	19	19
09:45	0	0	7	1	1	0	0	9	9.5
H/TOT	0	0	74	7	3	0	0	84	85.5
10:00	0	0	20	0	0	0	0	20	20
10:15	0	0	12	2	0	0	0	14	14
10:30	0	0	8	3	0	0	0	11	11
10:45	0	0	13	3	0	0	0	16	16
H/TOT	0	0	53	8	0	0	0	61	61
11:00	0	0	7	1	1	0	0	9	9.5
11:15	0	0	12	1	0	0	0	13	13
11:30	0	0	14	1	0	0	0	15	15
11:45	0	0	11	1	1	0	0	13	13.5
H/TOT	0	0	44	4	2	0	0	50	51
12:00	0	0	27	1	0	0	0	28	28
12:15	0	0	14	0	0	0	0	14	14
12:30	0	0	9	0	2	0	0	11	12
12:45	0	0	10	1	1	0	0	12	12.5
H/TOT	0	0	60	2	3	0	0	65	66.5
13:00	1	0	14	0	0	0	0	15	14.2
13:15	0	0	21	0	0	0	0	21	21
13:30	0	1	22	0	0	0	0	23	22.4
13:45	0	0	20	2	0	0	0	22	22
H/TOT	1	1	77	2	0	0	0	81	79.6
14:00	0	0	24	1	1	0	0	26	26.5
14:15	0	0	17	1	0	0	0	18	18
14:30	0	0	26	1	0	0	0	27	27
14:45	0	0	37	0	0	0	0	37	37
H/TOT	0	0	104	3	1	0	0	108	108.5
15:00	1	0	24	1	0	0	0	26	25.2
15:15	0	0	23	5	0	0	0	28	28
15:30	0	0	24	5	0	0	0	29	29
15:45	0	0	28	0	1	0	0	29	29.5
H/TOT	1	0	99	11	1	0	0	112	111.7
16:00	0	0	34	5	0	0	1	40	41
16:15	0	0	31	3	0	0	0	34	34
16:30	0	1	26	1	0	0	0	28	27.4
16:45	0	0	27	5	0	0	0	32	32
H/TOT	0	1	118	14	0	0	1	134	134.4
17:00	0	0	30	3	0	0	0	33	33
17:15	0	0	32	2	0	0	0	34	34
17:30	0	0	31	3	0	0	0	34	34
17:45	0	0	35	1	0	0	0	36	36
H/TOT	0	0	128	9	0	0	0	137	137
18:00	0	0	29	2	0	0	0	31	31
18:15	0	0	26	0	0	0	0	26	26
18:30	0	0	31	0	0	0	0	31	31
18:45	1	0	30	1	0	0	0	32	31.2
H/TOT	1	0	116	3	0	0	0	120	119.2
19:00	0	0	28	2	0	0	0	30	30
19:15	0	0	35	3	0	0	0	38	38
19:30	0	0	19	2	0	0	0	21	21
19:45	0	0	16	1	0	0	0	17	17
H/TOT	0	0	98	8	0	0	0	106	106
14 TOT	3	2	1056	82	12	0	2	1157	1161.4

B => D

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	3	0	66	17	2	0	2	90	90.6
06:15	1	1	107	25	1	1	4	140	144.4
06:30	1	0	152	28	8	1	2	192	198.5
06:45	1	1	130	36	4	2	4	178	185.2
H/TOT	6	2	455	106	15	4	12	600	618.7
07:00	1	0	154	31	4	1	4	195	201.5
07:15	2	0	122	39	6	1	4	174	180.7
07:30	1	1	153	32	5	6	3	201	212.9
07:45	2	2	144	29	4	3	4	188	195.1
H/TOT	6	3	573	131	19	11	15	758	790.2
08:00	6	0	170	17	2	4	3	202	206.4
08:15	4	3	140	14	7	2	0	170	171.1
08:30	3	2	95	21	6	3	6	136	145.3
08:45	3	1	128	30	10	6	3	181	193.8
H/TOT	16	6	533	82	25	15	12	689	716.6
09:00	1	0	155	18	8	2	3	187	195.8
09:15	1	0	162	20	8	4	4	199	211.4
09:30	1	1	148	24	15	2	3	194	205.7
09:45	1	2	139	28	5	2	3	180	186.1
H/TOT	4	3	604	90	36	10	13	760	799
10:00	2	1	151	30	8	1	7	200	210.1
10:15	1	1	130	10	11	4	2	159	170.3
10:30	1	0	119	20	9	1	2	152	159
10:45	0	1	133	22	10	2	2	170	179
H/TOT	4	3	533	82	38	8	13	681	718.4
11:00	1	2	126	36	8	2	3	178	185.6
11:15	1	2	129	26	12	3	3	176	186.9
11:30	2	3	120	28	7	3	1	164	169
11:45	2	2	135	28	9	2	3	181	188.3
H/TOT	6	9	510	118	36	10	10	699	729.8
12:00	1	1	152	21	8	3	3	189	198.5
12:15	0	0	121	39	9	4	2	175	186.7
12:30	0	0	138	28	11	0	2	179	186.5
12:45	1	0	136	30	9	6	1	183	195.5
H/TOT	2	1	547	118	37	13	8	726	767.2
13:00	2	2	144	18	14	4	1	185	195.4
13:15	1	0	134	23	10	2	3	173	182.8
13:30	2	1	128	30	10	4	2	177	187
13:45	1	1	137	25	7	3	6	180	192
H/TOT	6	4	543	96	41	13	12	715	757.2
14:00	0	1	125	23	7	3	1	160	167.8
14:15	2	0	127	31	8	4	5	177	189.6
14:30	3	0	155	25	6	1	3	193	197.9
14:45	3	2	157	36	5	1	1	205	206.2
H/TOT	8	3	564	115	26	9	10	735	761.5
15:00	1	1	148	48	8	0	2	208	212.6
15:15	0	1	165	35	7	4	1	213	222.1
15:30	2	1	163	30	5	3	4	208	216.2
15:45	1	1	157	27	5	1	2	194	198.4
H/TOT	4	4	633	140	25	8	9	823	849.3
16:00	3	0	157	33	3	0	1	197	197.1
16:15	2	2	132	34	4	7	2	183	193.3
16:30	1	0	142	32	1	2	1	179	182.3
16:45	1	0	148	23	1	3	2	178	183.6
H/TOT	7	2	579	122	9	12	6	737	756.3
17:00	1	1	156	19	2	1	2	182	184.9
17:15	0	4	154	31	0	1	2	192	192.9
17:30	2	1	160	28	0	0	1	192	190.8
17:45	1	1	157	22	0	1	3	185	187.9
H/TOT	4	7	627	100	2	3	8	751	756.5
18:00	3	1	174	12	1	0	1	192	190.5
18:15	3	4	150	25	1	0	2	185	182.7
18:30	0	1	144	16	0	0	2	163	164.4
18:45	2	0	132	14	0	0	3	151	152.4
H/TOT	8	6	600	67	2	0	8	691	690
19:00	0	0	164	21	0	0	1	186	187
19:15	0	1	131	17	0	0	2	151	152.4
19:30	0	0	114	10	0	0	3	127	130
19:45	1	1	103	9	2	0	1	117	117.6
H/TOT	1	2	512	57	2	0	7	581	587
14 TOT	82	55	7813	1424	313	116	143	9946	10298



IDASO

Survey Name: 24260 - Belmayne and Clongriffin
Site: Site 4
Location: R139 Clarehall Avenue / Belmayne Avenue / Clare Hall
Date: Thu 11-Apr-2024
AM Peak: 07:45 — 08:45 **Total:** 2663
PM Peak: 17:30 — 18:30 **Total:** 2689
15 Min Peak: 08:15 — 08:30 **Total:** 741

Arm A - Belmayne Avenue
Arm B - R139
Arm C - Clare Hall
Arm D - R139

C => A

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	1	0	0	0	0	1	1
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	3	0	0	0	0	3	3
06:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	5	0	0	0	0	5	5
07:00	0	0	4	1	0	0	0	5	5
07:15	0	0	2	1	1	0	0	4	4.5
07:30	0	0	12	0	0	0	0	12	12
07:45	0	0	6	1	0	0	0	7	7
H/TOT	0	0	24	3	1	0	0	28	28.5
08:00	0	0	15	0	0	0	0	15	15
08:15	0	0	17	1	1	0	0	19	19.5
08:30	0	0	9	2	1	0	0	12	12.5
08:45	0	1	15	0	0	0	0	16	15.4
H/TOT	0	1	56	3	2	0	0	62	62.4
09:00	0	0	6	0	0	0	0	6	6
09:15	0	0	4	2	0	0	0	6	6
09:30	0	0	6	0	0	0	0	6	6
09:45	0	0	3	1	0	0	0	4	4
H/TOT	0	0	19	3	0	0	0	22	22
10:00	0	0	1	0	2	0	0	3	4
10:15	0	0	4	1	0	0	0	5	5
10:30	0	0	3	0	0	0	0	3	3
10:45	0	0	3	0	0	0	0	3	3
H/TOT	0	0	11	1	2	0	0	14	15
11:00	0	0	6	1	0	0	0	7	7
11:15	0	0	1	1	0	0	0	2	2
11:30	0	0	6	1	0	0	0	7	7
11:45	0	0	1	1	0	0	0	2	2
H/TOT	0	0	14	4	0	0	0	18	18
12:00	0	0	1	0	0	0	0	1	1
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	7	1	0	0	0	8	8
12:45	0	0	5	0	0	0	0	5	5
H/TOT	0	0	13	1	0	0	0	14	14
13:00	0	0	7	1	0	0	0	8	8
13:15	0	0	3	0	0	0	0	3	3
13:30	0	0	4	1	0	0	0	5	5
13:45	0	0	5	3	0	0	0	8	8
H/TOT	0	0	19	5	0	0	0	24	24
14:00	0	0	8	0	0	0	0	8	8
14:15	0	0	7	0	0	0	0	7	7
14:30	0	0	5	1	0	0	0	6	6
14:45	0	0	8	0	0	0	0	8	8
H/TOT	0	0	28	1	0	0	0	29	29
15:00	0	0	2	1	0	0	0	3	3
15:15	0	0	2	0	0	0	0	2	2
15:30	0	0	6	0	0	0	0	6	6
15:45	0	0	6	0	0	0	0	6	6
H/TOT	0	0	16	1	0	0	0	17	17
16:00	0	0	6	0	0	0	0	6	6
16:15	0	0	7	0	0	0	0	7	7
16:30	0	0	1	0	0	0	0	1	1
16:45	0	0	6	0	0	0	0	6	6
H/TOT	0	0	20	0	0	0	0	20	20
17:00	0	0	10	0	0	0	0	10	10
17:15	0	0	8	0	1	0	0	9	9.5
17:30	0	0	8	1	0	0	0	9	9
17:45	0	0	9	0	0	0	0	9	9
H/TOT	0	0	35	1	1	0	0	37	37.5
18:00	0	0	8	0	0	0	0	8	8
18:15	0	0	12	0	0	0	0	12	12
18:30	0	0	6	1	0	0	0	7	7
18:45	0	0	9	0	0	0	0	9	9
H/TOT	0	0	35	1	0	0	0	36	36
19:00	0	0	3	0	0	0	0	3	3
19:15	0	0	8	0	0	0	0	8	8
19:30	0	0	6	0	0	0	0	6	6
19:45	0	0	2	0	0	0	0	2	2
H/TOT	0	0	19	0	0	0	0	19	19
14 TOT	0	1	314	24	6	0	0	345	347.4

C => B

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	1	2	0	0	0	3	3
06:15	0	0	2	0	1	0	0	3	3.5
06:30	0	0	5	2	0	0	0	7	7
06:45	0	0	5	1	0	0	0	6	6
H/TOT	0	0	13	5	1	0	0	19	19.5
07:00	0	0	6	4	0	0	0	10	10
07:15	0	0	10	2	0	0	0	12	12
07:30	0	0	20	7	0	0	0	27	27
07:45	0	0	43	0	0	0	0	43	43
H/TOT	0	0	79	13	0	0	0	92	92
08:00	0	0	41	4	0	0	0	45	45
08:15	0	0	48	2	0	0	1	51	52
08:30	0	0	43	0	0	0	0	43	43
08:45	0	0	21	0	0	0	0	21	21
H/TOT	0	0	153	6	0	0	1	160	161
09:00	0	0	17	3	1	0	0	21	21.5
09:15	1	0	20	1	1	0	0	23	22.7
09:30	0	0	14	0	0	0	0	14	14
09:45	0	0	13	2	1	0	0	16	16.5
H/TOT	1	0	64	6	3	0	0	74	74.7
10:00	0	0	18	2	0	0	0	20	20
10:15	0	0	14	1	0	0	0	15	15
10:30	0	0	14	0	0	0	0	14	14
10:45	0	0	10	1	0	0	0	11	11
H/TOT	0	0	56	4	0	0	0	60	60
11:00	0	0	8	1	0	0	0	9	9
11:15	0	0	12	0	1	0	0	13	13.5
11:30	0	0	12	0	0	0	0	12	12
11:45	0	0	14	1	1	0	0	16	16.5
H/TOT	0	0	46	2	2	0	0	50	51
12:00	0	0	13	2	0	0	0	15	15
12:15	0	0	14	0	0	0	0	14	14
12:30	1	0	10	0	0	0	0	11	10.2
12:45	0	0	14	1	0	0	0	15	15
H/TOT	1	0	51	3	0	0	0	55	54.2
13:00	0	0	15	2	0	0	0	17	17
13:15	0	0	19	0	1	0	0	20	20.5
13:30	0	0	12	3	0	0	0	15	15
13:45	0	0	24	1	0	0	0	25	25
H/TOT	0	0	70	6	1	0	0	77	77.5
14:00	0	0	26	0	0	0	0	26	26
14:15	0	0	22	0	0	0	0	22	22
14:30	0	0	17	0	0	0	0	17	17
14:45	0	0	19	1	0	0	0	20	20
H/TOT	0	0	84	1	0	0	0	85	85
15:00	0	0	12	3	0	0	0	15	15
15:15	0	0	31	3	0	0	0	34	34
15:30	0	0	21	3	0	0	0	24	24
15:45	0	0	12	0	1	0	0	13	13.5
H/TOT	0	0	76	9	1	0	0	86	86.5
16:00	0	0	15	2	0	0	1	18	19
16:15	0	0	14	1	0	0	0	15	15
16:30	0	0	14	1	0	0	0	15	15
16:45	0	0	26	6	0	0	0	32	32
H/TOT	0	0	69	10	0	0	1	80	81
17:00	0	0	30	3	0	0	0	33	33
17:15	0	0	21	1	0	0	0	22	22
17:30	0	0	31	2	0	0	0	33	33
17:45	1	0	26	1	0	0	0	28	27.2
H/TOT	1	0	108	7	0	0	0	116	115.2
18:00	0	0	19	1	0	0	0	20	20
18:15	0	0	19	1	0	0	0	20	20
18:30	0	0	23	2	0	0	0	25	25
18:45	0	0	30	3	0	0	0	33	33
H/TOT	0	0	91	7	0	0	0	98	98
19:00	0	0	28	0	0	0	0	28	28
19:15	0	0	24	1	0	0	0	25	25
19:30	0	0	21	5	0	0	0	26	26
19:45	0	0	20	1	0	0	0	21	21
H/TOT	0	0	93	7	0	0	0	100	100
14 TOT	3	0	1053	86	8	0	2	1152	1155.6

C => C

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	1	0	0	0	0	1	1
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0
13:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	1	0	0	0	0	1	1
14:00	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0
14:30	0	0	1	0	0	0	0	1	1
14:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
15:00	0	0	0	0	0	0	0	0	0
15:15	0	0	1	0	0	0	0	1	1
15:30	0	0	1	0	0	0	0	1	1
15:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	0	0	0	0	2	2
16:00	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14 TOT	0	0	5	0	0	0	0	5	5

C => D

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	20	3	0	0	0	23	23
06:15	0	0	22	8	0	0	0	30	30
06:30	0	0	29	15	1	0	0	45	45.5
06:45	0	1	30	4	0	0	0	35	34.4
H/TOT	0	1	101	30	1	0	0	133	132.9
07:00	1	0	36	9	1	0	0	47	46.7
07:15	2	0	40	5	0	0	0	47	45.4
07:30	0	1	42	10	0	0	0	53	52.4
07:45	0	1	43	6	0	0	0	50	49.4
H/TOT	3	2	161	30	1	0	0	197	193.9
08:00	4	1	56	3	1	0	0	65	61.7
08:15	2	0	63	3	0	0	0	68	66.4
08:30	0	0	44	3	1	0	0	48	48.5
08:45	1	0	32	2	0	0	0	35	34.2
H/TOT	7	1	195	11	2	0	0	216	210.8
09:00	0	1	36	1	0	0	0	38	37.4
09:15	0	0	33	4	1	0	0	38	38.5
09:30	0	0	23	4	0	0	0	27	27
09:45	0	0	23	3	1	0	0	27	27.5
H/TOT	0	1	115	12	2	0	0	130	130.4
10:00	0	0	24	1	0	1	0	26	27.3
10:15	0	0	27	1	0	0	0	28	28
10:30	0	0	19	3	0	0	0	22	22
10:45	0	0	22	3	1	0	0	26	26.5
H/TOT	0	0	92	8	1	1	0	102	103.8
11:00	0	0	20	1	0	0	0	21	21
11:15	0	0	16	2	2	0	0	20	21
11:30	0	0	21	3	0	0	0	24	24
11:45	0	0	27	1	0	0	0	28	28
H/TOT	0	0	84	7	2	0	0	93	94
12:00	0	0	20	5	0	0	0	25	25
12:15	0	1	23	2	0	0	0	26	25.4
12:30	0	0	24	2	2	0	0	28	29
12:45	0	0	25	0	0	0	0	25	25
H/TOT	0	1	92	9	2	0	0	104	104.4
13:00	0	0	27	4	0	0	0	31	31
13:15	0	0	33	2	0	0	0	35	35
13:30	0	0	26	3	1	0	0	30	30.5
13:45	0	0	24	4	1	0	0	29	29.5
H/TOT	0	0	110	13	2	0	0	125	126
14:00	0	0	16	1	0	0	0	17	17
14:15	0	0	23	1	3	0	0	27	28.5
14:30	0	0	18	2	0	0	0	20	20
14:45	0	1	29	2	1	0	0	33	32.9
H/TOT	0	1	86	6	4	0	0	97	98.4
15:00	0	0	21	2	0	0	0	23	23
15:15	0	0	27	1	0	0	0	28	28
15:30	0	1	21	6	0	0	0	28	27.4
15:45	0	0	18	5	0	0	0	23	23
H/TOT	0	1	87	14	0	0	0	102	101.4
16:00	0	0	15	2	1	0	0	18	18.5
16:15	0	0	22	2	0	0	0	24	24
16:30	0	1	21	2	0	0	0	24	23.4
16:45	0	1	20	1	0	0	0	22	21.4
H/TOT	0	2	78	7	1	0	0	88	87.3
17:00	0	0	30	2	0	0	0	32	32
17:15	0	0	29	4	0	0	0	33	33
17:30	0	0	34	5	0	0	0	39	39
17:45	0	1	30	0	0	0	0	31	30.4
H/TOT	0	1	123	11	0	0	0	135	134.4
18:00	0	0	33	3	1	0	0	37	37.5
18:15	0	0	28	4	0	0	0	32	32
18:30	0	1	35	4	0	0	0	40	39.4
18:45	0	0	35	2	0	0	0	37	37
H/TOT	0	1	131	13	1	0	0	146	145.9
19:00	0	0	35	3	0	0	0	38	38
19:15	0	0	21	4	1	0	0	26	26.5
19:30	0	0	29	0	0	0	0	29	29
19:45	0	0	32	1	1	0	0	34	34.5
H/TOT	0	0	117	8	2	0	0	127	128
14 TOT	10	12	1572	179	21	1	0	1795	1791.6

D => A

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	10	2	1	0	0	13	13.5
06:15	0	0	24	4	0	1	0	29	30.3
06:30	1	1	49	17	0	1	0	69	68.9
06:45	1	0	32	10	1	0	0	44	43.7
H/TOT	2	1	115	33	2	2	0	155	156.4
07:00	0	0	21	7	0	0	0	28	28
07:15	1	0	14	11	0	2	0	28	29.8
07:30	2	0	15	3	1	2	0	23	24.5
07:45	0	0	17	7	1	0	0	25	25.5
H/TOT	3	0	67	28	2	4	0	104	107.8
08:00	5	0	20	2	3	0	0	30	27.5
08:15	7	0	26	6	1	1	0	41	37.2
08:30	2	0	13	2	2	0	0	19	18.4
08:45	0	0	13	4	0	1	0	18	19.3
H/TOT	14	0	72	14	6	2	0	108	102.4
09:00	2	0	19	2	1	2	0	26	27.5
09:15	0	0	6	1	1	0	0	8	8.5
09:30	0	0	10	4	1	1	0	16	17.8
09:45	0	1	7	3	2	0	0	13	13.4
H/TOT	2	1	42	10	5	3	0	63	67.2
10:00	1	0	11	2	1	1	0	16	17
10:15	0	0	17	3	0	1	0	21	22.3
10:30	0	0	16	3	2	0	0	21	22
10:45	0	0	16	2	0	1	0	19	20.3
H/TOT	1	0	60	10	3	3	0	77	81.6
11:00	1	0	16	3	0	1	0	21	21.5
11:15	1	0	14	3	0	1	0	19	19.5
11:30	1	0	14	3	1	0	0	19	18.7
11:45	1	0	9	3	2	0	0	15	15.2
H/TOT	4	0	53	12	3	2	0	74	74.9
12:00	0	0	21	2	1	1	0	25	26.8
12:15	0	0	9	9	0	0	0	18	18
12:30	1	0	16	2	2	1	0	22	23.5
12:45	1	0	12	1	0	0	0	14	13.2
H/TOT	2	0	58	14	3	2	0	79	81.5
13:00	1	0	15	2	0	0	0	18	17.2
13:15	0	0	15	4	0	1	0	20	21.3
13:30	2	0	23	0	0	1	0	26	25.7
13:45	0	0	23	2	1	1	0	27	28.8
H/TOT	3	0	76	8	1	3	0	91	93
14:00	2	0	17	3	0	0	0	22	20.4
14:15	0	0	22	1	0	1	0	24	25.3
14:30	1	0	21	1	1	0	0	24	23.7
14:45	0	0	22	1	1	0	0	24	24.5
H/TOT	3	0	82	6	2	1	0	94	93.9
15:00	1	0	20	1	0	0	0	22	21.2
15:15	1	0	23	3	1	2	0	30	32.3
15:30	0	0	16	3	1	0	0	20	20.5
15:45	0	0	19	5	0	1	0	25	26.3
H/TOT	2	0	78	12	2	3	0	97	100.3
16:00	0	0	27	2	0	0	0	29	29
16:15	0	0	22	0	0	0	0	22	22
16:30	1	1	24	2	0	0	0	28	26.6
16:45	1	1	17	2	0	0	0	21	19.6
H/TOT	2	2	90	6	0	0	0	100	97.2
17:00	1	0	28	2	0	0	0	31	30.2
17:15	0	1	25	2	0	0	0	28	27.4
17:30	2	0	29	4	0	0	0	35	33.4
17:45	1	0	32	3	0	0	0	36	35.2
H/TOT	4	1	114	11	0	0	0	130	126.2
18:00	2	1	30	1	0	0	0	34	31.8
18:15	0	0	42	2	0	0	0	44	44
18:30	1	0	27	0	0	0	0	28	27.2
18:45	1	0	25	2	0	0	0	28	27.2
H/TOT	4	1	124	5	0	0	0	134	130.2
19:00	2	0	27	4	1	0	0	34	32.9
19:15	0	0	31	3	1	0	0	35	35.5
19:30	1	0	23	1	0	0	0	25	24.2
19:45	0	0	15	0	0	0	0	15	15
H/TOT	3	0	96	8	2	0	0	109	107.6
14 TOT	49	6	1127	177	31	25	0	1415	1420.2

D => B

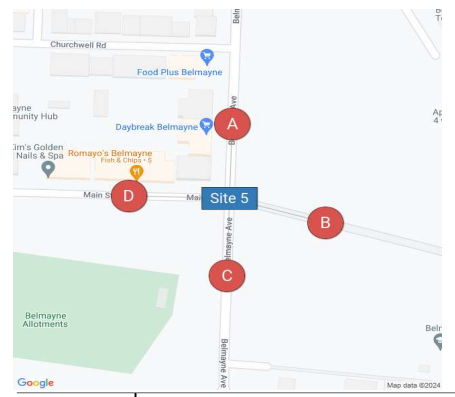
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	62	10	3	1	2	78	82.8
06:15	0	0	91	31	3	5	3	133	144
06:30	1	0	80	32	6	3	2	124	132.1
06:45	2	1	101	45	7	2	1	159	163.9
H/TOT	3	1	334	118	19	11	8	494	522.8
07:00	0	0	87	39	6	4	2	138	148.2
07:15	4	0	109	46	6	3	4	172	179.7
07:30	0	4	120	56	6	6	1	193	202.4
07:45	0	1	124	34	7	5	3	174	186.4
H/TOT	4	5	440	175	25	18	10	677	716.7
08:00	2	0	153	34	7	4	4	204	215.1
08:15	4	0	128	18	8	5	2	165	174.3
08:30	4	0	122	18	10	1	2	157	162.1
08:45	3	2	96	35	9	6	1	152	161.7
H/TOT	13	2	499	105	34	16	9	678	713.2
09:00	0	0	126	32	12	3	3	176	188.9
09:15	0	0	112	35	14	2	5	168	182.6
09:30	3	0	121	44	5	0	1	174	175.1
09:45	1	0	119	41	11	2	2	176	185.3
H/TOT	4	0	478	152	42	7	11	694	731.9
10:00	0	2	108	30	11	4	6	161	176.5
10:15	0	0	113	34	5	3	5	160	171.4
10:30	2	1	111	25	10	1	3	153	160.1
10:45	2	0	113	26	10	5	2	158	169.9
H/TOT	4	3	445	115	36	13	16	632	677.9
11:00	2	0	90	35	10	1	3	141	148.7
11:15	1	1	125	44	4	2	3	180	186.2
11:30	0	0	128	23	15	4	0	170	182.7
11:45	1	0	106	19	9	2	4	141	151.3
H/TOT	4	1	449	121	38	9	10	632	668.9
12:00	0	0	140	35	10	5	3	193	207.5
12:15	1	0	119	36	10	3	0	169	177.1
12:30	0	0	128	28	6	6	2	170	182.8
12:45	1	0	146	21	10	1	2	181	188.5
H/TOT	2	0	533	120	36	15	7	713	755.9
13:00	0	3	159	19	8	2	2	193	199.8
13:15	1	1	135	24	3	0	1	165	166.1
13:30	0	4	126	19	9	2	7	167	178.7
13:45	1	0	157	26	5	4	0	193	199.9
H/TOT	2	8	577	88	25	8	10	718	744.5
14:00	0	3	138	34	10	2	4	191	200.8
14:15	0	0	142	22	5	1	3	173	179.8
14:30	0	0	131	22	5	2	1	161	167.1
14:45	0	1	129	24	5	3	8	170	183.8
H/TOT	0	4	540	102	25	8	16	695	731.5
15:00	0	1	143	25	7	2	1	179	185.5
15:15	0	0	148	23	1	3	2	177	183.4
15:30	0	1	147	28	3	2	2	183	188.5
15:45	1	0	136	29	3	1	2	172	176
H/TOT	1	2	574	105	14	8	7	711	733.4
16:00	0	0	149	22	4	1	2	178	183.3
16:15	1	0	132	25	4	0	2	164	167.2
16:30	0	0	120	23	4	0	2	149	153
16:45	0	1	149	18	1	0	2	171	172.9
H/TOT	1	1	550	88	13	1	8	662	676.4
17:00	3	0	162	16	1	0	2	184	184.1
17:15	2	1	138	20	2	0	0	163	161.8
17:30	0	1	162	20	0	0	4	187	190.4
17:45	4	2	153	17	1	0	2	179	177.1
H/TOT	9	4	615	73	4	0	8	713	713.4
18:00	2	2	194	15	0	0	1	214	212.2
18:15	1	3	200	18	0	0	2	224	223.4
18:30	0	2	196	13	2	0	4	217	220.8
18:45	4	1	169	20	3	0	0	197	194.7
H/TOT	7	8	759	66	5	0	7	852	851.1
19:00	1	1	151	12	2	1	3	171	174.9
19:15	0	0	154	11	0	0	0	165	165
19:30	1	0	147	6	1	0	2	157	158.7
19:45	1	2	156	7	1	0	4	171	173.5
H/TOT	3	3	608	36	4	1	9	664	672.1
14 TOT	57	42	7401	1464	320	115	136	9535	9909.7

D => C

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	3	0	0	0	0	3	3
06:15	0	0	1	0	2	0	0	3	4
06:30	0	0	5	0	0	0	0	5	5
06:45	0	0	9	1	0	0	0	10	10
H/TOT	0	0	18	1	2	0	0	21	22
07:00	0	0	8	0	0	0	0	8	8
07:15	0	0	6	2	0	0	0	8	8
07:30	0	0	11	2	1	0	0	14	14.5
07:45	0	0	13	2	1	0	0	16	16.5
H/TOT	0	0	38	6	2	0	0	46	47
08:00	0	0	9	2	0	0	0	11	11
08:15	0	0	18	3	0	1	0	22	23.3
08:30	0	0	31	2	2	0	0	35	36
08:45	0	0	29	1	0	0	0	30	30
H/TOT	0	0	87	8	2	1	0	98	100.3
09:00	0	0	26	3	0	0	0	29	29
09:15	0	0	13	3	0	0	0	16	16
09:30	0	0	14	2	0	0	0	16	16
09:45	0	0	15	2	1	0	0	18	18.5
H/TOT	0	0	68	10	1	0	0	79	79.5
10:00	0	0	14	1	1	0	0	16	16.5
10:15	0	0	11	0	0	0	0	11	11
10:30	0	0	15	4	2	0	0	21	22
10:45	0	0	18	0	0	0	0	18	18
H/TOT	0	0	58	5	3	0	0	66	67.5
11:00	0	0	18	2	0	0	0	20	20
11:15	0	0	19	1	1	0	0	21	21.5
11:30	0	0	22	2	1	0	0	25	25.5
11:45	0	0	23	3	0	0	0	26	26
H/TOT	0	0	82	8	2	0	0	92	93
12:00	0	0	27	1	0	0	0	28	28
12:15	0	0	19	2	0	0	0	21	21
12:30	0	0	29	4	0	0	0	33	33
12:45	0	0	15	3	1	0	0	19	19.5
H/TOT	0	0	90	10	1	0	0	101	101.5
13:00	0	0	34	2	0	0	0	36	36
13:15	0	0	18	3	0	0	0	21	21
13:30	0	1	19	3	1	0	0	24	23.9
13:45	1	0	28	2	1	0	0	32	31.7
H/TOT	1	1	99	10	2	0	0	113	112.6
14:00	0	0	31	2	1	0	0	34	34.5
14:15	1	0	26	2	0	0	0	29	28.2
14:30	0	1	25	3	1	0	0	30	29.9
14:45	0	1	41	2	0	0	0	44	43.4
H/TOT	1	2	123	9	2	0	0	137	136
15:00	0	1	34	4	0	0	0	39	38.4
15:15	0	0	29	5	0	0	0	34	34
15:30	0	0	39	6	1	0	0	46	46.5
15:45	0	0	23	7	0	0	0	30	30
H/TOT	0	1	125	22	1	0	0	149	148.9
16:00	0	0	46	4	0	0	0	50	50
16:15	0	0	40	5	0	0	0	45	45
16:30	0	1	50	9	1	0	0	61	60.9
16:45	0	1	40	4	0	0	0	45	44.4
H/TOT	0	2	176	22	1	0	0	201	200.3
17:00	1	0	41	5	1	0	0	48	47.7
17:15	0	0	41	7	0	0	0	48	48
17:30	1	0	41	5	0	0	0	47	46.2
17:45	0	0	43	6	0	0	0	49	49
H/TOT	2	0	166	23	1	0	0	192	190.9
18:00	0	2	43	2	0	0	0	47	45.8
18:15	0	0	39	4	0	0	0	43	43
18:30	0	0	43	2	0	0	0	45	45
18:45	0	0	36	4	0	0	0	40	40
H/TOT	0	2	161	12	0	0	0	175	173.8
19:00	0	0	40	6	0	0	0	46	46
19:15	0	0	47	3	1	0	0	51	51.5
19:30	0	0	33	2	0	0	0	35	35
19:45	0	0	27	2	0	0	0	29	29
H/TOT	0	0	147	13	1	0	0	161	161.5
14 TOT	4	8	1438	159	21	1	0	1631	1634.8

D => D

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	1	0	0	0	1	2	3
06:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	1	2	3
07:00	0	0	1	0	0	0	2	3	5
07:15	0	0	0	0	0	0	1	1	2
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	2	2	4
H/TOT	0	0	1	0	0	0	5	6	11
08:00	0	0	1	0	0	0	0	1	1
08:15	0	0	0	0	0	0	2	2	4
08:30	0	0	0	0	0	1	3	4	8.3
08:45	0	0	0	0	1	0	1	2	3.5
H/TOT	0	0	1	0	1	1	6	9	16.8
09:00	0	0	0	0	0	0	1	1	2
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	3	3	6
09:45	0	0	0	0	0	0	1	1	2
H/TOT	0	0	0	0	0	0	5	5	10
10:00	0	0	1	0	0	0	0	1	1
10:15	0	0	1	0	0	0	3	4	7
10:30	0	0	0	0	0	0	1	1	2
10:45	0	0	0	0	0	0	1	1	2
H/TOT	0	0	2	0	0	0	5	7	12
11:00	0	0	0	0	0	0	2	2	4
11:15	0	0	0	0	0	0	2	2	4
11:30	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	2	2	4
H/TOT	0	0	0	0	0	0	6	6	12
12:00	0	0	0	0	0	0	1	1	2
12:15	0	0	0	0	0	0	1	1	2
12:30	0	0	0	0	0	0	3	3	6
12:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	5	5	10
13:00	0	0	0	0	0	0	2	2	4
13:15	0	0	0	0	0	0	1	1	2
13:30	0	0	0	0	0	0	2	2	4
13:45	0	0	0	0	0	0	1	1	2
H/TOT	0	0	0	0	0	0	6	6	12
14:00	0	0	0	0	0	0	2	2	4
14:15	0	0	0	0	0	0	1	1	2
14:30	0	0	1	0	0	0	1	2	3
14:45	0	0	0	0	0	0	2	2	4
H/TOT	0	0	1	0	0	0	6	7	13
15:00	0	0	0	0	0	0	1	1	2
15:15	0	0	0	0	0	0	2	2	4
15:30	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	3	3	6
H/TOT	0	0	0	0	0	0	6	6	12
16:00	0	0	0	0	0	0	1	1	2
16:15	0	0	0	0	0	0	2	2	4
16:30	0	0	1	0	0	0	1	2	3
16:45	0	0	0	0	0	0	1	1	2
H/TOT	0	0	1	0	0	0	5	6	11
17:00	0	0	0	0	0	0	2	2	4
17:15	0	0	0	0	0	0	2	2	4
17:30	0	0	1	0	0	0	0	1	1
17:45	0	0	0	1	0	0	1	2	3
H/TOT	0	0	1	1	0	0	5	7	12
18:00	0	0	0	0	0	0	2	2	4
18:15	0	0	1	0	0	0	0	1	1
18:30	0	0	0	0	0	0	4	4	8
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	6	7	13
19:00	0	0	0	0	0	0	3	3	6
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	2	2	4
H/TOT	0	0	0	0	0	0	5	5	10
14 TOT	0	0	9	1	1	1	72	84	157.8



IDASO

Survey Name: 24260 - Belmayne and Clongriffin
Site: Site 5
Location: Belmayne Avenue / Main Street
Date: Thu 11-Apr-2024
AM Peak: 08:00 — 09:00 **Total:** 690
PM Peak: 17:00 — 18:00 **Total:** 597
15 Min Peak: 08:15 — 08:30 **Total:** 217

Arm A - Belmayne Avenue
Arm B - Main Street
Arm C - Belmayne Avenue
Arm D - Main Street

A => A

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	1	0	0	1	1.5
H/TOT	0	0	0	0	1	0	0	1	1.5
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0
11:30	0	0	0	1	0	0	0	1	1
11:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	1	1	0	0	0	2	2
12:00	0	0	0	1	0	0	0	1	1
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	1	0	0	0	1	1
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	2	0	0	0	0	2	2
13:30	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	0	0	0	0	2	2
14:00	0	0	0	0	1	0	0	1	1.5
14:15	0	0	1	0	0	0	0	1	1
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	1	0	0	2	2.5
15:00	0	0	0	0	0	0	0	0	0
15:15	0	0	2	0	0	0	0	2	2
15:30	0	0	0	0	0	0	0	0	0
15:45	0	0	1	1	0	0	0	2	2
H/TOT	0	0	3	1	0	0	0	4	4
16:00	0	0	1	0	0	0	0	1	1
16:15	0	0	1	0	0	0	0	1	1
16:30	0	0	1	0	0	0	0	1	1
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	0	0	0	3	3
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	1	0	0	0	0	1	1
17:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	2	0	0	0	0	2	2
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
19:00	0	0	1	0	0	0	0	1	1
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	1	0	0	0	0	1	1
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	0	0	0	0	2	2
14 TOT	0	0	14	3	2	0	0	19	20

A => B

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	1	0	0	0	0	1	1
06:30	1	0	0	1	0	1	0	3	3.5
06:45	0	0	1	1	0	1	0	3	4.3
H/TOT	1	0	2	2	0	2	0	7	8.8
07:00	0	0	0	4	0	0	0	4	4
07:15	0	0	2	1	0	0	0	3	3
07:30	0	0	0	1	0	0	0	1	1
07:45	0	0	1	2	0	1	0	4	5.3
H/TOT	0	0	3	8	0	1	0	12	13.3
08:00	0	0	2	0	0	0	0	2	2
08:15	0	0	1	0	0	0	0	1	1
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	1	0	0	1	1.5
H/TOT	0	0	3	0	1	0	0	4	4.5
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	0	1	0	0	0	1	1
09:30	0	0	0	2	0	0	0	2	2
09:45	0	0	0	1	0	0	0	1	1
H/TOT	0	0	0	4	0	0	0	4	4
10:00	0	0	0	1	0	0	0	1	1
10:15	0	0	0	1	1	1	0	3	4.8
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	1	0	0	1	1.5
H/TOT	0	0	0	2	2	1	0	5	7.3
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	2	0	0	2	3
11:30	0	0	0	1	0	0	0	1	1
11:45	0	0	1	1	0	0	0	2	2
H/TOT	0	0	1	2	2	0	0	5	6
12:00	0	0	0	0	0	0	0	0	0
12:15	1	0	1	0	0	0	0	2	1.2
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0
H/TOT	1	0	1	0	0	0	0	2	1.2
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0
13:45	0	0	0	1	1	0	0	2	2.5
H/TOT	0	0	0	1	1	0	0	2	2.5
14:00	1	0	1	1	0	0	0	3	2.2
14:15	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	1	0	0	1	1.5
H/TOT	1	0	1	1	1	0	0	4	3.7
15:00	0	0	0	0	0	0	0	0	0
15:15	0	0	0	1	0	0	0	1	1
15:30	0	0	1	0	0	0	0	1	1
15:45	0	0	0	1	0	0	0	1	1
H/TOT	0	0	1	2	0	0	0	3	3
16:00	0	0	0	0	0	0	1	1	2
16:15	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	1	1	2
17:00	0	0	0	0	0	1	0	1	2.3
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	1	0	1	2.3
18:00	0	0	1	0	0	0	0	1	1
18:15	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
19:00	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14 TOT	3	0	13	22	7	5	1	51	59.6

A => C

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	1	20	4	0	0	0	25	24.4
06:15	1	0	24	2	1	0	0	28	27.7
06:30	1	1	23	8	0	0	0	33	31.6
06:45	2	0	24	1	1	0	0	28	26.9
H/TOT	4	2	91	15	2	0	0	114	110.6
07:00	2	1	25	2	0	0	0	30	27.8
07:15	1	0	30	7	0	0	0	38	37.2
07:30	2	1	42	5	1	0	0	51	49.3
07:45	0	0	63	4	0	0	0	67	67
H/TOT	5	2	160	18	1	0	0	186	181.3
08:00	0	1	82	2	0	0	1	86	86.4
08:15	4	1	109	5	0	0	0	119	115.2
08:30	0	0	101	3	0	0	0	104	104
08:45	2	0	72	3	0	0	0	77	75.4
H/TOT	6	2	364	13	0	0	1	386	381
09:00	0	0	38	3	1	0	0	42	42.5
09:15	0	0	41	2	1	0	0	44	44.5
09:30	0	0	31	2	1	0	0	34	34.5
09:45	1	1	21	2	0	0	0	25	23.6
H/TOT	1	1	131	9	3	0	0	145	145.1
10:00	0	1	26	2	1	0	0	30	29.9
10:15	1	0	31	1	1	0	0	34	33.7
10:30	0	1	23	2	0	0	0	26	25.4
10:45	0	0	40	2	0	0	0	42	42
H/TOT	1	2	120	7	2	0	0	132	131
11:00	0	0	31	4	0	0	0	35	35
11:15	0	0	23	4	0	0	0	27	27
11:30	0	1	31	4	0	0	0	36	35.4
11:45	0	1	29	3	1	0	0	34	33.9
H/TOT	0	2	114	15	1	0	0	132	131.3
12:00	0	1	37	3	0	0	0	41	40.4
12:15	1	0	22	2	0	0	0	25	24.2
12:30	0	0	26	2	1	0	0	29	29.5
12:45	0	1	34	3	1	0	0	39	38.9
H/TOT	1	2	119	10	2	0	0	134	133
13:00	0	1	30	1	1	0	0	33	32.9
13:15	0	0	36	4	0	0	0	40	40
13:30	1	0	40	4	0	0	0	45	44.2
13:45	0	1	46	5	2	0	0	54	54.4
H/TOT	1	2	152	14	3	0	0	172	171.5
14:00	0	0	30	3	0	0	0	33	33
14:15	2	1	44	3	0	0	0	50	47.8
14:30	0	0	64	2	0	0	0	66	66
14:45	0	0	56	2	1	0	0	59	59.5
H/TOT	2	1	194	10	1	0	0	208	206.3
15:00	0	0	33	5	0	0	0	38	38
15:15	0	0	40	7	0	0	0	47	47
15:30	0	0	38	5	0	0	0	43	43
15:45	0	0	56	2	1	0	0	59	59.5
H/TOT	0	0	167	19	1	0	0	187	187.5
16:00	0	0	52	4	0	0	0	56	56
16:15	0	1	51	2	0	0	0	54	53.4
16:30	0	0	58	3	1	0	0	62	62.5
16:45	0	0	39	4	0	0	0	43	43
H/TOT	0	1	200	13	1	0	0	215	214.9
17:00	0	0	44	2	0	0	0	46	46
17:15	0	0	57	1	0	0	0	58	58
17:30	0	1	66	5	0	0	0	72	71.4
17:45	0	2	55	1	1	0	0	59	58.3
H/TOT	0	3	222	9	1	0	0	235	233.7
18:00	0	0	43	3	0	0	0	46	46
18:15	0	0	57	4	1	0	0	62	62.5
18:30	0	0	58	1	0	0	0	59	59
18:45	0	0	51	6	0	0	0	57	57
H/TOT	0	0	209	14	1	0	0	224	224.5
19:00	0	1	37	4	0	0	0	42	41.4
19:15	0	0	39	3	1	0	0	43	43.5
19:30	0	0	49	4	0	0	0	53	53
19:45	0	0	42	3	1	0	0	46	46.5
H/TOT	0	1	167	14	2	0	0	184	184.4
14 TOT	21	21	2410	180	21	0	1	2654	2636.1

A => D

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	1	0	0	0	1	1
06:30	0	0	2	0	0	0	0	2	2
06:45	0	0	2	0	0	0	0	2	2
H/TOT	0	0	4	1	0	0	0	5	5
07:00	0	0	2	0	0	0	0	2	2
07:15	0	0	1	0	0	0	0	1	1
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	1	0	0	0	1	1
H/TOT	0	0	3	1	0	0	0	4	4
08:00	0	0	0	0	0	0	0	0	0
08:15	2	0	0	0	0	0	0	2	0.4
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2	0.4
09:00	0	0	0	1	0	0	0	1	1
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	1	0	0	1	1.5
H/TOT	0	0	0	1	1	0	0	2	2.5
10:00	0	0	0	0	1	0	0	1	1.5
10:15	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	1	0	1	0	0	2	2.5
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	1	0	0	1	1.5
H/TOT	0	0	0	0	1	0	0	1	1.5
15:00	0	0	0	0	0	0	0	0	0
15:15	0	0	1	0	0	0	0	1	1
15:30	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
16:00	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0
16:30	1	0	0	0	0	0	0	1	0.2
16:45	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0.2
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
18:00	0	0	1	0	0	0	0	1	1
18:15	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
19:00	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14 TOT	3	0	10	3	3	0	0	19	18.1

B => A

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0
06:45	0	0	1	0	0	2	0	3	5.6
H/TOT	0	0	1	0	0	2	0	3	5.6
07:00	0	0	0	0	0	0	0	0	0
07:15	0	0	0	1	0	0	0	1	1
07:30	0	0	0	1	1	0	0	2	2.5
07:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	2	1	0	0	3	3.5
08:00	0	0	1	1	0	0	0	2	2
08:15	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	3	0	0	3	4.5
08:45	0	0	0	0	1	1	0	2	3.8
H/TOT	0	0	1	1	4	1	0	7	10.3
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	2	0	0	2	3
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	2	0	0	2	3
10:00	0	0	0	0	0	1	0	1	2.3
10:15	0	0	1	0	0	0	0	1	1
10:30	0	0	1	1	0	1	0	3	4.3
10:45	0	0	0	0	1	0	0	1	1.5
H/TOT	0	0	2	1	1	2	0	6	9.1
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	2	0	0	2	3
11:30	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	2	0	0	2	3
12:00	0	0	2	0	1	0	0	3	3.5
12:15	1	0	0	0	0	0	0	1	0.2
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0
H/TOT	1	0	2	0	1	0	0	4	3.7
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	1	0	0	0	0	1	1
13:30	0	0	1	1	0	0	0	2	2
13:45	0	0	0	1	0	0	0	1	1
H/TOT	0	0	2	2	0	0	0	4	4
14:00	0	0	1	0	0	0	0	1	1
14:15	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	1	2	0	0	3	4
H/TOT	0	0	1	1	2	0	0	4	5
15:00	0	0	2	0	0	0	0	2	2
15:15	0	0	1	0	0	0	0	1	1
15:30	0	0	0	0	0	1	0	1	2.3
15:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	0	1	0	4	5.3
16:00	0	0	2	2	0	0	1	5	6
16:15	0	0	0	1	0	0	0	1	1
16:30	0	0	2	1	0	0	0	3	3
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	4	4	0	0	1	9	10
17:00	0	0	2	0	0	0	0	2	2
17:15	0	0	2	0	0	0	0	2	2
17:30	0	0	0	0	0	1	0	1	2.3
17:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	4	0	0	1	0	5	6.3
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	0	1	0	0	0	1	1
18:30	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	1	0	0	0	1	1
19:00	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	1	0	0	0	0	1	1
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
14 TOT	1	0	21	12	13	7	1	55	70.8

B => B

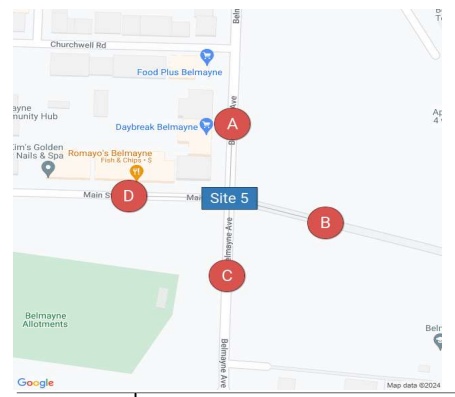
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	1	0	0	0	0	1	1
06:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
07:00	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	1	0	1	2.3
08:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	1	0	1	2.3
09:00	0	0	0	0	1	0	0	1	1.5
09:15	0	0	0	0	2	0	0	2	3
09:30	0	0	0	0	1	0	0	1	1.5
09:45	0	0	0	0	1	0	0	1	1.5
H/TOT	0	0	0	0	5	0	0	5	7.5
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	1	0	0	1	1.5
H/TOT	0	0	0	0	1	0	0	1	1.5
11:00	0	0	0	0	2	0	0	2	3
11:15	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	2	0	0	2	3
12:00	0	0	0	0	1	0	0	1	1.5
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	1	0	0	1	1.5
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	3	0	0	3	4.5
13:30	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	3	0	0	3	4.5
14:00	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	2	0	0	2	3
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	2	0	0	2	3
15:00	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	1	0	0	1	1.5
15:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	1	0	0	1	1.5
16:00	0	0	0	2	2	0	0	4	5
16:15	0	0	0	0	5	0	0	5	7.5
16:30	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	2	7	0	0	9	12.5
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	1	0	0	0	0	1	1
18:30	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
19:00	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14 TOT	0	0	2	2	22	1	0	27	39.3

B => C

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	1	0	0	0	0	1	1
06:30	0	0	0	1	0	0	0	1	1
06:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	2	1	0	0	0	3	3
07:00	0	0	0	0	0	1	0	1	2.3
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	1	1	0	0	0	2	2
07:45	0	0	1	0	0	3	0	4	7.9
H/TOT	0	0	2	1	0	4	0	7	12.2
08:00	0	0	0	0	1	0	0	1	1.5
08:15	0	0	1	2	0	1	0	4	5.3
08:30	0	0	0	1	2	0	0	3	4
08:45	0	0	0	0	1	0	0	1	1.5
H/TOT	0	0	1	3	4	1	0	9	12.3
09:00	0	0	1	0	0	1	0	2	3.3
09:15	0	0	0	0	1	1	0	2	3.8
09:30	0	0	1	1	2	1	0	5	7.3
09:45	0	0	0	1	0	0	0	1	1
H/TOT	0	0	2	2	3	3	0	10	15.4
10:00	0	0	1	4	1	1	0	7	8.8
10:15	0	0	2	0	0	1	0	3	4.3
10:30	0	0	2	0	2	1	0	5	7.3
10:45	0	0	0	1	1	1	0	3	4.8
H/TOT	0	0	5	5	4	4	0	18	25.2
11:00	0	0	2	0	1	0	0	3	3.5
11:15	0	0	1	3	0	2	0	6	8.6
11:30	0	0	0	5	0	0	0	5	5
11:45	0	0	0	0	2	0	0	2	3
H/TOT	0	0	3	8	3	2	0	16	20.1
12:00	0	0	2	2	1	1	0	6	7.8
12:15	0	0	1	2	2	1	0	6	8.3
12:30	0	0	3	0	0	1	0	4	5.3
12:45	0	0	1	2	0	1	0	4	5.3
H/TOT	0	0	7	6	3	4	0	20	26.7
13:00	0	0	0	1	2	0	0	3	4
13:15	0	0	3	1	0	0	0	4	4
13:30	0	0	2	1	2	0	0	5	6
13:45	0	0	2	0	2	0	0	4	5
H/TOT	0	0	7	3	6	0	0	16	19
14:00	0	0	1	1	1	1	0	4	5.8
14:15	2	1	2	1	1	0	0	7	5.3
14:30	0	0	1	1	2	0	0	4	5
14:45	1	1	3	4	1	0	0	10	9.1
H/TOT	3	2	7	7	5	1	0	25	25.2
15:00	2	0	3	2	1	1	0	9	9.2
15:15	0	0	3	3	1	0	0	7	7.5
15:30	0	0	4	5	1	0	0	10	10.5
15:45	0	0	1	2	0	0	0	3	3
H/TOT	2	0	11	12	3	1	0	29	30.2
16:00	1	0	6	6	1	0	0	14	13.7
16:15	1	0	4	2	1	0	0	8	7.7
16:30	0	0	5	4	0	0	0	9	9
16:45	0	0	8	1	0	0	0	9	9
H/TOT	2	0	23	13	2	0	0	40	39.4
17:00	0	0	8	1	1	0	0	10	10.5
17:15	0	0	5	0	0	1	0	6	7.3
17:30	0	0	3	1	0	0	0	4	4
17:45	1	0	8	0	0	1	0	10	10.5
H/TOT	1	0	24	2	1	2	0	30	32.3
18:00	1	0	0	3	0	0	0	4	3.2
18:15	0	0	4	0	0	0	0	4	4
18:30	0	0	1	0	0	0	0	1	1
18:45	0	0	3	1	0	0	0	4	4
H/TOT	1	0	8	4	0	0	0	13	12.2
19:00	0	0	2	0	0	0	0	2	2
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	0	0	0	0	2	2
14 TOT	9	2	104	67	34	22	0	238	275.2

B => D

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	1	0	0	0	0	1	1
06:30	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
07:00	0	0	1	0	1	0	0	2	2.5
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	1	0	0	1	1.5
07:45	0	0	1	1	0	0	0	2	2
H/TOT	0	0	2	1	2	0	0	5	6
08:00	0	0	1	0	2	0	0	3	4
08:15	0	0	0	1	0	0	0	1	1
08:30	0	0	0	0	1	0	0	1	1.5
08:45	0	0	1	0	2	0	0	3	4
H/TOT	0	0	2	1	5	0	0	8	10.5
09:00	0	0	0	0	3	0	0	3	4.5
09:15	0	0	0	0	2	0	0	2	3
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	5	0	0	5	7.5
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	1	0	0	0	0	1	1
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	2	0	0	2	3
11:30	0	0	1	0	1	0	0	2	2.5
11:45	0	0	0	1	1	0	0	2	2.5
H/TOT	0	0	1	1	4	0	0	6	8
12:00	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	2	0	0	2	3
12:30	0	0	1	0	0	0	0	1	1
12:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	2	0	0	3	4
13:00	0	0	0	0	1	0	0	1	1.5
13:15	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	1	0	0	1	1.5
13:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	2	0	0	2	3
14:00	1	0	0	0	1	0	0	2	1.7
14:15	0	0	0	1	1	0	0	2	2.5
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	1	0	0	1	1.5
H/TOT	1	0	0	1	3	0	0	5	5.7
15:00	1	0	0	0	0	0	0	1	0.2
15:15	0	0	0	0	3	0	0	3	4.5
15:30	0	0	0	0	3	0	0	3	4.5
15:45	0	0	0	0	3	0	0	3	4.5
H/TOT	1	0	0	0	9	0	0	10	13.7
16:00	0	0	0	0	2	0	0	2	3
16:15	0	0	0	0	2	0	0	2	3
16:30	0	0	0	0	2	0	0	2	3
16:45	0	0	0	0	1	0	0	1	1.5
H/TOT	0	0	0	0	7	0	0	7	10.5
17:00	0	0	0	0	1	0	0	1	1.5
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	1	0	0	1	1.5
17:45	0	0	1	0	1	0	0	2	2.5
H/TOT	0	0	1	0	3	0	0	4	5.5
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
19:00	0	0	1	0	0	0	0	1	1
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
14 TOT	2	0	10	4	42	0	0	58	77.4



IDASO

Survey Name: 24260 - Belmayne and Clongriffin
Site: Site 5
Location: Belmayne Avenue / Main Street
Date: Thu 11-Apr-2024
AM Peak: 08:00 — 09:00 **Total:** 690
PM Peak: 17:00 — 18:00 **Total:** 597
15 Min Peak: 08:15 — 08:30 **Total:** 217

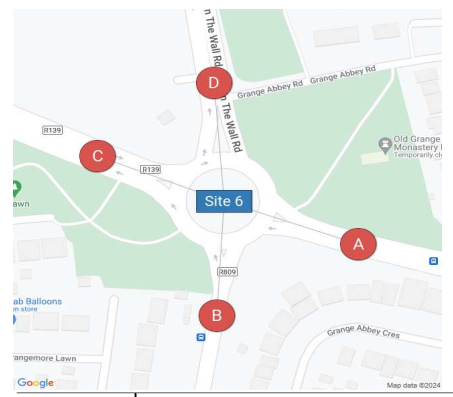
Arm A - Belmayne Avenue
Arm B - Main Street
Arm C - Belmayne Avenue
Arm D - Main Street

	C => A									C => B								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	9	0	1	0	0	10	10.5	0	0	0	0	0	0	0	0	0
06:15	0	0	6	1	0	0	0	7	7	1	0	4	0	0	0	0	5	4.2
06:30	0	0	5	1	0	1	0	7	8.3	1	1	10	7	0	1	0	20	19.9
06:45	0	0	8	0	0	0	0	8	8	1	0	15	8	1	0	0	25	24.7
H/TOT	0	0	28	2	1	1	0	32	33.8	3	1	29	15	1	1	0	50	48.8
07:00	0	0	14	2	0	0	0	16	16	2	0	4	4	0	0	0	10	8.4
07:15	0	1	10	7	1	0	0	19	18.9	0	0	9	2	0	2	0	13	15.6
07:30	0	0	21	3	0	0	0	24	24	1	0	9	0	1	2	0	13	15.3
07:45	0	0	31	3	0	0	0	34	34	0	0	5	5	1	1	0	12	13.8
H/TOT	0	1	76	15	1	0	0	93	92.9	3	0	27	11	2	5	0	48	53.1
08:00	0	0	47	2	1	0	0	50	50.5	0	0	2	2	2	0	0	6	7
08:15	1	0	73	5	1	0	0	80	79.7	1	0	1	2	1	1	0	6	7
08:30	0	1	46	4	1	0	0	52	51.9	0	0	1	0	2	0	0	3	4
08:45	0	1	46	4	1	0	0	52	51.9	0	0	1	1	1	1	0	4	5.8
H/TOT	1	2	212	15	4	0	0	234	234	1	0	5	5	6	2	0	19	23.8
09:00	0	0	38	3	0	0	0	41	41	0	0	0	0	0	1	0	1	2.3
09:15	0	0	24	3	0	0	0	27	27	0	0	1	0	3	1	0	5	7.8
09:30	0	0	24	3	0	1	0	28	29.3	0	0	1	1	1	0	0	3	3.5
09:45	0	1	13	2	1	1	0	18	19.2	0	0	0	4	1	0	0	5	5.5
H/TOT	0	1	99	11	1	2	0	114	116.5	0	0	2	5	5	2	0	14	19.1
10:00	1	0	18	2	2	0	0	23	23.2	0	0	0	0	1	1	0	2	3.8
10:15	0	0	24	1	0	0	0	25	25	0	0	1	5	0	1	0	7	8.3
10:30	0	1	22	0	1	0	0	24	23.9	0	0	1	1	3	0	0	5	6.5
10:45	0	0	26	3	1	0	0	30	30.5	0	0	2	0	3	1	0	6	8.8
H/TOT	1	1	90	6	4	0	0	102	102.6	0	0	4	6	7	3	0	20	27.4
11:00	0	0	26	3	0	1	0	30	31.3	0	0	3	3	0	0	0	6	6
11:15	1	0	23	3	0	0	0	27	26.2	0	0	2	0	1	2	0	5	8.1
11:30	0	0	28	2	1	0	0	31	31.5	0	0	2	2	0	0	0	4	4
11:45	1	0	18	6	2	0	0	27	27.2	0	0	1	0	0	1	0	2	3.3
H/TOT	2	0	95	14	3	1	0	115	116.2	0	0	8	5	1	3	0	17	21.4
12:00	1	0	30	2	1	0	0	34	33.7	0	0	3	1	1	1	0	6	7.8
12:15	0	0	17	7	0	0	0	24	24	0	0	1	3	0	0	0	4	4
12:30	0	0	32	2	1	0	0	35	35.5	0	0	1	0	1	1	0	3	4.8
12:45	1	0	30	1	0	0	0	32	31.2	0	0	2	0	1	0	0	3	3.5
H/TOT	2	0	109	12	2	0	0	125	124.4	0	0	7	4	3	2	0	16	20.1
13:00	1	0	32	5	0	0	0	38	37.2	0	0	3	0	0	0	0	3	3
13:15	0	0	28	3	0	0	0	31	31	0	0	2	1	1	1	0	5	6.8
13:30	1	0	41	4	0	0	0	46	45.2	0	0	4	0	2	1	0	7	9.3
13:45	0	0	32	5	1	0	0	38	38.5	0	0	1	1	2	1	0	5	7.3
H/TOT	2	0	133	17	1	0	0	153	151.9	0	0	10	2	5	3	0	20	26.4
14:00	0	0	39	5	1	0	0	45	45.5	0	0	3	0	0	0	0	3	3
14:15	14	0	46	2	0	1	0	63	53.1	0	0	3	3	1	0	0	7	7.5
14:30	3	0	45	2	1	0	0	51	49.1	0	0	1	0	2	0	0	3	4
14:45	0	0	39	1	1	0	0	41	41.5	0	0	0	1	1	0	0	2	2.5
H/TOT	17	0	169	10	3	1	0	200	189.2	0	0	7	4	4	0	0	15	17
15:00	0	0	39	5	0	0	0	44	44	0	0	1	0	1	0	0	2	2.5
15:15	3	0	34	2	1	0	0	40	38.1	0	0	1	2	1	2	0	6	9.1
15:30	0	0	34	6	1	0	0	41	41.5	0	0	0	0	1	0	0	1	1.5
15:45	0	0	60	6	0	1	0	67	68.3	0	0	0	0	1	0	0	1	1.5
H/TOT	3	0	167	19	2	1	0	192	191.9	0	0	2	2	4	2	0	10	14.6
16:00	0	0	54	4	0	0	1	59	60	0	0	0	2	1	0	0	3	3.5
16:15	0	0	46	0	0	0	0	46	46	0	0	2	0	1	0	0	3	3.5
16:30	1	1	40	1	0	0	0	43	41.6	0	0	0	0	0	0	0	0	0
16:45	1	1	36	3	0	0	0	41	39.6	0	0	0	0	0	0	0	0	0
H/TOT	2	2	176	8	0	0	1	189	187.2	0	0	2	2	2	0	0	6	7
17:00	1	1	61	4	0	0	0	67	65.6	0	0	1	0	0	0	0	1	1
17:15	0	1	52	2	0	0	0	55	54.4	0	0	0	0	0	0	0	0	0
17:30	2	0	54	8	0	0	0	64	62.4	0	0	2	0	0	0	0	2	2
17:45	2	0	58	2	0	0	0	62	60.4	0	0	1	1	0	0	0	2	2
H/TOT	5	2	225	16	0	0	0	248	242.8	0	0	4	1	0	0	0	5	5
18:00	2	1	52	4	1	0	0	60	58.3	0	0	1	0	0	0	0	1	1
18:15	0	0	63	3	0	0	0	66	66	0	0	1	0	0	0	0	1	1
18:30	1	0	51	3	0	0	0	55	54.2	0	0	1	0	0	0	0	1	1
18:45	1	0	43	2	0	0	0	46	45.2	0	0	0	0	0	0	0	0	0
H/TOT	4	1	209	12	1	0	0	227	223.7	0	0	3	0	0	0	0	3	3
19:00	2	1	39	4	1	0	0	47	45.3	0	0	0	0	0	0	0	0	0
19:15	1	0	55	4	1	0	0	61	60.7	0	0	0	0	0	0	0	0	0
19:30	2	1	44	1	0	0	0	48	45.8	0	0	0	0	0	0	0	0	0
19:45	0	0	39	0	0	0	0	39	39	0	0	1	0	0	0	0	1	1
H/TOT	5	2	177	9	2	0	0	195	190.8	0	0	1	0	0	0	0	1	1
14 TOT	44	12	1965	166	25	6	1	2219	2197.9	7	1	111	62	40	23	0	244	287.7

	C => C									C => D								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	5	5
06:15	0	0	0	0	0	0	0	0	0	0	0	15	2	0	0	0	17	17
06:30	0	0	1	0	0	0	0	1	1	0	0	40	10	0	0	0	50	50
06:45	0	0	3	0	0	0	0	3	3	1	0	10	5	0	0	0	16	15.2
H/TOT	0	0	4	0	0	0	0	4	4	1	0	68	19	0	0	0	88	87.2
07:00	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
07:15	0	0	1	0	0	0	0	1	1	1	0	0	2	0	0	0	3	2.2
07:30	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
07:45	0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	0	2	2
H/TOT	0	0	2	0	0	0	0	2	2	1	0	14	4	0	0	0	19	18.2
08:00	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0.4
08:15	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
08:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
08:45	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
H/TOT	0	0	2	0	0	0	0	2	2	2	0	3	2	0	0	0	7	5.4
09:00	0	0	1	0	0	0	0	1	1	2	0	0	0	1	0	0	3	1.9
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
09:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	0	0	0	3	3	2	0	1	0	1	0	0	4	2.9
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	1	0	0	0	0	1	1	0	0	0	2	0	0	0	2	2
10:45	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0	1	1
H/TOT	0	0	2	0	0	0	0	2	2	0	0	0	3	0	0	0	3	3
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	1	0	0	0	0	1	1	1	0	0	1	0	0	0	2	1.2
H/TOT	0	0	1	0	0	0	0	1	1	1	0	0	2	0	0	0	3	2.2
12:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
12:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2
12:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	0	0	0	0	2	2	1	0	1	1	0	0	0	3	2.2
13:00	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
13:15	0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	0	2	2
13:30	0	0	1	0	0	0	0	1	1	1	0	2	0	0	0	0	3	2.2
13:45	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
H/TOT	0	0	5	0	0	0	0	5	5	1	0	5	1	0	0	0	7	6.2
14:00	0	0	1	0	0	0	0	1	1	2	0	0	0	0	0	0	2	0.4
14:15	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	2	0	0	0	0	2	2	2	0	2	0	0	0	0	4	2.4
15:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
15:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2
15:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	0	0	0	0	2	2	1	0	0	1	0	0	0	2	1.2
16:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
16:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
16:30	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
16:45	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
H/TOT	0	0	5	1	0	0	0	6	6	0	0	0	1	0	0	0	1	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
17:15	0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0
17:30	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	4	0	1	0	0	5	5.5	0	0	0	1	0	0	0	1	1
18:00	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
18:15	0	0	3	0	0	0	0	3	3	0	0	1	0	0	0	0	1	1
18:30	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
18:45	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1
H/TOT	0	0	13	0	0	0	0	13	13	0	0	2	0	0	0	0	2	2
19:00	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
19:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
19:30	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
14 TOT	0	0	54	1	1	0	0	56	56.5	12	0	96	35	1	0	0	144	134.9

	D => A									D => B								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
06:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
08:00	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	4
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	6	8.5
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	4.5
09:15	0	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	1	1.5
09:30	0	0	1	0	0	0	0	1	1	0	0	0	0	1	0	0	1	1.5
09:45	0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	1	1	0	0	3	3.5	0	0	0	0	5	0	0	5	7.5
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2.5
10:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1	0	0	0	1	1	0	0	2	2.5
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	1	0	0	1	0	0	0	2	1.2	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	4.5
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
H/TOT	1	0	0	1	0	0	0	2	1.2	0	0	0	0	4	0	0	4	6
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
13:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	3	4
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
14:30	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
14:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	1	0	0	0	2	2	0	0	0	0	2	0	0	2	3
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
15:15	0	0	2	0	0	0	0	2	2	0	0	1	0	4	0	0	5	7
15:30	0	0	3	2	0	0	0	5	5	0	0	0	1	0	0	0	1	1
15:45	0	0	0	1	0	0	0	1	1	0	0	0	0	3	0	0	3	4.5
H/TOT	0	0	5	3	0	0	0	8	8	0	0	1	1	8	0	0	10	14
16:00	0	0	0	1	0	0	0	1	1	0	0	0	0	5	0	0	5	7.5
16:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	4.5
16:45	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2.5
H/TOT	0	0	0	1	0	0	0	1	1	0	0	1	1	9	0	0	11	15.5
17:00	0	0	1	0	0	0	0	1	1	0	0	1	0	1	0	0	2	2.5
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
17:30	1	0	0	0	0	0	0	1	0.2	0	0	0	0	1	0	0	1	1.5
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5
H/TOT	1	0	1	0	0	0	0	2	1.2	0	0	1	0	4	0	0	5	7
18:00	0	0	1	0	0	0	0	1	1	0	0	0	0	1	0	0	1	1.5
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	2	0	0	0	0	2	2	0	0	0	0	1	0	0	1	1.5
19:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:45	1	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0.2	0	0	1	0	0	0	0	1	1
14 TOT	3	0	12	7	1	0	0	23	21.1	0	0	8	4	43	0	0	55	76.5

	D => C									D => D								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	1	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0
08:00	1	0	1	0	0	0	0	2	1.2	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
08:45	1	0	1	0	0	0	0	2	1.2	0	0	0	0	0	0	0	0	0
H/TOT	2	0	3	0	0	0	0	5	3.4	0	0	0	0	0	0	0	0	0
09:00	3	0	0	0	0	0	0	3	0.6	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	2	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0
09:45	1	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0
H/TOT	4	0	0	2	1	0	0	7	4.3	0	0	0	0	0	0	0	0	0
10:00	1	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	2	0	1	0	1	0	0	4	2.9	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	3	0	1	0	1	0	0	5	3.1	0	0	0	0	0	0	0	0	0
11:00	1	0	0	2	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
11:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	1	0	2	2	0	0	0	5	4.2	0	0	0	0	0	0	0	0	0
12:00	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0
12:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
12:30	0	0	1	2	0	0	0	3	3	0	0	0	0	0	0	0	0	0
12:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	4	3	0	0	0	7	7	0	0	0	0	0	0	0	0	0
13:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
13:15	1	0	1	2	0	0	0	4	3.2	0	0	0	0	0	0	0	0	0
13:30	1	0	2	1	0	0	0	4	3.2	0	0	0	0	0	0	0	0	0
13:45	1	0	0	0	1	0	0	2	1.7	0	0	0	0	0	0	0	0	0
H/TOT	3	0	4	3	1	0	0	11	9.1	0	0	0	0	0	0	0	0	0
14:00	1	0	1	0	0	0	0	2	1.2	0	0	0	0	0	0	0	0	0
14:15	3	0	0	2	0	0	0	5	2.6	0	0	0	0	0	0	0	0	0
14:30	5	0	0	1	0	0	0	6	2	0	0	0	0	0	0	0	0	0
14:45	1	0	1	1	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0
H/TOT	10	0	2	4	0	0	0	16	8	0	0	0	0	0	0	0	0	0
15:00	2	0	2	2	0	0	0	6	4.4	0	0	0	0	0	0	0	0	0
15:15	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
15:30	2	0	6	4	0	0	0	12	10.4	0	0	0	0	0	0	0	0	0
15:45	1	0	5	3	0	0	0	9	8.2	0	0	0	0	0	0	0	0	0
H/TOT	5	0	15	10	0	0	0	30	26	0	0	0	0	0	0	0	0	0
16:00	1	0	2	1	0	0	0	4	3.2	0	0	0	0	0	0	0	0	0
16:15	1	0	0	1	0	0	0	2	1.2	0	0	0	0	0	0	0	0	0
16:30	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
16:45	1	0	4	0	0	0	0	5	4.2	0	0	0	0	0	0	0	0	0
H/TOT	3	0	12	2	0	0	0	17	14.6	0	0	0	0	0	0	0	0	0
17:00	1	0	19	1	0	0	0	21	20.2	0	0	0	0	0	0	0	0	0
17:15	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
17:30	0	0	5	2	0	0	0	7	7	0	0	0	0	0	0	0	0	0
17:45	1	0	19	2	0	0	0	22	21.2	0	0	0	0	0	0	0	0	0
H/TOT	2	0	47	5	0	0	0	54	52.4	0	0	0	0	0	0	0	0	0
18:00	2	0	3	2	0	0	0	7	5.4	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	2	0	1	1	0	0	0	4	2.4	0	0	0	0	0	0	0	0	0
18:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	4	0	5	3	0	0	0	12	8.8	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	1	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0
14 TOT	39	0	95	34	3	0	0	171	141.3	0	0	0	0	0	0	0	0	0



IDASO

Survey Name: 24260 - Belmayne and Clongriffin
Site: Site 6
Location: R139 / R809 / Hole in the Wall Road
Date: Thu 11-Apr-2024
AM Peak: 08:15 — 09:15 **Total:** 3291
PM Peak: 17:15 — 18:15 **Total:** 3336
15 Min Peak: 08:15 — 08:30 **Total:** 865

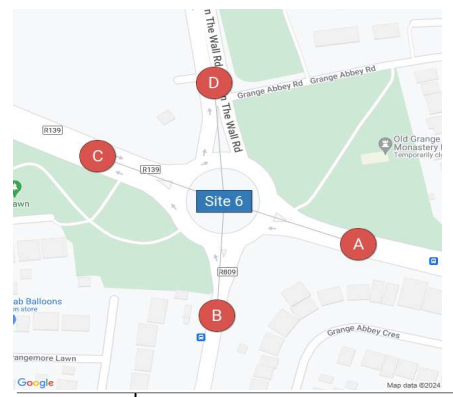
Arm A - R809 Grange Road
Arm B - R809 Grange Road
Arm C - R139
Arm D - Hole in the Wall Road

	A => A									A => B								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	1	5	6
06:15	0	0	0	0	0	0	0	0	0	2	0	8	0	0	0	2	12	12.4
06:30	0	0	0	1	0	0	0	1	1	0	0	17	0	0	0	1	18	19
06:45	0	0	0	0	0	0	0	0	0	1	1	8	4	1	0	1	16	16.1
H/TOT	0	0	0	1	0	0	0	1	1	3	1	36	5	1	0	5	51	53.5
07:00	0	0	1	0	0	0	0	1	1	1	0	15	6	0	1	1	24	25.5
07:15	0	0	0	0	0	0	0	0	0	0	0	27	5	1	0	1	34	35.5
07:30	0	0	0	0	1	0	0	1	1.5	1	0	20	5	0	0	1	27	27.2
07:45	0	0	0	0	0	0	0	0	0	2	0	28	7	2	0	1	40	40.4
H/TOT	0	0	1	0	1	0	0	2	2.5	4	0	90	23	3	1	4	125	128.6
08:00	0	0	0	0	0	0	0	0	0	0	0	32	3	0	0	2	37	39
08:15	0	0	0	0	0	0	0	0	0	0	1	51	2	1	2	1	58	61.5
08:30	0	0	0	0	0	0	0	0	0	1	1	44	7	1	0	1	55	55.1
08:45	0	0	0	0	0	0	0	0	0	0	0	47	2	0	1	0	50	51.3
H/TOT	0	0	0	0	0	0	0	0	0	1	2	174	14	2	3	4	200	206.9
09:00	0	0	0	0	0	0	0	0	0	2	0	46	4	1	0	2	55	55.9
09:15	0	0	0	1	0	0	0	1	1	1	0	38	6	1	0	1	47	47.7
09:30	0	0	0	0	0	0	0	0	0	1	0	28	6	1	0	1	37	37.7
09:45	0	0	0	0	0	0	0	0	0	0	0	35	6	2	0	1	44	46
H/TOT	0	0	0	1	0	0	0	1	1	4	0	147	22	5	0	5	183	187.3
10:00	0	0	0	0	0	0	0	0	0	1	0	36	3	0	0	1	41	41.2
10:15	0	0	0	0	0	0	0	0	0	1	0	28	6	0	0	1	36	36.2
10:30	0	0	1	0	0	0	0	1	1	1	0	32	2	2	0	1	38	39.2
10:45	0	0	0	0	0	0	0	0	0	1	0	44	6	4	1	1	57	60.5
H/TOT	0	0	1	0	0	0	0	1	1	4	0	140	17	6	1	4	172	177.1
11:00	0	0	0	0	0	0	0	0	0	0	0	48	8	0	0	1	57	58
11:15	0	0	0	0	0	0	0	0	0	0	0	35	9	1	0	1	46	47.5
11:30	0	0	0	0	0	0	0	0	0	1	0	28	4	1	0	1	35	35.7
11:45	0	0	0	0	0	0	0	0	0	1	0	40	7	0	0	1	49	49.2
H/TOT	0	0	0	0	0	0	0	0	0	2	0	151	28	2	0	4	187	190.4
12:00	0	0	0	0	0	0	0	0	0	0	0	30	1	0	0	1	32	33
12:15	0	0	0	0	0	0	0	0	0	2	0	49	8	0	0	1	60	59.4
12:30	0	0	0	0	0	0	0	0	0	1	0	49	4	0	0	1	55	55.2
12:45	0	0	1	0	0	0	0	1	1	1	0	46	4	0	0	1	52	52.2
H/TOT	0	0	1	0	0	0	0	1	1	4	0	174	17	0	0	4	199	199.8
13:00	0	0	0	0	0	0	0	0	0	1	0	37	7	1	0	1	47	47.7
13:15	0	0	0	0	0	0	0	0	0	2	0	40	5	0	0	1	48	47.4
13:30	0	0	0	0	0	0	0	0	0	0	0	41	4	0	0	1	46	47
13:45	0	0	0	0	0	0	0	0	0	1	0	32	2	1	0	1	37	37.7
H/TOT	0	0	0	0	0	0	0	0	0	4	0	150	18	2	0	4	178	179.8
14:00	0	0	0	0	0	0	0	0	0	0	0	37	7	2	0	1	47	49
14:15	0	0	0	0	0	0	0	0	0	1	0	42	3	0	0	1	47	47.2
14:30	0	0	0	0	0	0	0	0	0	1	0	42	2	1	1	0	47	48
14:45	0	0	0	0	0	0	0	0	0	1	0	32	5	0	0	2	40	41.2
H/TOT	0	0	0	0	0	0	0	0	0	3	0	153	17	3	1	4	181	185.4
15:00	0	0	0	0	0	0	0	0	0	1	0	35	4	0	0	1	41	41.2
15:15	0	0	0	0	0	0	0	0	0	0	0	40	4	0	0	1	45	46
15:30	0	0	0	0	0	0	0	0	0	2	0	35	4	0	0	0	41	39.4
15:45	0	0	0	0	0	0	0	0	0	1	0	47	3	2	0	0	53	53.2
H/TOT	0	0	0	0	0	0	0	0	0	4	0	157	15	2	0	2	180	179.8
16:00	0	0	0	0	0	0	0	0	0	0	0	36	8	1	0	2	47	49.5
16:15	0	0	0	0	0	0	0	0	0	0	0	37	6	0	0	1	44	45
16:30	0	0	0	0	0	0	0	0	0	1	0	32	4	1	0	1	39	39.7
16:45	0	0	0	0	0	0	0	0	0	0	0	44	5	0	0	1	50	51
H/TOT	0	0	0	0	0	0	0	0	0	1	0	149	23	2	0	5	180	185.2
17:00	0	0	0	0	0	0	0	0	0	0	0	59	2	0	0	1	62	63
17:15	0	0	0	0	0	0	0	0	0	0	1	49	2	0	0	1	53	53.4
17:30	0	0	0	1	0	0	0	1	1	2	1	56	0	0	0	1	60	58.8
17:45	0	0	0	0	0	0	0	0	0	1	0	45	4	0	0	1	51	51.2
H/TOT	0	0	0	1	0	0	0	1	1	3	2	209	8	0	0	4	226	226.4
18:00	0	0	0	0	0	0	0	0	0	0	0	43	3	0	0	1	47	48
18:15	0	0	1	0	0	0	0	1	1	0	0	33	4	0	0	1	38	39
18:30	0	0	0	0	0	0	0	0	0	0	0	36	2	0	0	1	39	40
18:45	0	0	1	0	0	0	0	1	1	1	0	36	3	0	0	1	41	41.2
H/TOT	0	0	2	0	0	0	0	2	2	1	0	148	12	0	0	4	165	168.2
19:00	0	0	0	0	0	0	0	0	0	0	0	50	1	0	0	1	52	53
19:15	0	0	0	0	0	0	0	0	0	0	0	38	1	0	0	1	40	41
19:30	0	0	0	0	0	0	0	0	0	1	0	24	1	0	0	1	27	27.2
19:45	0	0	0	0	0	0	0	0	0	1	0	35	0	0	0	1	37	37.2
H/TOT	0	0	0	0	0	0	0	0	0	2	0	147	3	0	0	4	156	158.4
14 TOT	0	0	5	3	1	0	0	9	9.5	40	5	2025	222	28	6	57	2383	2426.8

	A => C									A => D								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	32	10	1	1	0	44	45.8	0	0	2	0	0	0	0	2	2
06:15	1	0	49	5	0	0	0	55	54.2	0	0	5	0	0	0	0	5	5
06:30	1	0	59	8	5	1	0	74	77	0	0	3	2	0	0	0	5	5
06:45	0	0	55	12	2	1	0	70	72.3	2	0	3	0	0	0	0	5	3.4
H/TOT	2	0	195	35	8	3	0	243	249.3	2	0	13	2	0	0	0	17	15.4
07:00	1	0	83	13	1	1	1	100	102	0	0	1	2	0	0	0	3	3
07:15	0	0	56	21	4	1	0	82	85.3	0	0	3	3	0	0	0	6	6
07:30	1	1	74	18	1	4	0	99	103.3	0	0	9	2	0	0	0	11	11
07:45	1	2	73	12	4	2	0	94	96.6	0	0	10	1	0	0	0	11	11
H/TOT	3	3	286	64	10	8	1	375	387.2	0	0	23	8	0	0	0	31	31
08:00	3	0	91	9	3	2	0	108	109.7	0	0	12	4	1	0	0	17	17.5
08:15	0	2	91	9	3	1	0	106	107.6	0	0	17	1	1	0	0	19	19.5
08:30	1	2	50	13	4	2	4	76	82.6	0	1	29	1	0	0	0	31	30.4
08:45	0	1	84	19	9	4	2	119	130.1	3	0	26	1	0	0	0	30	27.6
H/TOT	4	5	316	50	19	9	6	409	430	3	1	84	7	2	0	0	97	95
09:00	0	0	79	13	2	3	0	97	101.9	1	0	14	3	0	0	0	18	17.2
09:15	0	0	93	14	5	2	1	115	121.1	2	0	15	4	0	0	0	21	19.4
09:30	0	1	68	13	7	1	1	91	96.2	0	0	14	1	0	0	0	15	15
09:45	1	1	69	20	3	3	0	97	101	0	0	11	4	0	0	0	15	15
H/TOT	1	2	309	60	17	9	2	400	420.2	3	0	54	12	0	0	0	69	66.6
10:00	0	1	78	22	5	1	3	110	116.2	0	0	8	0	0	0	0	8	8
10:15	0	0	67	6	8	3	0	84	91.9	0	0	8	2	0	0	0	10	10
10:30	0	0	65	12	6	1	0	84	88.3	0	0	13	5	2	0	0	20	21
10:45	0	1	72	19	8	2	0	102	108	0	0	8	5	0	0	0	13	13
H/TOT	0	2	282	59	27	7	3	380	404.4	0	0	37	12	2	0	0	51	52
11:00	1	0	59	20	5	2	0	87	91.3	1	0	12	1	0	0	1	15	15.2
11:15	0	2	65	19	5	2	0	93	96.9	0	0	9	2	0	0	0	11	11
11:30	1	2	67	17	2	2	0	91	92.6	0	0	9	3	0	0	0	12	12
11:45	0	1	80	20	7	1	0	109	113.2	0	0	8	6	0	0	0	14	14
H/TOT	2	5	271	76	19	7	0	380	394	1	0	38	12	0	0	1	52	52.2
12:00	0	0	54	15	7	2	0	78	84.1	2	0	30	3	0	0	0	35	33.4
12:15	0	0	70	30	5	2	0	107	112.1	0	0	9	4	1	0	0	14	14.5
12:30	0	0	77	17	8	1	0	103	108.3	0	0	11	1	0	0	0	12	12
12:45	1	0	69	22	7	4	0	103	110.9	0	1	15	1	0	0	0	17	16.4
H/TOT	1	0	270	84	27	9	0	391	415.4	2	1	65	9	1	0	0	78	76.3
13:00	1	1	78	11	10	3	0	104	111.5	1	0	26	4	0	0	0	31	30.2
13:15	1	1	75	19	7	2	0	105	109.7	0	0	13	2	0	0	0	15	15
13:30	0	0	84	13	7	3	1	108	116.4	4	0	37	4	0	0	0	45	41.8
13:45	0	1	75	16	5	1	1	99	103.2	0	0	20	1	2	0	0	23	24
H/TOT	2	3	312	59	29	9	2	416	440.8	5	0	96	11	2	0	0	114	111
14:00	0	1	67	17	3	1	0	89	91.2	0	1	16	2	0	0	0	19	18.4
14:15	0	0	75	26	4	3	1	109	115.9	1	0	13	4	0	0	0	18	17.2
14:30	0	0	77	24	4	1	1	107	111.3	3	0	26	1	1	0	0	31	29.1
14:45	0	0	89	23	2	0	0	114	115	2	0	17	5	1	0	0	25	23.9
H/TOT	0	1	308	90	13	5	2	419	433.4	6	1	72	12	2	0	0	93	88.6
15:00	0	0	82	26	4	0	0	112	114	4	0	19	3	1	0	0	27	24.3
15:15	0	0	83	21	6	2	0	112	117.6	1	0	17	2	1	0	0	21	20.7
15:30	0	0	75	24	2	1	0	102	104.3	2	0	21	1	0	0	0	24	22.4
15:45	1	1	111	13	5	1	1	133	136.4	3	0	24	2	1	0	0	30	28.1
H/TOT	1	1	351	84	17	4	1	459	472.3	10	0	81	8	3	0	0	102	95.5
16:00	2	0	111	20	3	0	1	137	137.9	1	0	26	4	0	0	0	31	30.2
16:15	0	2	78	16	2	4	0	102	107	0	0	26	4	0	0	0	30	30
16:30	1	1	89	25	0	1	0	117	116.9	1	0	18	4	0	0	0	23	22.2
16:45	0	0	71	12	0	1	0	84	85.3	1	0	20	4	0	0	0	25	24.2
H/TOT	3	3	349	73	5	6	1	440	447.1	3	0	90	16	0	0	0	109	106.6
17:00	1	2	108	16	1	1	0	129	128.8	0	0	25	3	0	0	0	28	28
17:15	0	1	93	20	0	0	0	114	113.4	0	0	35	4	0	0	0	39	39
17:30	1	0	109	14	0	1	0	125	125.5	0	0	28	4	0	0	0	32	32
17:45	0	0	80	11	0	0	0	91	91	1	0	33	3	0	0	0	37	36.2
H/TOT	2	3	390	61	1	2	0	459	458.7	1	0	121	14	0	0	0	136	135.2
18:00	0	1	101	8	1	0	0	111	110.9	0	0	30	1	0	0	0	31	31
18:15	2	3	82	16	0	0	0	103	99.6	1	0	21	2	0	0	0	24	23.2
18:30	0	0	81	7	0	0	0	88	88	0	0	21	1	0	0	0	22	22
18:45	1	0	64	4	0	0	0	69	68.2	2	0	22	3	0	0	0	27	25.4
H/TOT	3	4	328	35	1	0	0	371	366.7	3	0	94	7	0	0	0	104	101.6
19:00	0	0	82	9	0	0	0	91	91	0	1	21	1	0	0	0	23	22.4
19:15	0	1	66	5	0	0	0	72	71.4	1	0	23	3	0	0	0	27	26.2
19:30	0	0	55	6	0	0	0	61	61	0	0	16	0	0	0	0	16	16
19:45	0	0	49	4	0	0	0	53	53	1	0	23	0	0	0	0	24	23.2
H/TOT	0	1	252	24	0	0	0	277	276.4	2	1	83	4	0	0	0	90	87.8
14 TOT	24	33	4219	854	193	78	18	5419	5595.9	41	4	951	134	12	0	1	1143	1114.8

	B => A									B => B								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	4	3	0	0	0	7	7	0	0	0	0	0	0	0	0	0
06:15	0	0	13	2	0	0	1	16	17	0	0	1	0	0	0	0	1	1
06:30	0	0	9	2	1	0	2	14	16.5	0	0	0	0	0	0	0	0	0
06:45	1	0	8	5	0	0	0	14	13.2	0	0	0	0	0	0	0	0	0
H/TOT	1	0	34	12	1	0	3	51	53.7	0	0	1	0	0	0	0	1	1
07:00	1	0	12	2	0	0	2	17	18.2	0	0	0	0	0	0	0	0	0
07:15	0	0	14	4	1	0	0	19	19.5	0	0	0	0	0	0	0	0	0
07:30	2	0	18	6	1	0	2	29	29.9	0	0	0	1	0	0	0	1	1
07:45	0	0	26	5	1	0	0	32	32.5	0	0	1	0	0	0	0	1	1
H/TOT	3	0	70	17	3	0	4	97	100.1	0	0	1	1	0	0	0	2	2
08:00	1	0	38	8	2	0	1	50	51.2	0	0	1	1	0	0	0	2	2
08:15	2	0	46	4	0	0	0	52	50.4	0	0	1	0	0	0	0	1	1
08:30	1	0	44	9	0	0	1	55	55.2	0	0	0	0	0	0	0	0	0
08:45	4	0	45	4	0	0	2	55	53.8	0	0	0	0	0	0	0	0	0
H/TOT	8	0	173	25	2	0	4	212	210.6	0	0	2	1	0	0	0	3	3
09:00	0	0	50	7	2	0	0	59	60	0	0	0	0	0	0	0	0	0
09:15	2	0	31	8	0	0	2	43	43.4	0	0	0	0	0	0	0	0	0
09:30	0	0	33	6	0	0	0	39	39	0	0	0	0	0	0	0	0	0
09:45	0	1	36	0	1	0	1	39	39.9	0	0	0	0	0	0	0	0	0
H/TOT	2	1	150	21	3	0	3	180	182.3	0	0	0	0	0	0	0	0	0
10:00	0	0	25	2	1	0	1	29	30.5	0	0	0	0	0	0	0	0	0
10:15	1	0	26	3	1	0	1	32	32.7	0	0	0	0	0	0	0	0	0
10:30	1	1	19	9	1	0	1	32	32.1	0	0	0	0	0	0	0	0	0
10:45	0	1	30	6	1	0	1	39	39.9	0	0	0	0	0	0	0	0	0
H/TOT	2	2	100	20	4	0	4	132	135.2	0	0	0	0	0	0	0	0	0
11:00	0	0	32	3	0	0	2	37	39	0	0	0	0	0	0	0	0	0
11:15	0	0	41	4	2	0	0	47	48	0	0	0	0	0	0	0	0	0
11:30	0	0	32	3	1	0	1	37	38.5	0	0	1	0	0	0	0	1	1
11:45	0	0	45	10	1	1	1	58	60.8	0	0	0	1	0	0	0	1	1
H/TOT	0	0	150	20	4	1	4	179	186.3	0	0	1	1	0	0	0	2	2
12:00	0	0	42	9	0	1	1	53	55.3	0	0	0	0	0	0	0	0	0
12:15	0	0	21	3	0	0	1	25	26	0	0	0	0	0	0	0	0	0
12:30	3	0	33	3	0	0	1	40	38.6	0	0	1	0	0	0	0	1	1
12:45	0	0	48	3	1	0	1	53	54.5	0	0	0	0	0	0	0	0	0
H/TOT	3	0	144	18	1	1	4	171	174.4	0	0	1	0	0	0	0	1	1
13:00	2	0	38	3	1	0	0	44	42.9	0	0	1	0	0	0	0	1	1
13:15	0	0	43	8	0	0	1	52	53	0	0	1	0	0	0	0	1	1
13:30	1	0	41	5	0	0	1	48	48.2	0	0	0	0	0	0	0	0	0
13:45	4	0	45	5	1	0	1	56	54.3	0	0	0	0	0	0	0	0	0
H/TOT	7	0	167	21	2	0	3	200	198.4	0	0	2	0	0	0	0	2	2
14:00	0	0	39	3	1	0	1	44	45.5	0	0	1	0	0	0	0	1	1
14:15	0	0	42	3	0	0	1	46	47	0	0	0	0	0	0	0	0	0
14:30	1	0	43	3	1	0	1	49	49.7	0	0	0	0	0	0	0	0	0
14:45	1	0	40	6	1	0	0	48	47.7	0	0	1	0	0	0	0	1	1
H/TOT	2	0	164	15	3	0	3	187	189.9	0	0	2	0	0	0	0	2	2
15:00	0	0	39	7	1	0	2	49	51.5	0	0	0	0	0	0	0	0	0
15:15	1	1	39	4	0	0	0	45	43.6	0	0	0	0	0	0	0	0	0
15:30	0	0	24	4	1	0	1	30	31.5	0	0	0	0	0	0	0	0	0
15:45	0	0	41	3	0	0	1	45	46	0	0	0	0	0	0	0	0	0
H/TOT	1	1	143	18	2	0	4	169	172.6	0	0	0	0	0	0	0	0	0
16:00	0	0	38	6	0	0	1	45	46	0	0	0	0	0	0	0	0	0
16:15	0	1	39	2	2	0	1	45	46.4	0	0	0	0	0	0	0	0	0
16:30	0	0	29	6	1	1	1	38	40.8	0	0	0	0	0	0	0	0	0
16:45	0	0	48	3	0	0	2	53	55	0	0	0	0	0	0	0	0	0
H/TOT	0	1	154	17	3	1	5	181	188.2	0	0	0	0	0	0	0	0	0
17:00	2	0	52	4	0	0	0	58	56.4	0	0	0	0	0	0	0	0	0
17:15	1	0	37	3	1	0	1	43	43.7	0	0	1	0	0	0	0	1	1
17:30	0	0	32	3	0	0	0	35	35	0	0	0	0	0	0	0	0	0
17:45	2	1	68	1	0	0	1	73	71.8	0	0	2	0	0	0	0	2	2
H/TOT	5	1	189	11	1	0	2	209	206.9	0	0	3	0	0	0	0	3	3
18:00	2	1	43	1	0	0	2	49	48.8	0	0	0	0	0	0	0	0	0
18:15	2	0	37	2	0	0	0	41	39.4	0	0	0	0	0	0	0	0	0
18:30	0	1	42	2	0	0	2	47	48.4	0	0	0	0	0	0	0	0	0
18:45	1	0	56	0	0	0	1	58	58.2	0	0	0	0	0	0	0	0	0
H/TOT	5	2	178	5	0	0	5	195	194.8	0	0	0	0	0	0	0	0	0
19:00	0	0	32	0	0	0	1	33	34	0	0	0	1	0	0	0	1	1
19:15	2	0	35	2	0	0	1	40	39.4	0	0	1	0	0	0	0	1	1
19:30	0	0	29	2	0	0	1	32	33	0	0	0	0	0	0	0	0	0
19:45	4	0	50	0	0	0	1	55	52.8	0	0	0	0	0	0	0	0	0
H/TOT	6	0	146	4	0	0	4	160	159.2	0	0	1	1	0	0	0	2	2
14 TOT	45	8	1962	224	29	3	52	2323	2352.6	0	0	14	4	0	0	0	18	18

	B => C									B => D								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	1	0	21	4	1	0	1	28	28.7	1	0	5	1	0	0	0	7	6.2
06:15	0	0	39	7	1	0	3	50	53.5	0	0	5	3	1	0	0	9	9.5
06:30	0	0	47	12	2	0	1	62	64	0	0	5	4	0	0	0	9	9
06:45	1	1	44	14	2	1	1	64	65.9	0	0	10	1	2	1	0	14	16.3
H/TOT	2	1	151	37	6	1	6	204	212.1	1	0	25	9	3	1	0	39	41
07:00	0	0	52	13	3	0	2	70	73.5	0	0	13	5	2	0	0	20	21
07:15	1	1	42	10	2	0	3	59	61.6	1	0	21	1	1	0	0	24	23.7
07:30	0	0	53	9	3	2	0	67	71.1	0	0	29	3	0	0	0	32	32
07:45	1	0	63	9	0	1	0	74	74.5	1	0	38	0	1	0	0	40	39.7
H/TOT	2	1	210	41	8	3	5	270	280.7	2	0	101	9	4	0	0	116	116.4
08:00	1	0	81	6	1	3	1	93	97.6	2	0	44	0	1	0	0	47	45.9
08:15	4	1	65	6	2	1	1	80	79.5	2	0	78	0	0	0	0	80	78.4
08:30	2	1	62	6	2	0	0	73	71.8	1	0	81	4	0	0	0	86	85.2
08:45	1	0	77	7	1	1	0	87	88	0	2	76	1	2	0	0	81	80.8
H/TOT	8	2	285	25	6	5	2	333	336.9	5	2	279	5	3	0	0	294	290.3
09:00	1	0	70	6	4	0	1	82	84.2	0	0	85	1	0	0	0	86	86
09:15	1	0	72	9	3	1	1	87	90	0	0	58	6	3	0	0	67	68.5
09:30	0	0	66	6	3	1	0	76	78.8	0	0	38	4	0	0	0	42	42
09:45	0	1	57	7	2	0	0	67	67.4	1	0	39	8	2	0	0	50	50.2
H/TOT	2	1	265	28	12	2	2	312	320.4	1	0	220	19	5	0	0	245	246.7
10:00	2	0	65	7	4	0	0	78	78.4	0	0	42	2	0	0	0	44	44
10:15	1	0	53	4	2	1	0	61	62.5	0	0	37	6	0	0	0	43	43
10:30	1	1	60	7	1	0	0	70	69.1	0	0	46	3	0	0	0	49	49
10:45	0	1	60	6	3	0	0	70	70.9	1	0	60	4	0	0	0	65	64.2
H/TOT	4	2	238	24	10	1	0	279	280.9	1	0	185	15	0	0	0	201	200.2
11:00	0	1	51	6	4	0	0	62	63.4	0	0	47	3	0	0	0	50	50
11:15	1	0	52	9	8	0	0	70	73.2	0	0	45	9	1	0	0	55	55.5
11:30	1	1	60	4	4	0	0	70	70.6	0	0	53	4	0	0	0	57	57
11:45	2	1	57	8	2	1	0	71	71.1	1	0	62	3	1	0	0	67	66.7
H/TOT	4	3	220	27	18	1	0	273	278.3	1	0	207	19	2	0	0	229	229.2
12:00	1	1	80	8	2	1	0	93	93.9	0	0	65	3	0	0	0	68	68
12:15	0	0	54	8	0	1	0	63	64.3	0	0	65	3	0	0	0	68	68
12:30	0	0	52	5	5	0	0	62	64.5	0	0	53	3	1	1	0	58	59.8
12:45	0	0	60	9	4	1	0	74	77.3	3	1	71	7	1	0	0	83	80.5
H/TOT	1	1	246	30	11	3	0	292	300	3	1	254	16	2	1	0	277	276.3
13:00	1	0	67	3	2	0	0	73	73.2	0	1	57	3	1	0	0	62	61.9
13:15	0	0	59	7	4	0	1	71	74	2	0	63	1	1	0	0	67	65.9
13:30	1	1	78	11	2	1	0	94	94.9	0	0	69	2	0	0	0	71	71
13:45	1	0	67	3	1	2	1	75	78.3	0	1	65	2	0	0	0	68	67.4
H/TOT	3	1	271	24	9	3	2	313	320.4	2	2	254	8	2	0	0	268	266.2
14:00	0	0	75	6	2	1	0	84	86.3	0	0	74	1	1	0	0	76	76.5
14:15	2	0	65	8	4	0	1	80	81.4	0	0	65	0	2	0	0	67	68
14:30	3	0	69	8	1	0	0	81	79.1	0	0	99	6	0	0	0	105	105
14:45	1	1	62	7	0	0	1	72	71.6	0	0	100	7	0	0	0	107	107
H/TOT	6	1	271	29	7	1	2	317	318.4	0	0	338	14	3	0	0	355	356.5
15:00	0	0	66	13	1	1	1	82	84.8	0	0	67	5	1	0	0	73	73.5
15:15	0	0	62	16	1	2	0	81	84.1	0	0	79	4	0	0	0	83	83
15:30	0	0	64	9	1	0	1	75	76.5	0	0	83	2	0	0	1	86	87
15:45	1	0	70	7	2	0	0	80	80.2	11	0	67	4	1	0	1	84	76.7
H/TOT	1	0	262	45	5	3	2	318	325.6	11	0	296	15	2	0	2	326	320.2
16:00	0	0	69	16	0	0	0	85	85	1	0	78	4	1	0	0	84	83.7
16:15	1	0	70	13	1	2	0	87	89.3	2	1	87	11	0	0	0	101	98.8
16:30	0	0	65	10	0	1	0	76	77.3	0	0	80	12	0	0	0	92	92
16:45	1	0	75	10	1	1	0	88	89	3	1	62	2	0	0	0	68	65
H/TOT	2	0	279	49	2	4	0	336	340.6	6	2	307	29	1	0	0	345	339.5
17:00	0	0	74	3	1	0	1	79	80.5	1	0	96	3	0	0	0	100	99.2
17:15	0	1	65	8	0	0	0	74	73.4	1	1	81	5	1	0	0	89	88.1
17:30	0	0	64	12	0	0	0	76	76	2	1	89	7	1	0	0	100	98.3
17:45	2	1	77	6	0	0	0	86	83.8	0	0	90	5	0	0	0	95	95
H/TOT	2	2	280	29	1	0	1	315	313.7	4	2	356	20	2	0	0	384	380.6
18:00	3	0	75	5	1	0	0	84	82.1	0	0	82	4	0	0	0	86	86
18:15	1	0	72	6	0	0	0	79	78.2	0	1	91	6	0	0	0	98	97.4
18:30	0	0	65	7	0	0	1	73	74	5	0	94	5	0	0	0	104	100
18:45	2	0	78	6	0	0	0	86	84.4	0	0	99	5	0	0	0	104	104
H/TOT	6	0	290	24	1	0	1	322	318.7	5	1	366	20	0	0	0	392	387.4
19:00	0	1	85	9	0	0	0	95	94.4	1	0	87	5	0	0	0	93	92.2
19:15	1	0	77	8	0	0	0	86	85.2	0	1	81	6	0	0	0	88	87.4
19:30	1	1	67	7	0	0	1	77	76.6	0	0	89	0	1	0	0	90	90.5
19:45	1	0	66	2	0	0	0	69	68.2	3	0	69	9	1	0	0	82	80.1
H/TOT	3	2	295	26	0	0	1	327	324.4	4	1	326	20	2	0	0	353	350.2
14 TOT	46	17	3563	438	96	27	24	4211	4271.1	46	11	3514	218	31	2	2	3824	3800.7



IDASO

Survey Name: 24260 - Belmayne and Clongriffin
Site: Site 6
Location: R139 / R809 / Hole in the Wall Road
Date: Thu 11-Apr-2024
AM Peak: 08:15 — 09:15 **Total:** 3291
PM Peak: 17:15 — 18:15 **Total:** 3336
15 Min Peak: 08:15 — 08:30 **Total:** 865

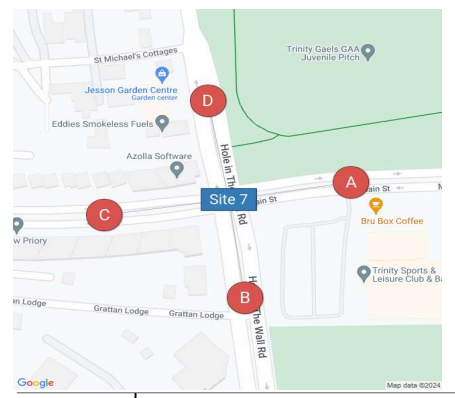
Arm A - R809 Grange Road
Arm B - R809 Grange Road
Arm C - R139
Arm D - Hole in the Wall Road

	C => A									C => B								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	0	0	50	6	1	0	0	57	57.5	1	0	15	5	2	2	1	26	29.8
06:15	0	0	62	20	3	3	0	88	93.4	0	0	8	5	1	2	1	17	21.1
06:30	0	0	53	25	3	2	0	83	87.1	0	0	32	5	1	1	0	39	40.8
06:45	0	0	64	24	6	1	0	95	99.3	1	0	37	20	2	1	0	61	62.5
H/TOT	0	0	229	75	13	6	0	323	337.3	2	0	92	35	6	6	2	143	154.2
07:00	0	0	47	16	4	3	0	70	75.9	0	0	39	18	2	0	1	60	62
07:15	2	0	68	27	2	2	0	101	103	1	0	39	22	1	1	0	64	65
07:30	0	3	79	40	4	2	0	128	130.8	0	1	51	23	2	3	0	80	84.3
07:45	0	1	85	25	1	3	0	115	118.8	0	0	72	10	5	2	1	90	96.1
H/TOT	2	4	279	108	11	10	0	414	428.5	1	1	201	73	10	6	2	294	307.4
08:00	1	0	94	25	4	4	1	129	136.4	0	0	70	11	1	0	1	83	84.5
08:15	1	0	101	12	4	3	1	122	128.1	2	1	80	5	0	0	2	90	89.8
08:30	0	0	94	17	4	2	1	118	123.6	1	0	81	4	1	0	0	87	86.7
08:45	1	2	90	15	7	4	0	119	125.7	1	0	65	4	4	0	1	75	77.2
H/TOT	3	2	379	69	19	13	3	488	513.8	4	1	296	24	6	0	4	335	338.2
09:00	0	0	94	31	12	4	0	141	152.2	0	0	61	9	3	1	1	75	78.8
09:15	0	0	68	18	9	2	0	97	104.1	0	0	53	14	5	0	1	73	76.5
09:30	2	0	71	22	3	0	0	98	97.9	0	0	59	16	0	0	0	75	75
09:45	1	0	69	35	6	2	0	113	117.8	0	0	58	9	3	0	1	71	73.5
H/TOT	3	0	302	106	30	8	0	449	472	0	0	231	48	11	1	3	294	303.8
10:00	0	2	61	15	8	4	0	90	98	0	1	63	9	5	0	2	80	83.9
10:15	0	0	65	18	4	1	2	90	95.3	0	0	53	15	1	1	0	70	71.8
10:30	0	0	62	25	5	0	0	92	94.5	2	1	60	6	4	0	0	73	72.8
10:45	1	0	53	15	6	4	0	79	86.4	0	0	54	5	1	0	0	60	60.5
H/TOT	1	2	241	73	23	9	2	351	374.2	2	2	230	35	11	1	2	283	289
11:00	0	0	42	32	7	1	0	82	86.8	0	0	47	9	3	0	0	59	60.5
11:15	0	1	63	29	2	1	0	96	97.7	0	0	51	10	3	2	0	66	70.1
11:30	1	0	52	24	9	3	0	89	96.6	0	1	60	4	3	1	0	69	71.2
11:45	0	0	61	11	10	2	0	84	91.6	1	0	53	3	3	0	0	60	60.7
H/TOT	1	1	218	96	28	7	0	351	372.7	1	1	211	26	12	3	0	254	262.5
12:00	0	0	77	27	7	3	0	114	121.4	0	1	56	9	1	1	0	68	69.2
12:15	1	0	68	30	10	0	0	109	113.2	0	0	41	5	2	3	0	51	55.9
12:30	0	0	55	21	2	6	0	84	92.8	1	0	61	8	3	0	0	73	73.7
12:45	0	0	76	14	5	0	0	95	97.5	1	0	66	6	4	0	0	77	78.2
H/TOT	1	0	276	92	24	9	0	402	424.9	2	1	224	28	10	4	0	269	277
13:00	0	0	74	8	6	1	1	90	95.3	0	1	83	5	2	1	0	92	93.7
13:15	1	1	91	19	2	0	0	114	113.6	0	0	73	5	2	0	0	80	81
13:30	0	3	61	10	5	2	2	83	88.3	0	1	58	7	2	0	1	69	70.4
13:45	0	0	84	14	0	3	0	101	104.9	2	0	74	17	4	0	0	97	97.4
H/TOT	1	4	310	51	13	6	3	388	402.1	2	2	288	34	10	1	1	338	342.5
14:00	0	2	69	14	6	1	0	92	95.1	0	1	83	21	1	0	0	106	105.9
14:15	3	0	95	13	4	0	1	116	116.6	0	0	66	5	2	0	0	73	74
14:30	2	0	50	14	1	1	1	69	70.2	1	0	77	8	2	2	0	90	92.8
14:45	1	1	65	5	3	1	3	79	83.4	0	0	68	15	3	1	1	88	91.8
H/TOT	6	3	279	46	14	3	5	356	365.3	1	1	294	49	8	3	1	357	364.5
15:00	0	0	82	18	5	1	0	106	109.8	0	0	56	12	1	1	1	71	73.8
15:15	0	0	65	11	2	2	0	80	83.6	0	0	88	11	0	0	0	99	99
15:30	0	0	78	13	2	1	1	95	98.3	0	1	67	13	0	0	0	81	80.4
15:45	1	0	77	10	4	2	0	94	97.8	1	0	68	9	0	0	0	78	77.2
H/TOT	1	0	302	52	13	6	1	375	389.5	1	1	279	45	1	1	1	329	330.4
16:00	0	0	73	6	3	0	0	82	83.5	0	0	61	11	2	0	1	75	77
16:15	1	0	70	15	2	0	1	89	90.2	0	0	69	11	2	0	0	82	83
16:30	0	0	66	9	3	0	0	78	79.5	0	0	61	11	2	0	0	74	75
16:45	0	0	68	12	0	0	0	80	80	0	0	84	6	0	0	0	90	90
H/TOT	1	0	277	42	8	0	1	329	333.2	0	0	275	39	6	0	1	321	325
17:00	2	0	73	4	1	0	0	80	78.9	1	0	85	9	1	0	0	96	95.7
17:15	0	0	79	6	1	0	0	86	86.5	1	0	70	7	1	0	0	79	78.7
17:30	0	1	89	6	0	0	1	97	97.4	0	0	81	11	0	0	0	92	92
17:45	0	1	83	4	0	0	0	88	87.4	3	1	79	7	1	0	0	91	88.5
H/TOT	2	2	324	20	2	0	1	351	350.2	5	1	315	34	3	0	0	358	354.9
18:00	0	2	94	5	0	0	0	101	99.8	3	0	97	5	0	0	0	105	102.6
18:15	0	3	107	9	1	0	0	120	118.7	0	0	83	8	0	0	1	92	93
18:30	0	2	80	4	1	0	1	88	88.3	1	0	87	7	0	0	0	95	94.2
18:45	0	0	112	11	1	0	0	124	124.5	2	0	89	12	1	0	0	104	102.9
H/TOT	0	7	393	29	3	0	1	433	431.3	6	0	356	32	1	0	1	396	392.7
19:00	2	2	90	5	0	0	0	99	96.2	0	0	71	7	1	1	0	80	81.8
19:15	0	0	60	3	0	0	0	63	63	0	0	78	7	1	0	0	86	86.5
19:30	0	0	95	6	0	0	0	101	101	0	0	63	3	0	0	0	66	66
19:45	0	0	62	5	1	0	0	68	68.5	1	1	88	2	0	0	0	92	90.6
H/TOT	2	2	307	19	1	0	0	331	328.7	1	1	300	19	2	1	0	324	324.9
14 TOT	24	27	4116	878	202	77	17	5341	5523.7	28	12	3592	521	97	27	18	4295	4367

	C => C									C => D								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	0	0	1	0	0	0	0	1	1	0	0	5	0	0	0	1	6	7
06:15	0	0	1	0	0	0	0	1	1	0	0	21	3	0	0	2	26	28
06:30	0	0	0	0	0	0	0	0	0	1	0	7	3	0	0	2	13	14.2
06:45	0	0	0	0	0	0	0	0	0	1	1	13	8	0	0	1	24	23.6
H/TOT	0	0	2	0	0	0	0	2	2	2	1	46	14	0	0	6	69	72.8
07:00	0	0	1	0	0	0	0	1	1	0	0	23	7	1	0	1	32	33.5
07:15	0	0	0	0	0	0	0	0	0	1	0	20	3	3	1	4	32	38
07:30	0	0	1	0	0	0	0	1	1	0	0	15	2	0	1	1	19	21.3
07:45	0	0	1	0	0	0	0	1	1	0	0	38	5	2	0	2	47	50
H/TOT	0	0	3	0	0	0	0	3	3	1	0	96	17	6	2	8	130	142.8
08:00	0	0	0	0	0	0	0	0	0	0	0	39	1	2	0	2	44	47
08:15	0	0	0	0	0	0	0	0	0	3	0	32	4	2	0	1	42	41.6
08:30	0	0	0	0	0	0	0	0	0	2	0	37	2	0	0	1	42	41.4
08:45	0	0	0	0	0	0	0	0	0	2	0	23	5	1	1	1	33	34.2
H/TOT	0	0	0	0	0	0	0	0	0	7	0	131	12	5	1	5	161	164.2
09:00	0	0	0	0	0	0	0	0	0	1	0	37	8	1	0	2	49	50.7
09:15	0	0	1	0	0	0	0	1	1	1	0	25	5	3	0	4	38	42.7
09:30	0	0	0	0	0	0	0	0	0	1	0	17	6	1	0	1	26	26.7
09:45	0	0	0	0	0	0	0	0	0	1	0	27	4	3	0	0	35	35.7
H/TOT	0	0	1	0	0	0	0	1	1	4	0	106	23	8	0	7	148	155.8
10:00	0	0	0	0	0	0	0	0	0	0	0	22	5	0	0	5	32	37
10:15	0	0	1	0	0	0	0	1	1	0	0	15	4	0	1	3	23	27.3
10:30	0	0	0	0	0	0	0	0	0	0	0	19	1	1	1	3	25	29.8
10:45	0	0	0	0	0	0	0	0	0	1	0	20	2	1	0	2	26	27.7
H/TOT	0	0	1	0	0	0	0	1	1	1	0	76	12	2	2	13	106	121.8
11:00	0	0	0	0	0	0	0	0	0	1	0	24	3	1	0	3	32	34.7
11:15	0	0	0	0	0	0	0	0	0	1	0	30	3	0	0	2	36	37.2
11:30	0	0	0	0	0	0	0	0	0	0	0	39	0	1	0	1	41	42.5
11:45	0	0	0	0	0	0	0	0	0	0	0	26	2	1	0	3	32	35.5
H/TOT	0	0	0	0	0	0	0	0	0	2	0	119	8	3	0	9	141	149.9
12:00	0	0	1	1	0	0	0	2	2	0	0	25	6	1	0	3	35	38.5
12:15	0	0	0	0	0	0	0	0	0	0	0	35	3	0	1	1	40	42.3
12:30	0	0	0	0	0	0	0	0	0	0	0	18	1	1	0	2	22	24.5
12:45	0	0	0	0	0	0	0	0	0	0	0	25	4	1	1	1	32	34.8
H/TOT	0	0	1	1	0	0	0	2	2	0	0	103	14	3	2	7	129	140.1
13:00	0	0	1	0	0	0	0	1	1	0	2	34	6	1	0	2	45	46.3
13:15	0	0	0	0	0	0	0	0	0	0	0	31	3	1	0	1	36	37.5
13:30	0	0	0	0	0	0	0	0	0	1	0	17	2	2	0	3	25	28.2
13:45	0	0	0	0	0	0	0	0	0	0	0	42	2	2	1	1	48	51.3
H/TOT	0	0	1	0	0	0	0	1	1	1	2	124	13	6	1	7	154	163.3
14:00	0	0	0	0	0	0	0	0	0	1	0	33	1	1	1	3	40	44
14:15	0	0	0	0	0	0	0	0	0	2	0	26	2	0	0	3	33	34.4
14:30	0	0	0	0	0	0	0	0	0	1	0	53	3	2	0	0	59	59.2
14:45	0	0	0	0	0	0	0	0	0	0	0	38	4	0	1	3	46	50.3
H/TOT	0	0	0	0	0	0	0	0	0	4	0	150	10	3	2	9	178	187.9
15:00	0	0	0	0	0	0	0	0	0	0	1	33	6	1	0	1	42	42.9
15:15	0	0	0	0	0	0	0	0	0	2	0	40	4	0	0	3	49	50.4
15:30	0	0	1	0	0	0	0	1	1	0	0	41	5	0	1	1	48	50.3
15:45	0	0	0	1	0	0	0	1	1	0	0	36	11	0	0	1	48	49
H/TOT	0	0	1	1	0	0	0	2	2	2	1	150	26	1	1	6	187	192.6
16:00	0	0	0	0	0	0	0	0	0	0	0	37	6	0	1	2	46	49.3
16:15	0	0	0	0	0	0	0	0	0	0	0	41	4	0	0	2	47	49
16:30	0	0	1	0	0	0	0	1	1	0	0	32	3	0	0	2	37	39
16:45	0	0	0	0	0	0	0	0	0	0	1	43	10	0	0	2	56	57.4
H/TOT	0	0	1	0	0	0	0	1	1	0	1	153	23	0	1	8	186	194.7
17:00	0	0	0	0	0	0	0	0	0	0	0	46	6	0	0	2	54	56
17:15	0	0	0	0	0	0	0	0	0	2	1	37	9	0	0	0	49	46.8
17:30	0	0	0	0	0	0	0	0	0	1	0	42	7	0	0	3	53	55.2
17:45	0	0	0	0	0	0	0	0	0	2	0	46	6	0	0	1	55	54.4
H/TOT	0	0	0	0	0	0	0	0	0	5	1	171	28	0	0	6	211	212.4
18:00	0	0	0	0	0	0	0	0	0	2	0	41	5	0	0	2	50	50.4
18:15	0	0	0	0	0	0	0	0	0	1	0	52	5	0	0	1	59	59.2
18:30	0	0	0	0	0	0	0	0	0	0	0	53	4	1	0	3	61	64.5
18:45	0	0	0	0	0	0	0	0	0	0	0	57	4	1	0	0	62	62.5
H/TOT	0	0	0	0	0	0	0	0	0	3	0	203	18	2	0	6	232	236.6
19:00	0	0	0	0	0	0	0	0	0	1	0	35	1	0	0	3	40	42.2
19:15	0	0	0	0	0	0	0	0	0	0	0	49	2	1	0	0	52	52.5
19:30	0	0	0	0	0	0	0	0	0	2	0	37	1	1	0	2	43	43.9
19:45	0	0	0	0	0	0	0	0	0	0	1	42	2	0	0	4	49	52.4
H/TOT	0	0	0	0	0	0	0	0	0	3	1	163	6	2	0	9	184	191
14 TOT	0	0	11	2	0	0	0	13	13	35	7	1791	224	41	12	106	2216	2325.9

	D => A									D => B								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	0	0	4	0	0	0	0	4	4	0	0	8	3	0	0	0	11	11
06:15	0	0	5	2	1	0	0	8	8.5	1	0	14	1	0	0	0	16	15.2
06:30	0	0	4	1	0	0	0	5	5	2	0	20	9	0	0	0	31	29.4
06:45	0	0	3	1	0	0	0	4	4	0	1	19	5	0	0	0	25	24.4
H/TOT	0	0	16	4	1	0	0	21	21.5	3	1	61	18	0	0	0	83	80
07:00	0	0	5	3	0	0	0	8	8	0	1	26	5	1	0	0	33	32.9
07:15	2	0	13	4	0	0	0	19	17.4	1	0	36	5	0	0	0	42	41.2
07:30	2	0	13	5	0	0	0	20	18.4	2	1	53	3	0	0	1	60	58.8
07:45	0	0	21	2	0	0	0	23	23	1	0	83	4	1	0	0	89	88.7
H/TOT	4	0	52	14	0	0	0	70	66.8	4	2	198	17	2	0	1	224	221.6
08:00	2	0	43	2	2	0	0	49	48.4	2	1	80	4	0	0	0	87	84.8
08:15	4	1	26	3	0	0	0	34	30.2	10	0	117	5	0	0	0	132	124
08:30	8	1	27	2	1	0	0	39	32.5	6	0	97	3	0	0	0	106	101.2
08:45	1	0	36	3	0	0	0	40	39.2	6	0	66	0	0	0	0	72	67.2
H/TOT	15	2	132	10	3	0	0	162	150.3	24	1	360	12	0	0	0	397	377.2
09:00	2	0	18	4	1	0	0	25	23.9	1	0	79	6	0	0	0	86	85.2
09:15	1	0	16	4	2	0	0	23	23.2	0	0	59	0	2	0	0	61	62
09:30	0	0	24	3	0	0	0	27	27	0	0	64	5	3	0	0	72	73.5
09:45	1	0	11	1	1	0	0	14	13.7	1	0	56	4	0	0	0	61	60.2
H/TOT	4	0	69	12	4	0	0	89	87.8	2	0	258	15	5	0	0	280	280.9
10:00	0	0	12	6	1	0	0	19	19.5	1	0	42	2	1	0	0	46	45.7
10:15	0	0	14	4	0	0	0	18	18	2	0	50	4	2	0	0	58	57.4
10:30	1	0	13	4	1	0	0	19	18.7	1	0	49	3	1	0	0	54	53.7
10:45	1	0	12	3	1	0	0	17	16.7	0	0	63	4	1	0	0	68	68.5
H/TOT	2	0	51	17	3	0	0	73	72.9	4	0	204	13	5	0	0	226	225.3
11:00	1	0	16	1	0	0	0	18	17.2	0	0	55	2	2	0	0	59	60
11:15	2	0	15	2	0	0	0	19	17.4	0	0	39	1	2	0	0	42	43
11:30	0	0	11	2	0	0	0	13	13	0	0	48	3	0	0	0	51	51
11:45	1	0	9	2	1	0	0	13	12.7	0	0	70	1	2	0	0	73	74
H/TOT	4	0	51	7	1	0	0	63	60.3	0	0	212	7	6	0	0	225	228
12:00	1	0	19	2	0	0	0	22	21.2	0	0	60	2	0	0	0	62	62
12:15	0	0	16	5	0	1	1	23	25.3	0	0	71	1	1	0	0	73	73.5
12:30	0	0	15	1	1	0	0	17	17.5	1	0	56	3	0	0	0	60	59.2
12:45	2	1	23	1	2	0	0	29	27.8	2	1	72	6	0	0	0	81	78.8
H/TOT	3	1	73	9	3	1	1	91	91.8	3	1	259	12	1	0	0	276	273.5
13:00	1	1	16	2	0	0	0	20	18.6	0	0	70	2	0	0	0	72	72
13:15	1	1	24	0	0	0	0	26	24.6	3	0	67	6	0	0	0	76	73.6
13:30	0	0	18	1	1	0	0	20	20.5	0	0	50	2	0	0	0	52	52
13:45	2	0	23	2	1	0	0	28	26.9	1	0	84	2	0	0	0	87	86.2
H/TOT	4	2	81	5	2	0	0	94	90.6	4	0	271	12	0	0	0	287	283.8
14:00	2	1	16	0	1	0	0	20	18.3	0	0	89	3	2	0	0	94	95
14:15	2	0	23	2	2	0	0	29	28.4	3	0	63	3	0	0	0	69	66.6
14:30	4	0	21	3	0	0	0	28	24.8	1	0	44	6	0	0	0	51	50.2
14:45	1	0	27	1	0	0	0	29	28.2	0	0	68	4	1	0	0	73	73.5
H/TOT	9	1	87	6	3	0	0	106	99.7	4	0	264	16	3	0	0	287	285.3
15:00	0	0	18	6	1	0	0	25	25.5	0	1	89	1	3	0	0	94	94.9
15:15	1	0	25	3	0	0	0	29	28.2	1	0	60	5	0	0	0	66	65.2
15:30	0	0	19	1	2	1	0	23	25.3	0	0	97	6	0	0	0	103	103
15:45	6	0	20	1	0	0	0	27	22.2	0	0	52	4	0	0	0	56	56
H/TOT	7	0	82	11	3	1	0	104	101.2	1	1	298	16	3	0	0	319	319.1
16:00	0	0	19	3	0	0	0	22	22	1	0	79	5	1	0	0	86	85.7
16:15	0	0	20	0	0	0	0	20	20	0	0	77	8	0	0	0	85	85
16:30	0	0	17	3	0	0	0	20	20	1	0	67	4	1	0	0	73	72.7
16:45	2	0	24	0	1	0	0	27	25.9	5	0	61	4	0	0	0	70	66
H/TOT	2	0	80	6	1	0	0	89	87.9	7	0	284	21	2	0	0	314	309.4
17:00	0	1	34	1	0	0	0	36	35.4	1	1	76	3	0	0	0	81	79.6
17:15	0	0	25	1	0	0	0	26	26	0	0	81	2	0	0	0	83	83
17:30	0	0	32	3	0	0	0	35	35	1	0	70	4	1	0	0	76	75.7
17:45	1	0	31	1	0	0	0	33	32.2	0	0	85	0	0	0	0	85	85
H/TOT	1	1	122	6	0	0	0	130	128.6	2	1	312	9	1	0	0	325	323.3
18:00	1	0	18	5	0	0	0	24	23.2	1	1	98	1	0	0	0	101	99.6
18:15	0	0	18	2	0	0	0	20	20	1	1	58	6	0	0	0	66	64.6
18:30	1	1	24	4	0	0	0	30	28.6	0	0	83	5	0	0	0	88	88
18:45	2	0	19	2	0	0	0	23	21.4	1	0	70	3	0	0	0	74	73.2
H/TOT	4	1	79	13	0	0	0	97	93.2	3	2	309	15	0	0	0	329	325.4
19:00	0	0	26	1	0	0	0	27	27	1	0	79	8	0	0	0	88	87.2
19:15	0	0	21	1	0	0	0	22	22	0	0	92	6	0	0	0	98	98
19:30	0	0	15	3	0	0	0	18	18	0	0	34	3	1	0	0	38	38.5
19:45	1	0	24	0	0	0	0	25	24.2	1	0	69	2	0	0	0	72	71.2
H/TOT	1	0	86	5	0	0	0	92	91.2	2	0	274	19	1	0	0	296	294.9
14 TOT	60	8	1061	125	24	2	1	1281	1243.8	63	9	3564	202	29	0	1	3868	3827.7

	D => C									D => D								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	1	0	16	1	0	0	2	20	21.2	0	0	0	0	0	0	0	0	0
06:15	1	1	31	13	1	0	1	48	48.1	0	0	0	0	0	0	0	0	0
06:30	1	0	44	12	0	0	2	59	60.2	0	0	0	1	0	0	0	1	1
06:45	0	0	30	11	0	0	1	42	43	0	0	0	0	0	0	0	0	0
H/TOT	3	1	121	37	1	0	6	169	172.5	0	0	0	1	0	0	0	1	1
07:00	2	0	30	7	0	0	2	41	41.4	0	0	0	0	0	0	0	0	0
07:15	1	0	34	10	2	0	1	48	49.2	0	0	1	1	0	0	0	2	2
07:30	1	0	43	8	1	0	2	55	56.7	0	0	2	0	0	0	0	2	2
07:45	0	0	39	8	0	1	4	52	57.3	0	0	2	0	0	0	2	4	6
H/TOT	4	0	146	33	3	1	9	196	204.6	0	0	5	1	0	0	2	8	10
08:00	3	0	42	6	0	0	2	53	52.6	0	0	6	0	0	0	0	6	6
08:15	3	0	35	4	1	0	1	44	43.1	0	0	5	0	0	0	0	5	5
08:30	1	0	27	4	1	0	2	35	36.7	0	0	4	0	1	0	0	5	5.5
08:45	1	0	21	2	2	1	1	28	30.5	0	0	3	0	0	0	0	3	3
H/TOT	8	0	125	16	4	1	6	160	162.9	0	0	18	0	1	0	0	19	19.5
09:00	0	0	45	3	1	0	2	51	53.5	0	0	2	0	0	0	0	2	2
09:15	0	0	43	3	2	0	2	50	53	0	0	3	0	0	0	0	3	3
09:30	1	0	33	2	4	0	3	43	47.2	0	0	4	0	0	0	0	4	4
09:45	0	0	34	4	1	0	3	42	45.5	0	0	2	0	0	0	0	2	2
H/TOT	1	0	155	12	8	0	10	186	199.2	0	0	11	0	0	0	0	11	11
10:00	0	0	32	2	1	0	4	39	43.5	0	0	2	0	0	0	0	2	2
10:15	0	1	22	3	0	0	1	27	27.4	0	0	6	0	0	0	0	6	6
10:30	0	0	17	7	1	0	3	28	31.5	0	0	0	0	0	0	0	0	0
10:45	0	0	23	8	1	0	1	33	34.5	0	0	2	0	0	0	0	2	2
H/TOT	0	1	94	20	3	0	9	127	136.9	0	0	10	0	0	0	0	10	10
11:00	0	0	35	4	0	0	4	43	47	0	0	1	0	0	0	0	1	1
11:15	0	0	22	4	1	1	2	30	33.8	0	0	1	0	0	0	0	1	1
11:30	0	0	25	4	0	1	2	32	35.3	0	0	2	0	0	0	0	2	2
11:45	0	0	34	3	1	0	2	40	42.5	0	0	3	1	0	0	0	4	4
H/TOT	0	0	116	15	2	2	10	145	158.6	0	0	7	1	0	0	0	8	8
12:00	0	0	44	1	0	0	4	49	53	0	0	2	0	0	0	0	2	2
12:15	0	0	24	6	2	1	1	34	37.3	0	0	2	0	0	0	0	2	2
12:30	0	0	31	1	1	0	2	35	37.5	0	0	2	0	0	0	0	2	2
12:45	0	0	34	3	0	0	1	38	39	0	0	7	1	0	0	0	8	8
H/TOT	0	0	133	11	3	1	8	156	166.8	0	0	13	1	0	0	0	14	14
13:00	1	1	28	3	1	1	1	36	37.4	0	0	1	0	0	0	0	1	1
13:15	0	0	31	3	0	0	2	36	38	0	0	4	1	0	0	0	5	5
13:30	1	0	21	4	0	0	1	27	27.2	0	0	4	0	0	0	0	4	4
13:45	0	0	30	9	1	0	4	44	48.5	0	0	4	0	0	0	0	4	4
H/TOT	2	1	110	19	2	1	8	143	151.1	0	0	13	1	0	0	0	14	14
14:00	0	0	29	2	2	2	1	36	40.6	0	0	3	1	0	0	0	4	4
14:15	1	0	31	1	1	0	3	37	39.7	0	0	2	0	0	0	0	2	2
14:30	0	0	41	1	1	0	3	46	49.5	0	0	3	0	0	0	0	3	3
14:45	4	1	57	3	2	1	1	69	68.5	0	0	8	0	0	0	1	9	10
H/TOT	5	1	158	7	6	3	8	188	198.3	0	0	16	1	0	0	1	18	19
15:00	0	1	45	9	3	0	2	60	62.9	0	0	10	0	0	0	0	10	10
15:15	0	1	50	6	3	0	0	60	60.9	0	0	8	0	1	0	0	9	9.5
15:30	3	1	67	4	0	1	3	79	80.3	0	0	12	0	0	0	0	12	12
15:45	0	0	34	4	0	0	1	39	40	0	0	4	1	0	0	0	5	5
H/TOT	3	3	196	23	6	1	6	238	244.1	0	0	34	1	1	0	0	36	36.5
16:00	0	0	32	6	0	0	2	40	42	0	0	2	0	0	0	0	2	2
16:15	1	0	34	8	0	1	1	45	46.5	0	0	5	0	0	0	0	5	5
16:30	0	0	40	2	1	0	2	45	47.5	0	0	4	0	0	0	0	4	4
16:45	0	0	38	3	0	1	1	43	45.3	0	0	6	0	0	0	0	6	6
H/TOT	1	0	144	19	1	2	6	173	181.3	0	0	17	0	0	0	0	17	17
17:00	0	0	25	6	0	0	1	32	33	0	0	5	1	0	0	0	6	6
17:15	0	2	46	6	0	1	2	57	59.1	0	0	5	0	0	0	0	5	5
17:30	1	1	44	10	0	0	1	57	56.6	0	0	5	0	0	0	0	5	5
17:45	0	0	55	4	0	0	3	62	65	0	0	3	1	0	0	0	4	4
H/TOT	1	3	170	26	0	1	7	208	213.7	0	0	18	2	0	0	0	20	20
18:00	0	0	41	5	0	0	1	47	48	0	0	5	0	0	0	0	5	5
18:15	0	1	33	3	1	0	2	40	41.9	0	0	1	0	0	0	0	1	1
18:30	0	1	50	5	0	0	2	58	59.4	0	0	4	0	0	0	0	4	4
18:45	0	0	41	6	0	0	2	49	51	0	0	4	0	0	0	0	4	4
H/TOT	0	2	165	19	1	0	7	194	200.3	0	0	14	0	0	0	0	14	14
19:00	2	0	35	4	0	0	1	42	41.4	0	0	7	0	0	0	0	7	7
19:15	0	0	34	7	0	0	2	43	45	0	0	6	2	0	0	0	8	8
19:30	0	0	27	2	0	0	2	31	33	0	0	2	1	0	0	0	3	3
19:45	0	1	32	1	2	0	1	37	38.4	0	0	5	1	0	0	0	6	6
H/TOT	2	1	128	14	2	0	6	153	157.8	0	0	20	4	0	0	0	24	24
14 TOT	30	13	1961	271	42	13	106	2436	2548.1	0	0	196	13	2	0	3	214	218



IDASO

Survey Name: 24260 - Belmayne and Clongriffin
Site: Site 7
Location: Hole in the Wall Road / Main Street
Date: Thu 11-Apr-2024
AM Peak: 07:45 — 08:45 **Total:** 1070
PM Peak: 18:30 — 19:30 **Total:** 1325
15 Min Peak: 19:00 — 19:15 **Total:** 344

Arm A - Main Street
Arm B - Hole in the Wall Road
Arm C - Main Street
Arm D - Hole in the Wall Road

A => A

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0
13:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
15:00	1	0	0	0	0	0	0	1	0.2
15:15	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0.2
16:00	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	0	1	0	0	0	1	1
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	1	0	0	0	1	1
14 TOT	1	0	0	1	0	0	0	2	1.2

A => B

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	13	2	0	0	2	17	19
06:15	0	1	18	10	0	0	1	30	30.4
06:30	0	0	23	9	0	0	2	34	36
06:45	0	1	26	13	0	0	1	41	41.4
H/TOT	0	2	80	34	0	0	6	122	126.8
07:00	2	0	34	10	1	0	2	49	49.9
07:15	1	0	40	11	3	0	1	56	57.7
07:30	1	1	48	8	0	0	2	60	60.6
07:45	0	0	50	4	0	0	2	56	58
H/TOT	4	1	172	33	4	0	7	221	226.2
08:00	1	1	56	7	0	0	3	68	69.6
08:15	6	0	51	2	0	0	1	60	56.2
08:30	4	0	39	3	2	0	2	50	49.8
08:45	1	0	36	6	2	0	1	46	47.2
H/TOT	12	1	182	18	4	0	7	224	222.8
09:00	1	0	47	4	1	0	1	54	54.7
09:15	1	0	34	0	1	0	2	38	39.7
09:30	1	0	40	3	1	0	4	49	52.7
09:45	1	0	34	3	0	0	2	40	41.2
H/TOT	4	0	155	10	3	0	9	181	188.3
10:00	0	0	36	3	0	0	4	43	47
10:15	2	1	36	2	0	0	1	42	40.8
10:30	0	0	30	4	0	0	3	37	40
10:45	0	0	25	4	1	0	1	31	32.5
H/TOT	2	1	127	13	1	0	9	153	160.3
11:00	0	0	33	4	0	0	2	39	41
11:15	0	0	28	2	1	0	1	32	33.5
11:30	0	0	30	5	0	0	2	37	39
11:45	1	0	36	2	0	0	1	40	40.2
H/TOT	1	0	127	13	1	0	6	148	153.7
12:00	0	0	40	2	0	0	4	46	50
12:15	0	0	36	7	0	1	2	46	49.3
12:30	1	0	33	3	1	0	2	40	41.7
12:45	1	0	52	4	2	0	1	60	61.2
H/TOT	2	0	161	16	3	1	9	192	202.2
13:00	2	2	38	2	0	0	2	46	45.2
13:15	0	1	36	1	0	0	1	39	39.4
13:30	0	0	23	5	1	0	2	31	33.5
13:45	1	0	38	6	1	0	1	47	47.7
H/TOT	3	3	135	14	2	0	6	163	165.8
14:00	1	1	42	2	1	0	1	48	48.1
14:15	2	0	44	1	0	0	2	49	49.4
14:30	1	0	37	3	0	0	3	44	46.2
14:45	0	0	43	2	2	0	1	48	50
H/TOT	4	1	166	8	3	0	7	189	193.7
15:00	1	1	42	4	2	0	2	52	53.6
15:15	0	1	38	6	1	1	0	47	48.2
15:30	4	1	40	4	0	0	3	52	51.2
15:45	3	0	55	3	0	0	1	62	60.6
H/TOT	8	3	175	17	3	1	6	213	213.6
16:00	0	0	28	5	1	0	2	36	38.5
16:15	0	0	33	5	0	0	1	39	40
16:30	0	0	59	2	0	0	2	63	65
16:45	6	0	40	2	0	0	1	49	45.2
H/TOT	6	0	160	14	1	0	6	187	188.7
17:00	0	1	67	2	0	0	2	72	73.4
17:15	0	1	34	2	0	0	1	38	38.4
17:30	0	0	46	2	0	0	2	50	52
17:45	1	0	63	4	0	0	2	70	71.2
H/TOT	1	2	210	10	0	0	7	230	235
18:00	0	0	49	5	1	0	2	57	59.5
18:15	0	1	45	2	0	0	1	49	49.4
18:30	0	0	60	10	0	0	2	72	74
18:45	0	0	44	6	0	0	2	52	54
H/TOT	0	1	198	23	1	0	7	230	236.9
19:00	2	0	81	7	0	0	1	91	90.4
19:15	0	0	63	10	0	0	2	75	77
19:30	0	0	29	1	0	0	2	32	34
19:45	1	1	56	1	2	0	2	63	64.6
H/TOT	3	1	229	19	2	0	7	261	266
14 TOT	50	16	2277	242	28	2	99	2714	2780

A => C

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	2	0	0	0	2	2
H/TOT	0	0	0	2	0	0	0	2	2
08:00	0	0	1	0	0	0	0	1	1
08:15	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
09:00	0	0	2	0	0	0	0	2	2
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	3	0	0	0	0	3	3
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	0	1	0	0	0	1	1
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	1	1	0	0	0	2	2
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0
11:30	0	0	0	1	0	0	0	1	1
11:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	1	0	0	0	1	1
12:00	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	1	0	0	0	0	1	1
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0
13:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	1	0	0	0	0	1	1
14:00	0	0	1	0	0	0	0	1	1
14:15	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	2	0	0	0	0	2	2
15:00	0	0	1	0	0	0	0	1	1
15:15	0	0	0	0	0	0	0	0	0
15:30	0	0	2	0	0	0	0	2	2
15:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	0	0	0	3	3
16:00	0	0	2	0	0	0	0	2	2
16:15	0	0	1	0	0	0	0	1	1
16:30	0	0	1	0	0	0	0	1	1
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	4	0	0	0	0	4	4
17:00	0	0	3	0	0	0	0	3	3
17:15	0	0	1	0	0	0	0	1	1
17:30	0	0	3	0	0	0	0	3	3
17:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	8	0	0	0	0	8	8
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	3	1	0	0	0	4	4
18:30	0	0	2	1	0	0	0	3	3
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	5	2	0	0	0	7	7
19:00	0	0	1	0	0	0	0	1	1
19:15	0	0	2	0	0	0	0	2	2
19:30	0	0	1	0	0	0	0	1	1
19:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	5	0	0	0	0	5	5
14 TOT	0	0	34	6	0	0	0	40	40

A => D

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	1	0	0	0	1	1
06:15	0	0	1	0	0	0	0	1	1
06:30	0	0	1	0	0	0	0	1	1
06:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	3	1	0	0	0	4	4
07:00	0	0	3	2	0	0	0	5	5
07:15	1	0	5	1	0	0	0	7	6.2
07:30	0	0	7	0	0	0	1	8	9
07:45	1	0	20	2	0	0	0	23	22.2
H/TOT	2	0	35	5	0	0	1	43	42.4
08:00	4	0	27	0	0	0	0	31	27.8
08:15	0	0	26	1	0	0	0	27	27
08:30	1	0	21	0	0	0	0	22	21.2
08:45	1	0	27	0	0	0	0	28	27.2
H/TOT	6	0	101	1	0	0	0	108	103.2
09:00	0	0	12	1	0	0	0	13	13
09:15	1	0	6	0	0	0	0	7	6.2
09:30	0	0	7	1	0	0	0	8	8
09:45	0	0	8	0	0	0	0	8	8
H/TOT	1	0	33	2	0	0	0	36	35.2
10:00	0	0	7	0	0	0	0	7	7
10:15	0	0	5	0	0	0	0	5	5
10:30	0	0	8	0	0	0	0	8	8
10:45	0	0	4	1	0	0	0	5	5
H/TOT	0	0	24	1	0	0	0	25	25
11:00	0	0	3	2	0	0	0	5	5
11:15	0	0	3	0	0	0	0	3	3
11:30	0	0	13	1	1	0	0	15	15.5
11:45	0	0	4	3	1	0	0	8	8.5
H/TOT	0	0	23	6	2	0	0	31	32
12:00	0	0	7	0	0	0	0	7	7
12:15	0	0	3	0	1	0	0	4	4.5
12:30	0	0	8	1	1	0	0	10	10.5
12:45	0	0	7	0	0	0	0	7	7
H/TOT	0	0	25	1	2	0	0	28	29
13:00	0	0	8	1	0	0	1	10	11
13:15	0	1	7	1	0	0	0	9	8.4
13:30	0	0	9	0	0	0	0	9	9
13:45	0	0	9	1	0	0	0	10	10
H/TOT	0	1	33	3	0	0	1	38	38.4
14:00	0	0	12	0	0	0	0	12	12
14:15	0	0	11	2	0	0	0	13	13
14:30	1	0	10	0	0	0	0	11	10.2
14:45	1	0	6	0	0	0	1	8	8.2
H/TOT	2	0	39	2	0	0	1	44	43.4
15:00	0	0	10	0	0	0	0	10	10
15:15	0	0	7	0	1	0	0	8	8.5
15:30	3	0	12	0	0	0	4	19	20.6
15:45	2	0	11	1	0	0	0	14	12.4
H/TOT	5	0	40	1	1	0	4	51	51.5
16:00	0	0	8	0	0	0	0	8	8
16:15	1	0	7	0	0	0	0	8	7.2
16:30	0	0	15	3	1	0	0	19	19.5
16:45	0	0	10	0	0	0	0	10	10
H/TOT	1	0	40	3	1	0	0	45	44.7
17:00	0	0	15	0	0	0	1	16	17
17:15	0	0	21	0	0	0	0	21	21
17:30	1	0	14	1	0	0	0	16	15.2
17:45	0	0	18	1	0	0	0	19	19
H/TOT	1	0	68	2	0	0	1	72	72.2
18:00	0	0	10	0	0	0	0	10	10
18:15	0	0	4	0	0	0	0	4	4
18:30	1	0	11	0	0	0	0	12	11.2
18:45	0	0	9	0	0	0	0	9	9
H/TOT	1	0	34	0	0	0	0	35	34.2
19:00	1	0	33	0	0	0	0	34	33.2
19:15	0	0	14	0	0	0	0	14	14
19:30	0	0	10	1	0	0	0	11	11
19:45	0	0	13	0	0	0	0	13	13
H/TOT	1	0	70	1	0	0	0	72	71.2
14 TOT	20	1	568	29	6	0	8	632	626.4

B => A

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	3	0	0	0	1	4	5
06:15	0	0	11	2	0	0	2	15	17
06:30	1	0	3	4	0	0	2	10	11.2
06:45	1	0	8	1	0	0	1	11	11.2
H/TOT	2	0	25	7	0	0	6	40	44.4
07:00	0	0	7	6	1	0	1	15	16.5
07:15	0	0	7	1	1	0	4	13	17.5
07:30	0	0	13	3	0	0	1	17	18
07:45	0	0	17	1	0	0	2	20	22
H/TOT	0	0	44	11	2	0	8	65	74
08:00	1	0	24	4	0	0	2	31	32.2
08:15	0	0	28	2	2	0	2	34	37
08:30	0	0	27	1	0	0	1	29	30
08:45	2	1	34	2	1	0	1	41	40.3
H/TOT	3	1	113	9	3	0	6	135	139.5
09:00	0	0	45	3	0	0	2	50	52
09:15	0	0	36	6	1	0	2	45	47.5
09:30	2	0	26	2	0	0	3	33	34.4
09:45	2	0	32	1	2	0	0	37	36.4
H/TOT	4	0	139	12	3	0	7	165	170.3
10:00	0	0	32	4	0	0	5	41	46
10:15	0	0	23	5	0	0	3	31	34
10:30	0	0	20	2	0	0	2	24	26
10:45	1	0	21	3	1	0	2	28	29.7
H/TOT	1	0	96	14	1	0	12	124	135.7
11:00	0	0	34	1	0	0	2	37	39
11:15	1	0	35	4	0	0	2	42	43.2
11:30	0	0	32	1	1	0	1	35	36.5
11:45	1	0	26	1	0	0	3	31	33.2
H/TOT	2	0	127	7	1	0	8	145	151.9
12:00	2	0	47	3	0	0	2	54	54.4
12:15	0	0	36	2	0	0	2	40	42
12:30	0	0	33	2	1	0	1	37	38.5
12:45	0	0	39	2	0	0	1	42	43
H/TOT	2	0	155	9	1	0	6	173	177.9
13:00	0	2	32	4	0	0	3	41	42.8
13:15	1	0	33	2	1	0	1	38	38.7
13:30	2	0	44	5	0	0	1	52	51.4
13:45	0	1	40	3	0	0	1	45	45.4
H/TOT	3	3	149	14	1	0	6	176	178.3
14:00	1	1	43	0	0	0	3	48	49.6
14:15	1	0	29	3	0	0	2	35	36.2
14:30	7	0	65	5	0	0	0	77	71.4
14:45	4	0	54	5	0	1	2	66	66.1
H/TOT	13	1	191	13	0	1	7	226	223.3
15:00	1	0	39	2	2	0	1	45	46.2
15:15	2	1	40	3	1	0	3	50	51.3
15:30	2	0	58	2	0	0	1	63	62.4
15:45	2	0	38	8	0	0	1	49	48.4
H/TOT	7	1	175	15	3	0	6	207	208.3
16:00	0	0	48	5	0	0	2	55	57
16:15	1	0	64	7	0	0	2	74	75.2
16:30	0	0	39	7	0	0	2	48	50
16:45	1	2	53	4	0	0	1	61	60
H/TOT	2	2	204	23	0	0	7	238	242.2
17:00	0	0	60	9	0	0	3	72	75
17:15	0	1	53	9	0	0	0	63	62.4
17:30	2	1	62	12	0	0	2	79	78.8
17:45	0	0	68	11	1	0	2	82	84.5
H/TOT	2	2	243	41	1	0	7	296	300.7
18:00	1	0	67	5	0	0	2	75	76.2
18:15	1	1	56	4	0	0	1	63	62.6
18:30	3	0	72	4	0	0	3	82	82.6
18:45	0	0	88	8	0	0	0	96	96
H/TOT	5	1	283	21	0	0	6	316	317.4
19:00	1	1	66	4	0	0	3	75	76.6
19:15	1	0	73	5	0	0	0	79	78.2
19:30	1	0	63	0	2	0	2	68	70.2
19:45	1	1	54	3	0	0	4	63	65.6
H/TOT	4	2	256	12	2	0	9	285	290.6
14 TOT	50	13	2200	208	18	1	101	2591	2654.5

B => B

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
12:00	0	0	1	0	0	0	0	1	1
12:15	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	0	0	0	1	1
13:00	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0
13:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	1	0	0	0	0	1	1
14:00	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0
14:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0
15:15	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0
14 TOT	0	0	2	0	0	0	0	2	2

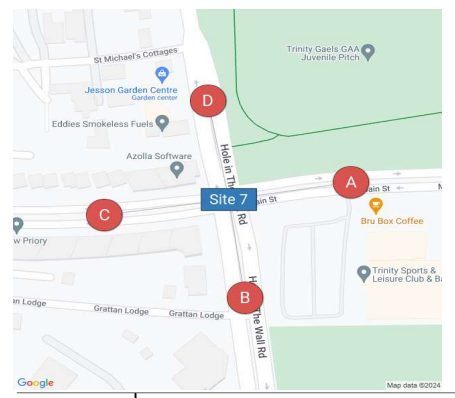
B => C

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	1	0	0	0	0	1	1
06:15	0	0	1	0	0	0	0	1	1
06:30	0	0	0	1	0	0	0	1	1
06:45	0	0	0	1	0	0	0	1	1
H/TOT	0	0	2	2	0	0	0	4	4
07:00	0	0	2	0	0	0	0	2	2
07:15	1	0	2	0	1	0	0	4	3.7
07:30	0	0	0	0	0	0	0	0	0
07:45	0	0	1	0	0	0	0	1	1
H/TOT	1	0	5	0	1	0	0	7	6.7
08:00	0	0	1	0	0	0	0	1	1
08:15	0	0	0	1	0	0	0	1	1
08:30	1	0	3	0	0	0	0	4	3.2
08:45	0	0	4	0	0	0	0	4	4
H/TOT	1	0	8	1	0	0	0	10	9.2
09:00	0	0	2	1	1	0	0	4	4.5
09:15	1	0	1	0	0	0	0	2	1.2
09:30	0	0	1	0	0	0	0	1	1
09:45	0	0	1	0	0	0	0	1	1
H/TOT	1	0	5	1	1	0	0	8	7.7
10:00	0	0	2	0	0	0	0	2	2
10:15	0	0	1	1	0	0	0	2	2
10:30	0	0	3	0	0	0	0	3	3
10:45	1	0	3	0	0	0	0	4	3.2
H/TOT	1	0	9	1	0	0	0	11	10.2
11:00	0	0	1	1	1	0	0	3	3.5
11:15	0	0	0	0	0	0	0	0	0
11:30	0	0	4	0	0	0	0	4	4
11:45	0	0	0	1	0	0	0	1	1
H/TOT	0	0	5	2	1	0	0	8	8.5
12:00	0	0	2	1	0	0	0	3	3
12:15	0	0	1	0	0	0	0	1	1
12:30	0	0	1	0	0	0	0	1	1
12:45	0	0	1	0	0	0	0	1	1
H/TOT	0	0	5	1	0	0	0	6	6
13:00	0	0	2	0	0	0	0	2	2
13:15	0	0	1	0	0	0	0	1	1
13:30	1	0	5	0	0	0	0	6	5.2
13:45	0	0	7	0	0	0	0	7	7
H/TOT	1	0	15	0	0	0	0	16	15.2
14:00	0	0	4	0	0	0	0	4	4
14:15	0	0	3	0	0	0	0	3	3
14:30	0	0	3	1	0	0	0	4	4
14:45	0	0	4	0	0	0	0	4	4
H/TOT	0	0	14	1	0	0	0	15	15
15:00	0	0	1	1	0	0	0	2	2
15:15	0	0	4	1	0	0	0	5	5
15:30	0	0	3	0	0	0	0	3	3
15:45	1	0	1	0	0	0	0	2	1.2
H/TOT	1	0	9	2	0	0	0	12	11.2
16:00	0	0	4	1	0	0	0	5	5
16:15	0	0	4	0	0	0	0	4	4
16:30	0	0	2	1	0	0	0	3	3
16:45	0	0	4	0	0	0	0	4	4
H/TOT	0	0	14	2	0	0	0	16	16
17:00	0	0	2	1	0	0	0	3	3
17:15	0	0	9	0	0	0	0	9	9
17:30	1	0	5	0	0	0	0	6	5.2
17:45	0	0	5	0	0	0	0	5	5
H/TOT	1	0	21	1	0	0	0	23	22.2
18:00	0	0	3	0	0	0	0	3	3
18:15	0	0	4	0	0	0	0	4	4
18:30	0	0	8	0	0	0	0	8	8
18:45	1	0	4	0	0	0	0	5	4.2
H/TOT	1	0	19	0	0	0	0	20	19.2
19:00	0	0	5	0	0	0	0	5	5
19:15	0	0	6	0	0	0	0	6	6
19:30	0	0	5	0	0	0	0	5	5
19:45	0	0	3	0	0	0	0	3	3
H/TOT	0	0	19	0	0	0	0	19	19
14 TOT	8	0	150	14	3	0	0	175	170.1

B => D

TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	1	0	5	1	0	0	0	7	6.2
06:15	0	0	11	1	1	0	0	13	13.5
06:30	0	0	9	2	0	0	0	11	11
06:45	2	0	10	3	2	1	0	18	18.7
H/TOT	3	0	35	7	3	1	0	49	49.4
07:00	0	0	10	2	2	0	0	14	15
07:15	0	0	24	2	2	0	0	28	29
07:30	1	0	30	4	0	1	0	36	36.5
07:45	1	0	45	2	2	0	1	51	52.2
H/TOT	2	0	109	10	6	1	1	129	132.7
08:00	3	0	38	2	1	0	0	44	42.1
08:15	2	0	60	3	2	0	0	67	66.4
08:30	3	1	71	5	1	0	0	81	78.5
08:45	6	1	43	2	1	0	0	53	48.1
H/TOT	14	2	212	12	5	0	0	245	235.1
09:00	1	0	53	4	0	0	0	58	57.2
09:15	1	0	58	8	3	0	0	70	70.7
09:30	0	0	29	5	0	0	0	34	34
09:45	0	0	34	10	1	0	0	45	45.5
H/TOT	2	0	174	27	4	0	0	207	207.4
10:00	0	0	29	2	0	0	0	31	31
10:15	0	0	29	4	0	0	0	33	33
10:30	0	0	36	6	1	0	0	43	43.5
10:45	0	0	44	8	1	0	0	53	53.5
H/TOT	0	0	138	20	2	0	0	160	161
11:00	1	0	54	4	0	0	0	59	58.2
11:15	0	0	33	7	2	0	0	42	43
11:30	1	0	45	5	0	0	0	51	50.2
11:45	1	0	49	8	1	0	0	59	58.7
H/TOT	3	0	181	24	3	0	0	211	210.1
12:00	0	0	47	6	1	0	0	54	54.5
12:15	0	0	56	7	0	0	0	63	63
12:30	0	0	33	2	2	1	0	38	40.3
12:45	1	2	61	5	1	0	0	70	68.5
H/TOT	1	2	197	20	4	1	0	225	226.3
13:00	1	1	59	4	1	0	0	66	65.1
13:15	1	0	53	3	1	0	0	58	57.7
13:30	2	0	60	7	0	0	0	69	67.4
13:45	1	0	52	3	3	0	0	59	59.7
H/TOT	5	1	224	17	5	0	0	252	249.9
14:00	0	0	51	6	1	0	0	58	58.5
14:15	7	0	62	0	1	0	0	70	64.9
14:30	0	0	50	3	1	0	0	54	54.5
14:45	2	0	54	6	1	0	0	63	61.9
H/TOT	9	0	217	15	4	0	0	245	239.8
15:00	4	0	45	9	0	0	1	59	56.8
15:15	1	0	51	8	1	0	0	61	60.7
15:30	4	0	60	4	0	0	0	68	64.8
15:45	6	0	53	3	2	1	2	67	66.5
H/TOT	15	0	209	24	3	1	3	255	248.8
16:00	3	0	60	6	1	0	0	70	68.1
16:15	1	0	65	8	0	0	0	74	73.2
16:30	2	0	70	8	0	1	0	81	80.7
16:45	2	0	42	8	0	0	0	52	50.4
H/TOT	8	0	237	30	1	1	0	277	272.4
17:00	1	0	65	3	0	0	0	69	68.2
17:15	2	1	59	3	0	0	0	65	62.8
17:30	1	0	64	8	0	0	0	73	72.2
17:45	0	0	65	1	0	0	0	66	66
H/TOT	4	1	253	15	0	0	0	273	269.2
18:00	1	0	54	3	0	0	0	58	57.2
18:15	1	0	69	4	0	0	0	74	73.2
18:30	2	0	59	1	1	0	0	63	61.9
18:45	2	0	65	4	1	0	0	72	70.9
H/TOT	6	0	247	12	2	0	0	267	263.2
19:00	2	0	58	1	0	0	0	61	59.4
19:15	1	1	59	3	0	0	0	64	62.6
19:30	2	0	38	2	0	0	0	42	40.4
19:45	3	0	47	8	1	0	0	59	57.1
H/TOT	8	1	202	14	1	0	0	226	219.5
14 TOT	80	7	2635	247	43	5	4	3021	2984.8

IDASO



Survey Name: 24260 - Belmayne and Clongriffin
Site: Site 7
Location: Hole in the Wall Road / Main Street
Date: Thu 11-Apr-2024
AM Peak: 07:45 — 08:45 **Total:** 1070
PM Peak: 18:30 — 19:30 **Total:** 1325
15 Min Peak: 19:00 — 19:15 **Total:** 344

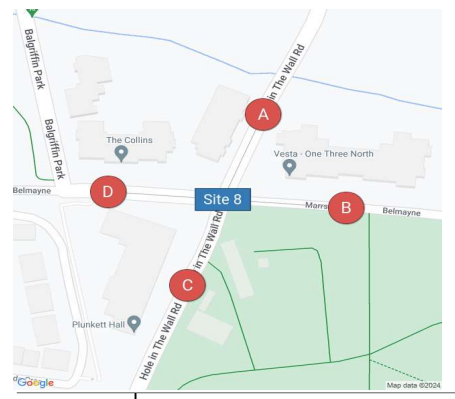
Arm A - Main Street
Arm B - Hole in the Wall Road
Arm C - Main Street
Arm D - Hole in the Wall Road

	C => A									C => B								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2
06:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
06:30	0	0	0	0	0	0	0	0	0	1	0	6	1	0	0	0	8	7.2
06:45	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	5	5
H/TOT	0	0	0	0	0	0	0	0	0	2	0	13	3	0	0	0	18	16.4
07:00	0	0	2	0	0	0	0	2	2	0	0	5	1	0	0	0	6	6
07:15	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	3.5
07:30	0	0	1	1	0	0	0	2	2	0	0	3	1	0	0	0	4	4
07:45	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
H/TOT	0	0	3	1	0	0	0	4	4	0	0	16	2	1	0	0	19	19.5
08:00	0	0	1	0	0	0	0	1	1	1	0	9	0	0	0	0	10	9.2
08:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
08:30	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
08:45	0	0	0	0	0	0	0	0	0	1	0	6	0	0	0	0	7	6.2
H/TOT	0	0	1	0	0	0	0	1	1	2	0	25	0	0	0	0	27	25.4
09:00	0	0	1	0	0	0	0	1	1	0	0	3	0	0	0	0	3	3
09:15	0	0	0	1	0	0	0	1	1	0	0	5	0	1	0	0	6	6.5
09:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
09:45	1	0	0	0	0	0	0	1	0.2	0	0	2	0	0	0	0	2	2
H/TOT	1	0	1	1	0	0	0	3	2.2	0	0	11	0	1	0	0	12	12.5
10:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
10:15	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
10:30	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
10:45	0	0	0	1	0	0	0	1	1	0	0	4	0	0	0	0	4	4
H/TOT	0	0	0	1	0	0	0	1	1	0	0	8	2	0	0	0	10	10
11:00	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	3	2.2
11:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
11:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
11:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	1	0	7	0	0	0	0	8	7.2
12:00	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
12:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
12:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
12:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
13:00	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	3	2.2
13:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
13:30	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	5	5.5
13:45	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
H/TOT	0	0	0	0	0	0	0	0	0	1	0	13	1	1	0	0	16	15.7
14:00	0	0	1	0	0	0	0	1	1	0	0	3	1	0	0	0	4	4
14:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
14:30	0	0	1	0	0	0	0	1	1	0	0	2	1	0	0	0	3	3
14:45	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	4	3.4
H/TOT	0	0	2	0	0	0	0	2	2	0	1	12	2	0	0	0	15	14.4
15:00	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
15:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
15:30	0	0	1	0	0	0	0	1	1	0	0	4	0	0	0	0	4	4
15:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	1	0	0	0	0	1	1	0	0	14	0	0	0	0	14	14
16:00	0	0	1	0	0	0	0	1	1	0	0	4	0	0	0	0	4	4
16:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
16:30	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
16:45	0	0	0	1	0	0	0	1	1	0	0	3	1	0	0	0	4	4
H/TOT	0	0	1	1	0	0	0	2	2	0	0	16	1	0	0	0	17	17
17:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
17:15	0	0	3	0	0	0	0	3	3	0	0	4	0	0	0	0	4	4
17:30	0	0	2	0	0	0	0	2	2	0	0	4	1	0	0	0	5	5
17:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	0	0	5	0	0	0	0	5	5	0	0	12	1	0	0	0	13	13
18:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
18:15	0	0	1	0	0	0	0	1	1	0	0	4	1	0	0	0	5	5
18:30	0	0	1	0	0	0	0	1	1	0	0	4	0	0	0	0	4	4
18:45	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
H/TOT	0	0	2	0	0	0	0	2	2	0	0	15	1	0	0	0	16	16
19:00	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
19:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
19:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
19:45	0	0	1	0	0	0	0	1	1	0	0	7	0	0	0	0	7	7
H/TOT	0	0	2	0	0	0	0	2	2	0	0	12	0	0	0	0	12	12
14 TOT	1	0	18	4	0	0	0	23	22.2	6	1	185	13	3	0	0	208	204.1

	C => C									C => D								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
06:15	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	3
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
07:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.4
07:45	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
H/TOT	0	0	0	0	0	0	0	0	0	0	1	5	1	0	0	0	7	6.4
08:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
08:15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
08:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
08:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
09:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
09:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
09:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
09:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
11:00	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	3.5
11:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
H/TOT	0	0	1	0	0	0	0	1	1	0	0	2	1	1	0	0	4	4.5
12:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
12:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
12:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
12:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
14:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:30	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2
14:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
15:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
15:15	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	2
15:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
15:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	7	7
16:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
16:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
H/TOT	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
17:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
17:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
17:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
18:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
18:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
19:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
19:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
14 TOT	0	0	1	0	0	0	0	1	1	0	1	64	7	1	0	0	73	72.9

	D => A									D => B								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	1	0	0	0	0	1	1	0	0	10	1	0	0	0	11	11
06:15	1	0	2	0	0	0	0	3	2.2	1	0	14	5	2	0	0	22	22.2
06:30	0	0	1	0	0	0	0	1	1	1	0	20	4	0	0	0	25	24.2
06:45	0	0	0	1	1	0	0	2	2.5	0	0	7	3	0	0	0	10	10
H/TOT	1	0	4	1	1	0	0	7	6.7	2	0	51	13	2	0	0	68	67.4
07:00	0	0	0	0	0	0	0	0	0	1	1	16	2	0	0	0	20	18.6
07:15	0	0	4	0	0	0	0	4	4	1	0	30	3	0	0	0	34	33.2
07:30	3	0	2	0	0	0	0	5	2.6	2	0	41	4	0	0	1	48	47.4
07:45	2	0	7	1	0	0	0	10	8.4	1	0	70	6	1	1	4	83	88
H/TOT	5	0	13	1	0	0	0	19	15	5	1	157	15	1	1	5	185	187.2
08:00	1	0	6	0	0	0	0	7	6.2	6	0	63	7	1	0	0	77	72.7
08:15	0	0	11	1	0	0	0	12	12	11	1	47	7	0	0	0	66	56.6
08:30	1	0	9	0	1	0	0	11	10.7	11	1	39	2	1	0	0	54	45.1
08:45	0	0	13	1	1	0	0	15	15.5	6	0	47	0	1	0	0	54	49.7
H/TOT	2	0	39	2	2	0	0	45	44.4	34	2	196	16	3	0	0	251	224.1
09:00	0	0	14	0	2	0	0	16	17	2	0	50	6	0	0	0	58	56.4
09:15	0	0	6	0	1	0	0	7	7.5	1	0	44	5	2	0	0	52	52.2
09:30	0	0	7	0	0	0	0	7	7	0	0	54	4	3	0	0	61	62.5
09:45	0	0	5	0	0	0	0	5	5	1	0	41	5	1	0	0	48	47.7
H/TOT	0	0	32	0	3	0	0	35	36.5	4	0	189	20	6	0	0	219	218.8
10:00	0	0	7	0	0	0	0	7	7	1	0	35	5	1	0	0	42	41.7
10:15	0	0	0	2	0	0	0	2	2	0	0	39	6	2	0	0	47	48
10:30	0	0	4	0	0	0	0	4	4	0	0	42	3	3	0	1	49	51.5
10:45	0	0	5	2	0	0	0	7	7	0	0	44	9	1	0	0	54	54.5
H/TOT	0	0	16	4	0	0	0	20	20	1	0	160	23	7	0	1	192	195.7
11:00	0	0	1	1	0	0	0	2	2	0	0	37	1	2	0	0	40	41
11:15	1	0	12	0	0	0	0	13	12.2	2	0	33	4	1	0	0	40	38.9
11:30	0	0	7	1	0	0	0	8	8	0	0	36	3	0	0	0	39	39
11:45	1	1	7	0	0	0	0	9	7.6	0	0	54	6	3	0	0	63	64.5
H/TOT	2	1	27	2	0	0	0	32	29.8	2	0	160	14	6	0	0	182	183.4
12:00	0	0	4	0	2	0	0	6	7	1	0	55	2	0	0	0	58	57.2
12:15	0	0	12	0	1	0	0	13	13.5	0	0	51	1	3	0	0	55	56.5
12:30	0	0	0	0	0	0	0	0	0	1	0	60	2	1	0	0	64	63.7
12:45	0	0	5	2	0	0	1	8	9	1	2	44	2	0	0	0	49	47
H/TOT	0	0	21	2	3	0	1	27	29.5	3	2	210	7	4	0	0	226	224.4
13:00	0	0	3	1	0	0	0	4	4	3	0	53	3	0	0	0	59	56.6
13:15	0	0	6	1	0	0	0	7	7	1	0	66	4	0	0	0	71	70.2
13:30	0	0	7	1	0	0	0	8	8	1	0	48	1	0	1	0	51	51.5
13:45	1	0	4	1	0	0	0	6	5.2	1	0	65	6	0	0	0	72	71.2
H/TOT	1	0	20	4	0	0	0	25	24.2	6	0	232	14	0	1	0	253	249.5
14:00	0	0	5	2	0	0	0	7	7	3	0	80	2	2	1	0	88	87.9
14:15	6	0	12	0	1	0	0	19	14.7	1	0	57	3	2	0	0	63	63.2
14:30	5	0	14	0	1	0	0	20	16.5	6	0	50	6	0	0	0	62	57.2
14:45	2	0	14	0	0	0	0	16	14.4	2	0	61	2	2	0	0	67	66.4
H/TOT	13	0	45	2	2	0	0	62	52.6	12	0	248	13	6	1	0	280	274.7
15:00	1	0	7	2	1	0	0	11	10.7	0	2	57	8	4	0	0	71	71.8
15:15	0	0	10	1	0	0	0	11	11	0	0	58	8	1	0	0	67	67.5
15:30	0	0	17	1	0	0	0	18	18	0	0	55	4	0	1	0	60	61.3
15:45	0	0	8	0	0	0	0	8	8	1	0	44	2	0	0	0	47	46.2
H/TOT	1	0	42	4	1	0	0	48	47.7	1	2	214	22	5	1	0	245	246.8
16:00	0	0	9	0	0	0	0	9	9	0	0	70	5	0	0	0	75	75
16:15	0	0	12	1	0	0	0	13	13	0	0	59	8	0	0	0	67	67
16:30	0	0	10	0	0	0	0	10	10	1	0	38	4	2	0	0	45	45.2
16:45	1	0	11	0	0	0	0	12	11.2	2	0	56	1	1	1	0	61	61.2
H/TOT	1	0	42	1	0	0	0	44	43.2	3	0	223	18	3	1	0	248	248.4
17:00	0	0	17	0	0	0	1	18	19	1	1	60	5	0	0	0	67	65.6
17:15	0	0	10	1	0	0	0	11	11	0	0	74	1	0	0	0	75	75
17:30	2	0	12	0	0	0	0	14	12.4	2	0	74	5	0	0	0	81	79.4
17:45	1	0	16	0	0	0	0	17	16.2	1	0	70	2	0	0	0	73	72.2
H/TOT	3	0	55	1	0	0	1	60	58.6	4	1	278	13	0	0	0	296	292.2
18:00	0	0	11	0	0	0	0	11	11	1	1	65	4	0	0	0	71	69.6
18:15	1	0	12	0	0	0	0	13	12.2	1	0	42	7	0	0	0	50	49.2
18:30	0	0	12	1	0	0	0	13	13	0	1	57	4	0	0	0	62	61.4
18:45	1	0	27	1	0	0	0	29	28.2	1	0	61	3	0	0	0	65	64.2
H/TOT	2	0	62	2	0	0	0	66	64.4	3	2	225	18	0	0	0	248	244.4
19:00	1	0	15	1	0	0	0	17	16.2	1	0	55	1	0	0	0	57	56.2
19:15	0	0	9	0	0	0	0	9	9	1	0	66	1	0	0	0	68	67.2
19:30	1	1	10	0	0	0	0	12	10.6	0	0	34	2	0	0	0	36	36
19:45	0	0	6	1	0	0	0	7	7	1	0	44	1	0	0	0	46	45.2
H/TOT	2	1	40	2	0	0	0	45	42.8	3	0	199	5	0	0	0	207	204.6
14 TOT	33	2	458	28	12	0	2	535	515.4	83	10	2742	211	43	5	6	3100	3061.6

	D => C									D => D								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0
07:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
07:45	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
H/TOT	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
08:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
08:45	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
H/TOT	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
09:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
11:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
11:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
12:00	1	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
12:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	1	0	2	0	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	0	0	0	0	1	0	0	1	1.5	0	0	0	0	0	0	0	0	0
13:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	1	0	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0
14:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
14:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
14:30	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
14:45	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
H/TOT	0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
15:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
15:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
15:30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
15:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
16:00	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
16:15	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
17:00	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
17:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
17:30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
18:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
18:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1
19:30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
19:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	0	0	0	3	3	0	0	1	0	0	0	0	1	1
14 TOT	1	0	56	2	1	0	0	60	59.7	0	0	1	0	0	0	0	1	1



IDASO

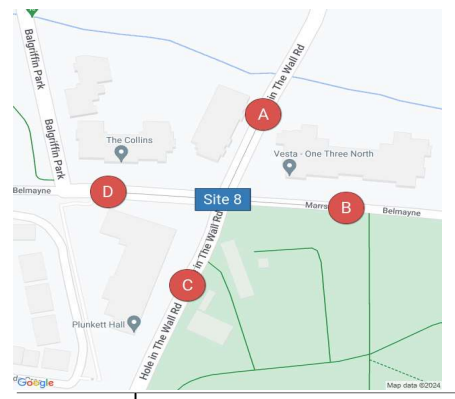
Survey Name:	24260 - Belmayne and Clongriffin		Arm A - Hole in the Wall Road
Site:	Site 8		Arm B - Marrsfield Avenue
Location:	Hole in the Wall Road / Clongriffin Avenue / Marrsfield Avenue		Arm C - Hole in the Wall Road
Date:	Thu 11-Apr-2024		Arm D - Clongriffin Avenue
AM Peak:	08:00 — 09:00	**Total:** 1327	
PM Peak:	17:00 — 18:00	**Total:** 1161	
15 Min Peak:	08:15 — 08:30	**Total:** 358	

	A => A									A => B								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
06:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
06:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
06:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
07:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
07:15	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
07:30	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
07:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	17	1	0	0	0	18	18
08:00	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	10	10
08:15	0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	9	9
08:30	0	0	0	0	0	0	0	0	0	0	0	15	1	0	0	0	16	16
08:45	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
H/TOT	0	0	0	0	0	0	0	0	0	0	0	44	3	0	0	0	47	47
09:00	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
09:15	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
09:30	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
09:45	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	7	7
H/TOT	0	0	0	0	0	0	0	0	0	0	0	30	2	0	0	0	32	32
10:00	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
10:15	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
10:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
10:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	13	13
11:00	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
11:15	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5
11:30	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3
11:45	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
H/TOT	0	0	0	0	0	0	0	0	0	0	0	18	3	0	0	0	21	21
12:00	0	0	0	0	0	0	0	0	0	0	0	5	1	0	1	0	7	8.3
12:15	0	0	0	0	0	0	0	0	0	0	0	7	2	0	0	0	9	9
12:30	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
12:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	21	3	0	1	0	25	26.3
13:00	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
13:15	0	0	0	0	0	0	0	0	0	0	0	4	0	1	0	0	5	5.5
13:30	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
13:45	0	0	0	0	0	0	0	0	0	0	1	9	0	0	0	0	10	9.4
H/TOT	0	0	0	0	0	0	0	0	0	0	1	25	0	1	0	0	27	26.9
14:00	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
14:15	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
14:30	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
14:45	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
H/TOT	0	0	0	0	0	0	0	0	0	0	0	35	1	0	0	0	36	36
15:00	0	0	0	0	0	0	0	0	0	0	0	14	2	0	0	1	17	18
15:15	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
15:30	0	0	0	0	0	0	0	0	0	1	0	9	0	1	0	0	11	10.7
15:45	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	16	16
H/TOT	0	0	0	0	0	0	0	0	0	1	0	47	2	1	0	1	52	52.7
16:00	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
16:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
16:30	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
16:45	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	26	26
17:00	0	0	0	0	0	0	0	0	0	0	0	12	2	0	0	0	14	14
17:15	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
17:30	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0	0	13	13
17:45	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	14	14
H/TOT	0	0	0	0	0	0	0	0	0	0	0	52	2	0	0	0	54	54
18:00	0	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	10	10
18:15	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	5	4.4
18:30	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
18:45	0	0	0	0	0	0	0	0	0	1	0	13	0	0	0	0	14	13.2
H/TOT	0	0	0	0	0	0	0	0	0	1	1	33	2	0	0	0	37	35.6
19:00	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	1	4	4.2
19:15	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
19:30	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
19:45	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
H/TOT	0	0	0	0	0	0	0	0	0	1	0	23	1	0	0	1	26	26.2
14 TOT	0	0	0	0	0	0	0	0	0	3	2	387	22	2	1	2	419	419.7

	A => C									A => D								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	0	0	8	0	0	0	0	8	8	0	1	4	1	0	0	0	6	5.4
06:15	0	0	9	4	1	0	0	14	14.5	0	0	7	1	0	0	0	8	8
06:30	0	0	9	2	0	0	0	11	11	0	0	4	1	0	0	0	5	5
06:45	0	0	7	2	1	0	0	10	10.5	0	0	7	3	0	0	0	10	10
H/TOT	0	0	33	8	2	0	0	43	44	0	1	22	6	0	0	0	29	28.4
07:00	0	1	8	2	0	0	0	11	10.4	0	0	11	1	0	0	0	12	12
07:15	0	0	21	2	0	0	0	23	23	0	0	22	1	0	0	0	23	23
07:30	2	0	23	4	1	1	1	32	33.2	0	0	23	2	0	0	0	25	25
07:45	1	0	48	6	0	0	4	59	62.2	0	0	22	0	0	0	1	23	24
H/TOT	3	1	100	14	1	1	5	125	128.8	0	0	78	4	0	0	1	83	84
08:00	0	0	43	7	1	0	0	51	51.5	0	0	37	1	0	0	0	38	38
08:15	1	0	28	4	0	0	0	33	32.2	1	0	39	2	0	0	0	42	41.2
08:30	2	0	37	2	1	0	0	42	40.9	0	0	35	1	0	0	0	36	36
08:45	0	0	37	3	1	0	0	41	41.5	0	0	25	1	0	0	0	26	26
H/TOT	3	0	145	16	3	0	0	167	166.1	1	0	136	5	0	0	0	142	141.2
09:00	0	0	39	4	1	0	0	44	44.5	0	0	26	0	0	0	0	26	26
09:15	1	0	34	2	2	0	0	39	39.2	0	0	24	2	0	0	0	26	26
09:30	0	0	44	2	2	0	0	48	49	0	0	9	0	0	0	0	9	9
09:45	0	0	36	5	0	0	0	41	41	0	0	12	0	1	0	0	13	13.5
H/TOT	1	0	153	13	5	0	0	172	173.7	0	0	71	2	1	0	0	74	74.5
10:00	0	0	34	3	0	0	0	37	37	0	0	11	0	1	0	0	12	12.5
10:15	0	0	29	5	2	0	0	36	37	0	0	10	0	0	0	0	10	10
10:30	0	0	32	5	2	0	0	39	40	1	0	5	3	0	0	0	9	8.2
10:45	0	0	31	7	1	0	0	39	39.5	0	0	15	0	1	0	0	16	16.5
H/TOT	0	0	126	20	5	0	0	151	153.5	1	0	41	3	2	0	0	47	47.2
11:00	0	0	27	2	2	0	0	31	32	0	0	14	0	0	0	0	14	14
11:15	1	0	30	4	3	0	0	38	38.7	0	0	13	0	0	0	0	13	13
11:30	0	0	26	3	0	0	0	29	29	0	0	8	0	0	0	0	8	8
11:45	4	1	39	3	1	0	0	48	44.7	0	0	13	2	0	0	0	15	15
H/TOT	5	1	122	12	6	0	0	146	144.4	0	0	48	2	0	0	0	50	50
12:00	0	0	34	1	0	0	0	35	35	0	0	8	4	0	0	0	12	12
12:15	1	0	46	1	4	0	0	52	53.2	0	0	6	0	0	0	0	6	6
12:30	0	0	39	2	0	0	0	41	41	0	0	6	1	0	0	0	7	7
12:45	0	0	33	1	0	0	1	35	36	0	0	14	0	0	0	0	14	14
H/TOT	1	0	152	5	4	0	1	163	165.2	0	0	34	5	0	0	0	39	39
13:00	1	0	34	1	0	0	0	36	35.2	0	0	11	0	1	0	0	12	12.5
13:15	0	0	47	4	0	0	0	51	51	0	0	12	0	1	0	0	13	13.5
13:30	0	0	42	4	1	1	0	48	49.8	0	0	15	1	0	0	0	16	16
13:45	0	0	40	5	0	0	0	45	45	0	0	14	2	0	0	0	16	16
H/TOT	1	0	163	14	1	1	0	180	181	0	0	52	3	2	0	0	57	58
14:00	0	0	52	2	3	1	0	58	60.8	1	0	18	0	0	0	0	19	18.2
14:15	0	0	46	3	3	0	0	52	53.5	0	0	20	1	0	0	0	21	21
14:30	1	0	38	5	0	0	0	44	43.2	0	0	19	3	0	0	0	22	22
14:45	0	0	45	4	0	0	0	49	49	0	1	18	0	0	0	1	20	20.4
H/TOT	1	0	181	14	6	1	0	203	206.5	1	1	75	4	0	0	1	82	81.6
15:00	1	2	58	4	3	0	0	68	67.5	0	0	17	1	0	0	0	18	18
15:15	0	0	52	5	0	0	0	57	57	0	0	15	1	0	0	0	16	16
15:30	0	0	42	4	0	1	0	47	48.3	0	1	14	4	0	0	0	19	18.4
15:45	0	0	38	3	0	0	0	41	41	0	0	26	2	0	0	0	28	28
H/TOT	1	2	190	16	3	1	0	213	213.8	0	1	72	8	0	0	0	81	80.4
16:00	0	0	50	3	0	0	0	53	53	0	0	19	0	0	0	0	19	19
16:15	0	0	45	7	1	0	0	53	53.5	0	0	23	2	0	0	0	25	25
16:30	1	0	31	2	1	0	0	35	34.7	0	0	16	1	0	0	0	17	17
16:45	0	0	35	1	1	1	0	38	39.8	0	0	13	1	0	0	0	14	14
H/TOT	1	0	161	13	3	1	0	179	181	0	0	71	4	0	0	0	75	75
17:00	0	0	58	4	0	0	1	63	64	0	0	25	0	0	0	0	25	25
17:15	0	0	54	1	0	0	0	55	55	0	0	18	0	0	0	0	18	18
17:30	1	0	54	4	0	0	0	59	58.2	0	1	20	2	1	0	0	24	23.9
17:45	0	0	51	2	0	0	0	53	53	0	0	14	0	0	0	0	14	14
H/TOT	1	0	217	11	0	0	1	230	230.2	0	1	77	2	1	0	0	81	80.9
18:00	1	1	42	2	0	0	0	46	44.6	0	0	14	1	0	0	0	15	15
18:15	1	0	30	3	0	0	0	34	33.2	0	0	10	1	0	0	0	11	11
18:30	0	0	47	2	0	0	0	49	49	0	0	17	1	0	0	0	18	18
18:45	1	0	47	1	0	0	0	49	48.2	0	1	10	1	0	0	0	12	11.4
H/TOT	3	1	166	8	0	0	0	178	175	0	1	51	4	0	0	0	56	55.4
19:00	1	0	53	1	0	0	0	55	54.2	1	1	15	2	0	0	0	19	17.6
19:15	0	0	35	1	0	0	0	36	36	0	0	12	0	0	0	0	12	12
19:30	0	0	29	1	0	0	0	30	30	0	1	17	1	0	0	0	19	18.4
19:45	0	0	28	1	0	0	0	29	29	0	0	9	0	1	0	0	10	10.5
H/TOT	1	0	145	4	0	0	0	150	149.2	1	2	53	3	1	0	0	60	58.5
14 TOT	22	5	2054	168	39	5	7	2300	2312.4	4	7	881	55	7	0	2	956	954.1

	B => A									B => B								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
06:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
06:30	1	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0
06:45	0	0	1	0	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0
H/TOT	1	0	4	0	1	0	0	6	5.7	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
07:30	1	0	2	0	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0
07:45	1	0	7	0	0	0	0	8	7.2	0	0	0	0	0	0	0	0	0
H/TOT	2	0	11	1	0	0	0	14	12.4	0	0	0	0	0	0	0	0	0
08:00	0	0	16	1	0	0	0	17	17	0	0	0	0	0	0	0	0	0
08:15	1	1	12	2	0	0	0	16	14.6	0	0	0	0	0	0	0	0	0
08:30	0	0	16	1	0	0	0	17	17	0	0	0	0	0	0	0	0	0
08:45	1	0	8	0	0	0	0	9	8.2	0	0	0	0	0	0	0	0	0
H/TOT	2	1	52	4	0	0	0	59	56.8	0	0	0	0	0	0	0	0	0
09:00	0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
09:15	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
09:30	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
09:45	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
H/TOT	0	0	16	3	0	0	0	19	19	0	0	0	0	0	0	0	0	0
10:00	0	0	4	1	1	0	0	6	6.5	0	0	0	0	0	0	0	0	0
10:15	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
10:30	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
10:45	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
H/TOT	0	0	16	1	1	0	0	18	18.5	0	0	0	0	0	0	0	0	0
11:00	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
11:15	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
11:30	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
11:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	0	0	13	2	0	0	0	15	15	0	0	0	0	0	0	0	0	0
12:00	1	0	4	1	0	0	0	6	5.2	0	0	0	0	0	0	0	0	0
12:15	0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
12:30	0	1	4	1	0	0	0	6	5.4	0	0	0	0	0	0	0	0	0
12:45	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
H/TOT	1	1	18	3	0	0	0	23	21.6	0	0	0	0	0	0	0	0	0
13:00	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0
13:15	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
13:30	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
13:45	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
H/TOT	0	0	15	1	0	0	0	16	16	0	0	0	0	0	0	0	0	0
14:00	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
14:15	0	1	4	0	0	0	0	5	4.4	0	0	0	0	0	0	0	0	0
14:30	1	0	4	1	0	0	0	6	5.2	0	0	0	0	0	0	0	0	0
14:45	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
H/TOT	1	1	17	1	0	0	0	20	18.6	0	0	0	0	0	0	0	0	0
15:00	0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
15:15	0	0	9	0	0	0	0	9	9	0	0	0	0	0	0	0	0	0
15:30	0	0	5	2	0	0	0	7	7	0	0	0	0	0	0	0	0	0
15:45	1	0	3	1	0	0	0	5	4.2	0	0	0	0	0	0	0	0	0
H/TOT	1	0	25	3	0	0	0	29	28.2	0	0	0	0	0	0	0	0	0
16:00	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
16:15	0	0	14	0	0	0	0	14	14	0	0	0	0	0	0	0	0	0
16:30	0	0	8	1	0	0	0	9	9	0	0	0	0	0	0	0	0	0
16:45	0	0	5	2	0	0	0	7	7	0	0	0	0	0	0	0	0	0
H/TOT	0	0	30	4	0	0	0	34	34	0	0	0	0	0	0	0	0	0
17:00	0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0
17:15	0	0	6	0	0	0	0	6	6	0	0	0	0	0	0	0	0	0
17:30	0	0	4	2	0	0	0	6	6	0	0	0	0	0	0	0	0	0
17:45	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
H/TOT	0	0	22	2	0	0	0	24	24	0	0	0	0	0	0	0	0	0
18:00	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
18:15	0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
18:30	0	1	4	0	0	0	0	5	4.4	0	0	0	0	0	0	0	0	0
18:45	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0
H/TOT	0	1	21	0	0	0	0	22	21.4	0	0	0	0	0	0	0	0	0
19:00	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0
19:15	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
19:30	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
19:45	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0
H/TOT	0	0	16	1	0	0	0	17	17	0	0	0	0	0	0	0	0	0
14 TOT	8	4	276	26	2	0	0	316	308.2	0	0	0	0	0	0	0	0	0

	B => C									B => D								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	0	0	1	0	0	0	0	1	1	0	0	7	0	0	0	0	7	7
06:15	1	0	3	0	0	0	0	4	3.2	0	0	11	4	2	0	0	17	18
06:30	0	0	3	2	0	0	0	5	5	0	0	6	1	0	0	0	7	7
06:45	0	0	2	0	0	0	0	2	2	0	0	13	4	1	0	0	18	18.5
H/TOT	1	0	9	2	0	0	0	12	11.2	0	0	37	9	3	0	0	49	50.5
07:00	0	0	2	0	0	0	0	2	2	0	0	15	5	0	0	0	20	20
07:15	0	0	2	0	0	0	0	2	2	0	0	22	1	0	0	0	23	23
07:30	0	0	5	0	0	0	0	5	5	0	1	25	2	0	0	0	28	27.4
07:45	0	0	9	0	0	0	0	9	9	1	0	24	0	0	0	0	25	24.2
H/TOT	0	0	18	0	0	0	0	18	18	1	1	86	8	0	0	0	96	94.6
08:00	1	0	6	0	0	0	0	7	6.2	0	1	47	1	0	0	0	49	48.4
08:15	3	1	7	0	0	0	0	11	8	3	0	64	4	1	0	0	72	70.1
08:30	0	0	5	0	0	0	0	5	5	0	0	47	1	0	0	0	48	48
08:45	1	0	7	0	0	0	0	8	7.2	1	1	39	2	0	0	0	43	41.6
H/TOT	5	1	25	0	0	0	0	31	26.4	4	2	197	8	1	0	0	212	208.1
09:00	0	0	5	0	0	0	0	5	5	0	1	13	0	0	0	0	14	13.4
09:15	0	0	3	1	0	0	0	4	4	0	1	14	1	0	0	0	16	15.4
09:30	0	0	6	0	1	0	0	7	7.5	0	0	16	1	0	0	0	17	17
09:45	0	0	4	0	0	0	0	4	4	0	0	14	0	1	0	0	15	15.5
H/TOT	0	0	18	1	1	0	0	20	20.5	0	2	57	2	1	0	0	62	61.3
10:00	0	0	5	0	0	0	0	5	5	0	0	12	0	1	0	0	13	13.5
10:15	0	0	3	0	0	0	0	3	3	0	0	15	3	0	0	0	18	18
10:30	0	0	2	0	0	0	0	2	2	0	0	7	4	0	0	0	11	11
10:45	0	0	6	0	0	0	0	6	6	0	0	12	1	0	0	0	13	13
H/TOT	0	0	16	0	0	0	0	16	16	0	0	46	8	1	0	0	55	55.5
11:00	0	0	3	0	0	0	0	3	3	0	0	9	0	0	0	0	9	9
11:15	0	0	6	0	0	0	0	6	6	0	0	7	3	0	0	0	10	10
11:30	0	0	4	0	0	0	0	4	4	0	0	12	2	0	0	0	14	14
11:45	0	0	6	0	0	0	0	6	6	1	0	17	1	0	0	0	19	18.2
H/TOT	0	0	19	0	0	0	0	19	19	1	0	45	6	0	0	0	52	51.2
12:00	0	0	3	1	0	0	0	4	4	1	0	13	2	0	0	0	16	15.2
12:15	0	0	3	0	0	0	0	3	3	0	0	9	0	0	0	0	9	9
12:30	0	1	10	1	0	0	0	12	11.4	0	0	21	2	1	0	0	24	24.5
12:45	0	0	5	1	1	0	0	7	7.5	0	0	9	0	0	0	0	9	9
H/TOT	0	1	21	3	1	0	0	26	25.9	1	0	52	4	1	0	0	58	57.7
13:00	0	0	8	0	0	0	0	8	8	0	2	10	0	0	0	0	12	10.8
13:15	0	0	6	0	0	0	0	6	6	0	0	16	0	0	0	0	16	16
13:30	0	0	5	0	0	0	0	5	5	0	0	8	0	0	0	0	8	8
13:45	2	0	5	1	0	0	0	8	6.4	1	1	14	1	1	0	0	18	17.1
H/TOT	2	0	24	1	0	0	0	27	25.4	1	3	48	1	1	0	0	54	51.9
14:00	0	0	5	0	0	0	0	5	5	0	1	15	2	0	0	0	18	17.4
14:15	0	0	6	0	0	0	0	6	6	0	0	15	3	0	0	0	18	18
14:30	0	0	5	0	0	0	0	5	5	0	0	16	2	0	0	0	18	18
14:45	0	0	6	0	0	0	0	6	6	1	0	17	3	0	0	0	21	20.2
H/TOT	0	0	22	0	0	0	0	22	22	1	1	63	10	0	0	0	75	73.6
15:00	0	0	2	3	0	0	0	5	5	1	0	10	2	0	0	0	13	12.2
15:15	0	0	4	0	0	0	0	4	4	1	0	20	0	0	0	0	21	20.2
15:30	0	0	7	0	0	0	0	7	7	1	0	17	1	0	0	0	19	18.2
15:45	0	0	5	0	0	0	0	5	5	0	0	18	1	0	0	0	19	19
H/TOT	0	0	18	3	0	0	0	21	21	3	0	65	4	0	0	0	72	69.6
16:00	0	0	7	0	0	0	0	7	7	0	0	21	2	0	0	0	23	23
16:15	0	0	4	0	0	0	0	4	4	2	0	18	1	0	0	0	21	19.4
16:30	0	0	2	0	0	0	0	2	2	0	0	19	1	0	0	0	20	20
16:45	0	0	5	0	0	0	0	5	5	0	0	16	4	0	0	0	20	20
H/TOT	0	0	18	0	0	0	0	18	18	2	0	74	8	0	0	0	84	82.4
17:00	0	1	5	0	0	0	0	6	5.4	0	0	24	0	0	0	0	24	24
17:15	0	0	8	0	0	0	0	8	8	0	0	23	1	0	0	0	24	24
17:30	0	0	7	1	0	0	0	8	8	2	0	22	1	0	0	0	25	23.4
17:45	0	0	10	0	0	0	0	10	10	1	1	19	0	1	0	0	22	21.1
H/TOT	0	1	30	1	0	0	0	32	31.4	3	1	88	2	1	0	0	95	92.5
18:00	0	0	8	0	0	0	0	8	8	0	0	21	2	0	0	0	23	23
18:15	0	0	4	1	0	0	0	5	5	0	0	28	0	0	0	0	28	28
18:30	0	1	7	1	0	0	0	9	8.4	2	0	19	7	1	0	0	29	27.9
18:45	1	0	10	1	0	0	0	12	11.2	0	0	18	3	0	0	0	21	21
H/TOT	1	1	29	3	0	0	0	34	32.6	2	0	86	12	1	0	0	101	99.9
19:00	0	0	9	0	0	0	0	9	9	1	0	22	1	0	0	1	25	25.2
19:15	0	0	9	0	0	0	0	9	9	0	0	18	1	0	0	0	19	19
19:30	0	0	6	1	0	0	0	7	7	0	0	19	0	0	0	0	19	19
19:45	0	0	4	0	0	0	0	4	4	0	0	20	0	0	0	0	20	20
H/TOT	0	0	28	1	0	0	0	29	29	1	0	79	2	0	0	1	83	83.2
14 TOT	9	4	295	15	2	0	0	325	316.4	20	10	1023	84	10	0	1	1148	1132



IDASO

Survey Name: 24260 - Belmayne and Clongriffin
Site: Site 8
Location: Hole in the Wall Road / Clongriffin Avenue / Marrsfield Avenue
Date: Thu 11-Apr-2024
AM Peak: 08:00 — 09:00 **Total:** 1327
PM Peak: 17:00 — 18:00 **Total:** 1161
15 Min Peak: 08:15 — 08:30 **Total:** 358

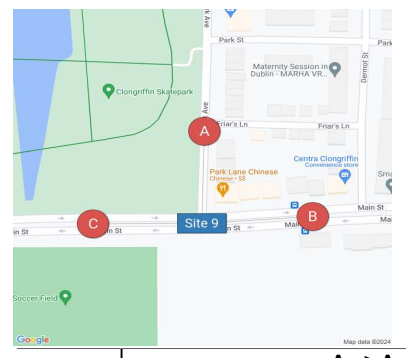
Arm A - Hole in the Wall Road
Arm B - Marrsfield Avenue
Arm C - Hole in the Wall Road
Arm D - Clongriffin Avenue

	C => A									C => B								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	0	0	5	1	0	0	0	6	6	0	0	1	0	0	0	0	1	1
06:15	0	0	6	1	1	0	0	8	8.5	0	0	1	0	0	0	0	1	1
06:30	0	0	5	1	0	0	0	6	6	0	0	1	0	0	0	0	1	1
06:45	0	0	7	3	1	1	0	12	13.8	0	0	0	0	1	0	0	1	1.5
H/TOT	0	0	23	6	2	1	0	32	34.3	0	0	3	0	1	0	0	4	4.5
07:00	0	0	7	2	1	0	0	10	10.5	0	0	0	0	0	0	0	0	0
07:15	0	0	15	4	2	0	0	21	22	0	0	4	0	0	0	0	4	4
07:30	1	0	18	3	0	1	0	23	23.5	0	0	1	0	0	0	0	1	1
07:45	1	0	30	3	2	0	0	36	36.2	0	0	4	0	0	0	0	4	4
H/TOT	2	0	70	12	5	1	0	90	92.2	0	0	9	0	0	0	0	9	9
08:00	0	0	29	1	2	0	0	32	33	0	0	2	0	0	0	0	2	2
08:15	2	0	39	4	1	0	0	46	44.9	0	0	4	1	0	0	0	5	5
08:30	1	0	47	2	2	0	0	52	52.2	0	1	8	0	0	0	0	9	8.4
08:45	0	1	32	4	0	0	0	37	36.4	0	0	5	0	0	0	0	5	5
H/TOT	3	1	147	11	5	0	0	167	166.5	0	1	19	1	0	0	0	21	20.4
09:00	0	0	35	3	0	0	0	38	38	0	0	11	1	0	0	0	12	12
09:15	0	0	31	3	2	0	0	36	37	0	0	5	1	0	0	0	6	6
09:30	0	0	23	6	1	0	0	30	30.5	0	0	4	1	0	0	0	5	5
09:45	0	0	27	7	1	0	0	35	35.5	0	0	3	1	0	0	0	4	4
H/TOT	0	0	116	19	4	0	0	139	141	0	0	23	4	0	0	0	27	27
10:00	0	0	22	2	0	0	0	24	24	0	0	6	0	0	0	0	6	6
10:15	0	0	20	3	0	0	0	23	23	0	0	0	0	0	0	0	0	0
10:30	0	0	32	5	0	0	0	37	37	0	0	2	1	0	0	0	3	3
10:45	0	0	30	3	1	0	0	34	34.5	0	0	5	0	0	0	0	5	5
H/TOT	0	0	104	13	1	0	0	118	118.5	0	0	13	1	0	0	0	14	14
11:00	0	0	33	5	0	0	0	38	38	0	0	2	2	0	0	0	4	4
11:15	0	0	24	8	2	0	0	34	35	0	0	1	0	0	0	0	1	1
11:30	0	0	24	6	1	0	0	31	31.5	0	0	2	0	0	0	0	2	2
11:45	0	0	29	5	1	0	0	35	35.5	0	0	6	0	0	0	0	6	6
H/TOT	0	0	110	24	4	0	0	138	140	0	0	11	2	0	0	0	13	13
12:00	0	0	30	4	0	0	0	34	34	0	0	7	1	0	0	0	8	8
12:15	0	0	43	7	0	0	0	50	50	0	0	3	0	0	0	0	3	3
12:30	0	0	30	3	2	1	0	36	38.3	0	0	3	0	0	0	0	3	3
12:45	1	1	40	2	1	0	0	45	44.1	0	1	1	0	0	0	0	2	1.4
H/TOT	1	1	143	16	3	1	0	165	166.4	0	1	14	1	0	0	0	16	15.4
13:00	0	0	46	4	1	0	1	52	53.5	0	1	4	0	0	0	0	5	4.4
13:15	0	0	37	2	1	0	0	40	40.5	0	0	4	0	0	0	0	4	4
13:30	0	0	29	5	0	0	0	34	34	0	0	8	0	1	0	0	9	9.5
13:45	0	0	33	1	1	0	0	35	35.5	0	0	5	0	0	0	0	5	5
H/TOT	0	0	145	12	3	0	1	161	163.5	0	1	21	0	1	0	0	23	22.9
14:00	0	0	34	2	0	0	0	36	36	0	0	6	1	0	0	0	7	7
14:15	0	0	36	2	0	0	0	38	38	0	0	3	0	0	0	0	3	3
14:30	0	0	43	5	1	0	0	49	49.5	0	0	4	0	0	0	0	4	4
14:45	0	0	33	2	0	0	0	35	35	0	0	6	0	0	0	0	6	6
H/TOT	0	0	146	11	1	0	0	158	158.5	0	0	19	1	0	0	0	20	20
15:00	0	0	34	8	0	0	1	43	44	0	0	6	0	0	0	0	6	6
15:15	0	0	34	4	2	0	0	40	41	0	0	4	1	0	0	0	5	5
15:30	0	0	57	3	0	0	2	62	64	0	0	7	0	0	0	0	7	7
15:45	2	0	37	4	1	1	0	45	45.2	0	0	2	1	0	0	0	3	3
H/TOT	2	0	162	19	3	1	3	190	194.2	0	0	19	2	0	0	0	21	21
16:00	0	0	35	2	1	0	0	38	38.5	0	0	3	0	0	0	0	3	3
16:15	0	0	44	6	1	0	0	51	51.5	0	0	3	1	0	0	0	4	4
16:30	0	0	55	7	0	1	0	63	64.3	0	0	2	2	0	0	0	4	4
16:45	0	0	32	4	0	0	0	36	36	0	0	6	1	0	0	0	7	7
H/TOT	0	0	166	19	2	1	0	188	190.3	0	0	14	4	0	0	0	18	18
17:00	0	0	40	2	0	0	1	43	44	0	0	6	0	0	0	0	6	6
17:15	0	0	50	2	0	0	0	52	52	0	1	3	0	0	0	0	4	3.4
17:30	0	0	46	3	0	0	0	49	49	0	0	8	2	0	0	0	10	10
17:45	0	0	52	0	0	0	0	52	52	0	0	8	0	0	0	0	8	8
H/TOT	0	0	188	7	0	0	1	196	197	0	1	25	2	0	0	0	28	27.4
18:00	2	0	39	3	0	0	0	44	42.4	0	0	5	0	0	0	0	5	5
18:15	0	0	36	3	0	0	0	39	39	1	0	8	0	0	0	0	9	8.2
18:30	1	0	29	0	0	0	0	30	29.2	0	0	11	0	0	0	0	11	11
18:45	1	0	57	1	2	0	0	61	61.2	0	0	6	1	0	0	0	7	7
H/TOT	4	0	161	7	2	0	0	174	171.8	1	0	30	1	0	0	0	32	31.2
19:00	0	0	36	0	0	0	0	36	36	0	0	11	0	0	0	0	11	11
19:15	0	0	42	2	0	0	0	44	44	0	0	6	0	0	0	0	6	6
19:30	0	1	23	1	0	0	0	25	24.4	0	0	9	0	0	0	0	9	9
19:45	0	0	32	3	1	0	0	36	36.5	0	0	3	2	0	0	0	5	5
H/TOT	0	1	133	6	1	0	0	141	140.9	0	0	29	2	0	0	0	31	31
14 TOT	12	3	1814	182	36	5	5	2057	2075.1	1	4	249	21	2	0	0	277	274.8

	C => C									C => D								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
06:15	0	0	0	0	0	0	0	0	0	0	0	7	3	0	0	0	10	10
06:30	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
06:45	0	0	0	0	0	0	0	0	0	0	0	7	2	0	0	0	9	9
H/TOT	0	0	0	0	0	0	0	0	0	0	0	18	6	0	0	0	24	24
07:00	0	0	0	0	0	0	0	0	0	0	0	8	2	1	0	0	11	11.5
07:15	0	0	0	0	0	0	0	0	0	0	0	11	3	0	0	0	14	14
07:30	0	0	0	0	0	0	0	0	0	0	1	16	1	0	0	1	19	19.4
07:45	0	0	0	0	0	0	0	0	0	0	0	29	3	0	0	1	33	34
H/TOT	0	0	0	0	0	0	0	0	0	0	1	64	9	1	0	2	77	78.9
08:00	0	0	0	0	0	0	0	0	0	0	0	23	2	0	0	0	25	25
08:15	0	0	0	0	0	0	0	0	0	0	0	45	0	0	0	0	45	45
08:30	0	0	0	0	0	0	0	0	0	0	0	48	2	0	0	0	50	50
08:45	0	0	0	0	0	0	0	0	0	0	0	38	1	0	0	0	39	39
H/TOT	0	0	0	0	0	0	0	0	0	0	0	154	5	0	0	0	159	159
09:00	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0	0	26	26
09:15	0	0	0	0	0	0	0	0	0	0	0	23	2	0	0	0	25	25
09:30	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	15	15
09:45	0	0	0	0	0	0	0	0	0	0	0	11	2	0	0	0	13	13
H/TOT	0	0	0	0	0	0	0	0	0	0	0	74	5	0	0	0	79	79
10:00	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
10:15	0	0	0	0	0	0	0	0	0	0	0	14	1	0	0	0	15	15
10:30	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
10:45	0	0	0	0	0	0	0	0	0	0	0	13	1	0	0	0	14	14
H/TOT	0	0	0	0	0	0	0	0	0	0	0	47	2	0	0	0	49	49
11:00	0	0	0	0	0	0	0	0	0	0	0	23	1	1	0	0	25	25.5
11:15	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
11:30	0	0	0	0	0	0	0	0	0	0	0	27	1	0	0	0	28	28
11:45	0	0	0	0	0	0	0	0	0	0	0	13	3	0	0	0	16	16
H/TOT	0	0	0	0	0	0	0	0	0	0	0	75	5	1	0	0	81	81.5
12:00	0	0	0	0	0	0	0	0	0	0	0	16	1	0	0	0	17	17
12:15	0	0	0	0	0	0	0	0	0	0	0	16	2	1	0	0	19	19.5
12:30	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	6	6.5
12:45	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	30	30
H/TOT	0	0	0	0	0	0	0	0	0	0	0	67	3	2	0	0	72	73
13:00	0	0	0	0	0	0	0	0	0	2	0	18	2	0	0	0	22	20.4
13:15	0	0	0	0	0	0	0	0	0	1	1	15	0	0	0	0	17	15.6
13:30	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	0	27	27
13:45	0	0	0	0	0	0	0	0	0	0	0	18	2	1	0	0	21	21.5
H/TOT	0	0	0	0	0	0	0	0	0	3	1	78	4	1	0	0	87	84.5
14:00	0	0	0	0	0	0	0	0	0	0	0	22	1	1	0	0	24	24.5
14:15	0	0	0	0	0	0	0	0	0	0	0	31	0	2	0	0	33	34
14:30	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	0	28	28
14:45	0	0	0	0	0	0	0	0	0	0	0	21	2	0	0	1	24	25
H/TOT	0	0	0	0	0	0	0	0	0	0	0	102	3	3	0	1	109	111.5
15:00	0	0	0	0	0	0	0	0	0	0	0	19	3	0	0	0	22	22
15:15	0	0	0	0	0	0	0	0	0	0	0	12	3	1	0	0	16	16.5
15:30	0	0	0	0	0	0	0	0	0	0	0	13	2	0	0	2	17	19
15:45	0	0	0	0	0	0	0	0	0	0	0	30	0	1	0	2	33	35.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	74	8	2	0	4	88	93
16:00	0	0	0	0	0	0	0	0	0	0	0	30	2	0	0	0	32	32
16:15	0	0	0	0	0	0	0	0	0	0	0	20	4	0	0	0	24	24
16:30	0	0	0	0	0	0	0	0	0	0	0	29	2	0	0	0	31	31
16:45	0	0	0	0	0	0	0	0	0	0	0	15	3	0	0	0	18	18
H/TOT	0	0	0	0	0	0	0	0	0	0	0	94	11	0	0	0	105	105
17:00	0	0	0	0	0	0	0	0	0	0	0	31	1	0	0	0	32	32
17:15	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0	0	24	24
17:30	0	0	0	0	0	0	0	0	0	0	0	27	1	0	0	0	28	28
17:45	0	0	0	0	0	0	0	0	0	0	0	27	3	0	0	0	30	30
H/TOT	0	0	0	0	0	0	0	0	0	0	0	109	5	0	0	0	114	114
18:00	0	0	0	0	0	0	0	0	0	0	0	25	1	0	0	0	26	26
18:15	0	0	0	0	0	0	0	0	0	0	0	28	1	0	0	0	29	29
18:30	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	22	22
18:45	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	22	22
H/TOT	0	0	0	0	0	0	0	0	0	0	0	97	2	0	0	0	99	99
19:00	0	0	0	0	0	0	0	0	0	0	0	39	1	0	0	0	40	40
19:15	0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	32	32
19:30	0	0	0	0	0	0	0	0	0	1	0	17	2	0	0	0	20	19.2
19:45	0	0	0	0	0	0	0	0	0	1	0	19	2	0	0	0	22	21.2
H/TOT	0	0	0	0	0	0	0	0	0	2	0	107	5	0	0	0	114	112.4
14 TOT	0	0	0	0	0	0	0	0	0	5	2	1160	73	10	0	7	1257	1263.8

	D => A									D => B								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	1	0	1	0	0	0	0	2	1.2	0	0	2	0	0	0	0	2	2
06:15	0	0	2	0	0	0	0	2	2	0	0	4	0	0	0	0	4	4
06:30	0	0	0	0	0	0	0	0	0	1	0	2	1	0	0	0	4	3.2
06:45	0	0	1	0	0	0	0	1	1	0	0	4	1	0	0	0	5	5
H/TOT	1	0	4	0	0	0	0	5	4.2	1	0	12	2	0	0	0	15	14.2
07:00	0	0	6	1	0	0	0	7	7	1	0	13	0	0	0	0	14	13.2
07:15	0	0	3	1	0	0	0	4	4	0	0	17	2	0	0	0	19	19
07:30	0	0	8	0	0	0	0	8	8	0	0	20	0	2	0	0	22	23
07:45	0	0	12	1	0	0	0	13	13	0	0	23	1	0	0	0	24	24
H/TOT	0	0	29	3	0	0	0	32	32	1	0	73	3	2	0	0	79	79.2
08:00	0	0	18	0	0	0	0	18	18	0	0	23	3	0	0	0	26	26
08:15	0	0	31	2	0	0	0	33	33	0	0	26	2	0	0	0	28	28
08:30	0	0	32	2	0	0	0	34	34	0	0	29	1	0	0	0	30	30
08:45	0	1	15	3	2	0	0	21	21.4	0	0	48	3	0	0	0	51	51
H/TOT	0	1	96	7	2	0	0	106	106.4	0	0	126	9	0	0	0	135	135
09:00	0	0	10	0	0	0	1	11	12	0	0	20	4	0	0	0	24	24
09:15	0	0	12	0	0	0	0	12	12	1	0	14	1	1	0	0	17	16.7
09:30	0	0	9	2	0	0	0	11	11	1	0	14	0	0	0	0	15	14.2
09:45	0	0	5	1	0	0	0	6	6	0	0	13	0	0	0	0	13	13
H/TOT	0	0	36	3	0	0	1	40	41	2	0	61	5	1	0	0	69	67.9
10:00	0	0	7	0	0	0	0	7	7	0	0	14	2	0	0	0	16	16
10:15	0	0	11	2	0	0	0	13	13	0	0	10	0	0	0	0	10	10
10:30	0	1	6	0	0	0	0	7	6.4	0	0	7	3	0	0	0	10	10
10:45	0	0	9	0	1	0	0	10	10.5	0	0	13	2	0	0	0	15	15
H/TOT	0	1	33	2	1	0	0	37	36.9	0	0	44	7	0	0	0	51	51
11:00	0	0	6	0	1	0	0	7	7.5	0	0	9	1	0	0	0	10	10
11:15	0	0	9	0	0	0	0	9	9	0	0	11	2	1	0	0	14	14.5
11:30	0	0	12	0	1	0	0	13	13.5	1	0	13	1	0	0	0	15	14.2
11:45	0	0	4	0	0	0	0	4	4	0	0	13	1	0	0	0	14	14
H/TOT	0	0	31	0	2	0	0	33	34	1	0	46	5	1	0	0	53	52.7
12:00	0	0	4	2	0	0	0	6	6	1	0	15	1	3	0	0	20	20.7
12:15	0	0	6	1	0	0	0	7	7	1	0	9	4	0	0	0	14	13.2
12:30	0	1	6	0	0	0	0	7	6.4	0	1	11	2	0	0	0	14	13.4
12:45	0	0	10	0	0	0	0	10	10	0	0	11	1	0	0	0	12	12
H/TOT	0	1	26	3	0	0	0	30	29.4	2	1	46	8	3	0	0	60	59.3
13:00	0	0	11	1	0	0	0	12	12	0	0	12	0	0	0	0	12	12
13:15	0	0	7	1	0	0	0	8	8	0	0	6	1	0	0	0	7	7
13:30	0	0	4	1	0	0	0	5	5	0	0	19	0	1	0	0	20	20.5
13:45	1	0	7	1	0	0	0	9	8.2	1	0	7	2	0	0	0	10	9.2
H/TOT	1	0	29	4	0	0	0	34	33.2	1	0	44	3	1	0	0	49	48.7
14:00	0	0	7	0	0	0	0	7	7	0	0	11	2	1	0	1	15	16.5
14:15	0	0	10	1	0	0	0	11	11	3	1	16	2	0	0	0	22	19
14:30	0	0	15	1	0	0	0	16	16	1	0	20	2	0	0	0	23	22.2
14:45	0	0	7	0	0	0	0	7	7	1	0	22	2	0	0	0	25	24.2
H/TOT	0	0	39	2	0	0	0	41	41	5	1	69	8	1	0	1	85	81.9
15:00	0	0	7	1	0	0	0	8	8	0	0	15	2	1	0	2	20	22.5
15:15	0	0	16	1	0	0	0	17	17	0	0	16	3	0	0	0	19	19
15:30	0	1	9	0	0	0	0	10	9.4	0	0	30	0	0	0	0	30	30
15:45	0	0	14	0	0	0	0	14	14	0	0	19	2	0	0	0	21	21
H/TOT	0	1	46	2	0	0	0	49	48.4	0	0	80	7	1	0	2	90	92.5
16:00	0	0	12	0	0	0	1	13	14	0	0	21	6	1	0	0	28	28.5
16:15	0	0	14	1	0	0	0	15	15	0	0	15	3	0	0	0	18	18
16:30	0	0	8	2	0	0	0	10	10	1	0	21	2	0	0	0	24	23.2
16:45	0	0	13	1	0	0	0	14	14	0	1	27	0	1	0	0	29	28.9
H/TOT	0	0	47	4	0	0	1	52	53	1	1	84	11	2	0	0	99	98.6
17:00	0	1	11	1	0	0	0	13	12.4	0	0	23	4	0	0	0	27	27
17:15	0	0	14	2	0	0	0	16	16	0	0	29	3	1	0	0	33	33.5
17:30	1	0	15	0	0	0	0	16	15.2	1	1	31	1	0	0	0	34	32.6
17:45	0	0	18	1	0	0	0	19	19	0	0	31	2	0	0	0	33	33
H/TOT	1	1	58	4	0	0	0	64	62.6	1	1	114	10	1	0	0	127	126.1
18:00	0	0	17	1	0	0	0	18	18	3	0	32	4	0	0	0	39	36.6
18:15	0	0	13	0	0	0	0	13	13	0	1	37	1	0	0	0	39	38.4
18:30	0	0	14	1	0	0	0	15	15	0	0	24	3	0	0	0	27	27
18:45	0	0	16	0	0	0	0	16	16	0	0	22	3	0	0	0	25	25
H/TOT	0	0	60	2	0	0	0	62	62	3	1	115	11	0	0	0	130	127
19:00	1	0	2	0	0	0	0	3	2.2	0	0	25	0	1	0	0	26	26.5
19:15	0	1	14	1	0	0	0	16	15.4	0	1	29	4	0	0	0	34	33.4
19:30	0	0	8	0	0	0	0	8	8	0	0	28	0	0	0	0	28	28
19:45	0	0	11	0	0	0	0	11	11	0	0	19	2	1	0	0	22	22.5
H/TOT	1	1	35	1	0	0	0	38	36.6	0	1	101	6	2	0	0	110	110.4
14 TOT	4	6	569	37	5	0	2	623	620.7	18	6	1015	95	15	0	3	1152	1144.5

	D => C									D => D								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	0	0	5	1	1	0	0	7	7.5	0	0	0	0	0	0	0	0	0
06:15	0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0
06:30	0	0	7	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0
06:45	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0
H/TOT	0	0	16	5	1	0	0	22	22.5	0	0	0	0	0	0	0	0	0
07:00	0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
07:15	0	0	6	1	0	0	0	7	7	0	0	0	0	0	0	0	0	0
07:30	0	0	13	1	0	0	0	14	14	0	0	0	0	0	0	0	0	0
07:45	1	0	18	2	0	0	0	21	20.2	0	0	0	0	0	0	0	0	0
H/TOT	1	0	47	4	0	0	0	52	51.2	0	0	0	0	0	0	0	0	0
08:00	1	0	26	0	0	0	0	27	26.2	0	0	0	0	0	0	0	0	0
08:15	0	0	16	2	0	0	0	18	18	0	0	0	0	0	0	0	0	0
08:30	0	1	13	0	1	0	0	15	14.9	0	0	0	0	0	0	0	0	0
08:45	3	0	18	0	0	0	0	21	18.6	0	0	0	0	0	0	0	0	0
H/TOT	4	1	73	2	1	0	0	81	77.7	0	0	0	0	0	0	0	0	0
09:00	0	0	15	1	1	0	0	17	17.5	0	0	0	0	0	0	0	0	0
09:15	0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
09:30	0	0	11	1	1	0	0	13	13.5	0	0	0	0	0	0	0	0	0
09:45	0	0	6	2	0	0	0	8	8	0	0	0	0	0	0	0	0	0
H/TOT	0	0	47	4	2	0	0	53	54	0	0	0	0	0	0	0	0	0
10:00	0	0	6	3	0	0	0	9	9	0	0	0	0	0	0	0	0	0
10:15	0	0	11	0	0	0	0	11	11	0	0	1	0	0	0	0	1	1
10:30	0	0	12	0	1	0	1	14	15.5	0	0	0	0	0	0	0	0	0
10:45	0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0
H/TOT	0	0	34	4	1	0	1	40	41.5	0	0	1	0	0	0	0	1	1
11:00	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
11:15	0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
11:30	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
11:45	0	0	20	2	0	0	0	22	22	0	0	0	0	0	0	0	0	0
H/TOT	0	0	49	2	0	0	0	51	51	0	0	0	0	0	0	0	0	0
12:00	1	0	12	0	1	0	0	14	13.7	0	0	0	0	0	0	0	0	0
12:15	0	0	19	0	0	0	0	19	19	0	0	0	0	0	0	0	0	0
12:30	0	0	7	0	1	0	0	8	8.5	0	0	0	0	0	0	0	0	0
12:45	1	1	10	2	0	0	0	14	12.6	0	0	0	0	0	0	0	0	0
H/TOT	2	1	48	2	2	0	0	55	53.8	0	0	0	0	0	0	0	0	0
13:00	0	0	12	2	0	0	0	14	14	0	0	0	0	0	0	0	0	0
13:15	0	0	16	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0
13:30	0	0	15	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
13:45	0	0	15	1	0	0	0	16	16	0	0	0	0	0	0	0	0	0
H/TOT	0	0	58	3	0	0	0	61	61	0	0	0	0	0	0	0	0	0
14:00	0	0	31	2	0	0	0	33	33	0	0	0	0	0	0	0	0	0
14:15	0	0	22	0	1	0	0	23	23.5	0	0	0	0	0	0	0	0	0
14:30	0	0	16	1	0	0	0	17	17	0	0	0	0	0	0	0	0	0
14:45	0	0	25	1	2	0	0	28	29	0	0	0	0	0	0	0	0	0
H/TOT	0	0	94	4	3	0	0	101	102.5	0	0	0	0	0	0	0	0	0
15:00	0	0	8	3	1	0	0	12	12.5	0	0	0	0	0	0	0	0	0
15:15	0	0	15	3	1	0	0	19	19.5	0	0	0	0	0	0	0	0	0
15:30	0	0	16	0	0	0	0	16	16	0	0	0	0	0	0	0	0	0
15:45	0	0	19	1	0	0	0	20	20	0	0	0	0	0	0	0	0	0
H/TOT	0	0	58	7	2	0	0	67	68	0	0	0	0	0	0	0	0	0
16:00	0	0	24	1	0	0	0	25	25	0	0	0	0	0	0	0	0	0
16:15	0	0	18	1	0	0	0	19	19	0	0	0	0	0	0	0	0	0
16:30	0	0	20	2	1	0	0	23	23.5	0	0	0	0	0	0	0	0	0
16:45	0	0	21	1	0	0	0	22	22	0	0	0	0	0	0	0	0	0
H/TOT	0	0	83	5	1	0	0	89	89.5	0	0	0	0	0	0	0	0	0
17:00	0	0	31	0	0	0	0	31	31	0	0	0	0	0	0	0	0	0
17:15	0	0	25	1	0	0	0	26	26	0	0	0	0	0	0	0	0	0
17:30	1	0	25	2	0	0	0	28	27.2	0	0	0	0	0	0	0	0	0
17:45	0	0	30	1	0	0	0	31	31	0	0	0	0	0	0	0	0	0
H/TOT	1	0	111	4	0	0	0	116	115.2	0	0	0	0	0	0	0	0	0
18:00	0	0	15	2	0	0	0	17	17	0	0	0	0	0	0	0	0	0
18:15	1	0	17	2	0	0	0	20	19.2	0	0	0	0	0	0	0	0	0
18:30	0	0	19	1	0	0	0	20	20	0	0	0	0	0	0	0	0	0
18:45	1	0	34	1	0	0	0	36	35.2	0	0	0	0	0	0	0	0	0
H/TOT	2	0	85	6	0	0	0	93	91.4	0	0	0	0	0	0	0	0	0
19:00	1	0	22	0	0	0	0	23	22.2	0	0	0	0	0	0	0	0	0
19:15	0	0	19	0	0	0	0	19	19	0	0	0	0	0	0	0	0	0
19:30	1	1	17	0	0	0	0	19	17.6	0	0	0	0	0	0	0	0	0
19:45	0	0	11	1	0	0	0	12	12	0	0	0	0	0	0	0	0	0
H/TOT	2	1	69	1	0	0	0	73	70.8	0	0	0	0	0	0	0	0	0
14 TOT	12	3	872	53	13	0	1	954	950.1	0	0	1	0	0	0	0	1	1



IDASO

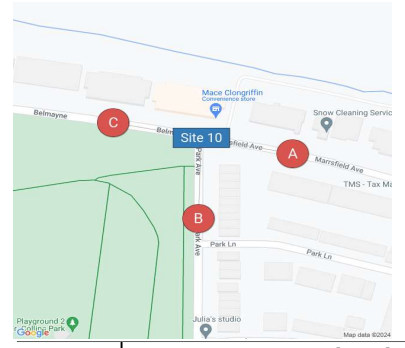
Survey Name: 24260 - Belmayne and Clongriffin
Site: Site 9
Location: Main Street / Park Avenue
Date: Thu 11-Apr-2024
AM Peak: 08:15 — 09:15 **Total:** 536
PM Peak: 17:00 — 18:00 **Total:** 624
15 Min Peak: 19:00 — 19:15 **Total:** 171

Arm A - Park Avenue
Arm B - Main Street
Arm C - Main Street

	A => A									A => B									A => C								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	0	0	6	5.4
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	9	9
06:45	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	1.2	0	1	3	0	0	0	0	4	3.4
H/TOT	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	1.2	0	2	18	1	0	0	0	21	19.8
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5	0	0	4	1	0	0	0	5	5
07:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	9	6	2	0	0	17	18
07:30	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7	0	0	13	1	0	0	0	14	14
07:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	18	1	0	0	0	19	19
H/TOT	0	0	0	0	0	0	0	0	0	0	0	12	0	1	0	0	13	13.5	0	0	44	9	2	0	0	55	56
08:00	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7	2	1	18	0	0	0	0	21	18.8
08:15	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0	5	4.2	1	0	14	0	0	0	0	15	14.2
08:30	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	15	0	0	6	1	1	0	0	8	8.5
08:45	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12	0	0	10	3	0	0	0	13	13
H/TOT	0	0	0	0	0	0	0	0	0	1	0	38	0	0	0	0	39	38.2	3	1	48	4	1	0	0	57	54.5
09:00	0	0	0	0	0	0	0	0	0	0	0	12	1	0	0	0	13	13	1	0	11	0	1	0	0	13	12.7
09:15	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	4	3.2	0	0	6	0	0	0	0	6	6
09:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	11	2	0	0	0	13	13
09:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	7	1	0	0	0	8	8
H/TOT	0	0	0	0	0	0	0	0	0	1	0	20	1	0	0	0	22	21.2	1	0	35	3	1	0	0	40	39.7
10:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	6	1	0	0	0	7	7
10:15	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7	2	0	7	0	0	0	0	9	7.4
10:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	10	2	0	0	0	12	12
10:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	5	0	0	0	0	5	5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	15	2	0	28	3	0	0	0	33	31.4
11:00	0	0	1	0	0	0	0	1	1	0	0	2	1	0	0	0	3	3	0	0	8	1	0	0	0	9	9
11:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	4	0	0	0	0	4	4
11:30	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	3	0	0	10	0	0	0	0	10	10
11:45	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5	0	0	8	1	0	0	0	9	9
H/TOT	0	0	1	0	0	0	0	1	1	0	0	10	3	0	0	0	13	13	0	0	30	2	0	0	0	32	32
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
12:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	6	3	0	1	0	10	11.3
12:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	8	1	1	0	0	10	10.5
12:45	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	0	1	1	0	0	15	0	0	0	0	15	15
H/TOT	0	0	0	1	0	0	0	1	1	0	0	5	0	0	0	0	5	5	0	0	37	4	1	1	0	43	44.8
13:00	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4	2	0	11	1	0	0	0	14	12.4
13:15	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0	5	4.2	0	0	9	2	0	0	0	11	11
13:30	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2	0	0	3	0	0	0	0	3	3
13:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	11	0	0	0	0	11	11
H/TOT	0	0	0	0	0	0	0	0	0	1	0	10	2	0	0	0	13	12.2	2	0	34	3	0	0	0	39	37.4
14:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	10	0	1	0	0	11	11.5
14:15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5	0	0	10	1	0	0	0	11	11
14:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	1	0	10	0	0	0	0	11	10.2
14:45	0	0	0	0	0	0	0	0	0	2	0	9	0	1	0	0	12	10.9	0	0	16	1	1	0	0	18	18.5
H/TOT	0	0	0	0	0	0	0	0	0	2	0	18	0	1	0	0	21	19.9	1	0	46	2	2	0	0	51	51.2
15:00	0	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	7	7	1	0	13	0	0	0	3	17	19.2
15:15	0	0	0	0	0	0	0	0	0	1	0	3	1	0	0	0	5	4.2	0	0	9	1	0	0	0	10	10
15:30	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6	0	0	18	0	0	0	0	18	18
15:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	7	2	0	0	0	9	9
H/TOT	0	0	0	0	0	0	0	0	0	1	0	16	4	0	0	0	21	20.2	1	0	47	3	0	0	3	54	56.2
16:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.2	0	0	7	1	1	0	0	9	9.5
16:15	0	0	0	0	0	0	0	0	0	2	0	3	1	0	0	0	6	4.4	0	0	7	1	0	0	0	8	8
16:30	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	3	0	0	15	0	0	0	0	15	15
16:45	0	0	0	0	0	0	0	0	0	1	0	5	0	0	0	0	6	5.2	0	0	10	0	0	0	0	10	10
H/TOT	0	0	0	0	0	0	0	0	0	4	0	9	3	0	0	0	16	12.8	0	0	39	2	1	0	0	42	42.5
17:00	0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0	9	9	0	0	9	0	0	0	0	9	9
17:15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5	0	1	10	1	0	0	0	12	11.4
17:30	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5	0	0	17	0	0	0	0	17	17
17:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	17	0	0	0	0	17	17
H/TOT	0	0	0	0	0	0	0	0	0	0	0	21	1	0	0	0	22	22	0	1	53	1	0	0	0	55	54.4
18:00	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6	0	0	13	0	0	0	0	13	13
18:15	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6	0	0	13	0	0	0	0	13	13
18:30	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3	0	0	14	1	0	0	0	15	15
18:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	16	2	0	0	0	18	18
H/TOT	0	0	0	0	0	0	0	0	0	0	0	15	1	0	0	0	16	16	0	0	56	3	0	0	0	59	59
19:00	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7	0	0	16	1	0	0	0	17	17
19:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	8	4	0	0	0	12	12
19:30	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	0	8	0	0	0	0	8	8
19:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	10	0	0	0	0	10	10
H/TOT	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	18	18	0	0	42	5	0	0	0	47	47
14 TOT	0	0	1	1	0	0	0	2	2	11	0	208	15	2	0	0	236	228.2	10	4	557	45	8	1	3	628	625.9

	B => A									B => B									B => C								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	3	0	0	2	16	18
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	7	0	0	1	28	29
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	8	0	0	2	23	25
06:45	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	24	13	0	0	1	38	39
H/TOT	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	68	31	0	0	6	105	111
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	23	8	1	0	2	37	37.1
07:15	0	0	2	0	0	0	0	2	2	0	0	1	1	0	0	0	2	2	1	0	38	5	1	0	1	46	46.7
07:30	0	0	2	0	0	0	0	2	2	0	0	3	0	0	0	0	3	3	0	1	37	7	0	0	3	48	50.4
07:45	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1	0	0	59	7	0	0	1	67	68
H/TOT	0	0	6	0	0	0	0	6	6	0	0	5	1	0	0	0	6	6	4	1	157	27	2	0	7	198	202.2
08:00	0	0	4	0	0	0	0	4	4	0	0	1	0	0	0	0	1	1	1	0	57	6	0	0	2	66	67.2
08:15	0	0	10	0	0	0	0	10	10	0	0	2	0	1	0	0	3	3.5	7	0	59	2	0	0	1	69	64.4
08:30	0	0	6	1	0	0	0	7	7	0	0	2	0	0	0	0	2	2	3	0	48	2	1	0	2	56	56.1
08:45	1	0	6	0	0	0	0	7	6.2	0	0	2	0	0	0	0	2	2	1	0	43	3	2	0	1	50	51.2
H/TOT	1	0	26	1	0	0	0	28	27.2	0	0	7	0	1	0	0	8	8.5	12	0	207	13	3	0	6	241	238.9
09:00	0	0	7	0	0	0	0	7	7	0	0	3	0	0	0	0	3	3	0	0	42	5	1	0	1	49	50.5
09:15	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	1	0	26	0	0	0	2	29	30.2
09:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	32	2	0	0	5	40	44.2
09:45	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1	1	0	24	2	0	0	1	28	28.2
H/TOT	0	0	12	1	0	0	0	13	13	0	0	5	0	0	0	0	5	5	3	0	124	9	1	0	9	146	153.1
10:00	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	2	1	0	30	2	0	0	4	37	40.2
10:15	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1	0	1	28	3	0	0	1	33	33.4
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	2	0	0	3	27	30
10:45	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	16	1	1	0	1	19	20.5
H/TOT	0	0	3	1	0	0	0	4	4	0	0	2	1	0	0	0	3	3	1	1	96	8	1	0	9	116	124.1
11:00	0	0	1	1	0	0	0	2	2	0	0	2	0	0	0	0	2	2	0	0	28	1	0	0	2	31	33
11:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	19	2	2	0	1	24	26
11:30	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	0	1	1	0	0	31	5	0	0	2	38	40
11:45	0	0	2	0	0	0	0	2	2	0	0	0	1	0	0	0	1	1	2	0	29	3	1	0	2	37	37.9
H/TOT	0	0	4	1	0	0	0	5	5	0	0	3	2	0	0	0	5	5	2	0	107	11	3	0	7	130	136.9
12:00	0	0	5	0	0	0	0	5	5	0	0	1	0	0	0	0	1	1	0	0	25	3	0	0	3	31	34
12:15	0	0	0	2	1	0	0	3	3.5	0	0	2	1	0	0	0	3	3	1	0	31	4	1	0	1	38	38.7
12:30	0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2	0	0	25	4	1	0	2	32	34.5
12:45	0	0	1	0	0	0	0	1	1	0	1	0	0	0	0	0	1	0.4	2	0	35	3	2	0	1	43	43.4
H/TOT	0	0	7	2	1	0	0	10	10.5	0	1	5	1	0	0	0	7	6.4	3	0	116	14	4	0	7	144	150.6
13:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	31	1	0	0	2	36	36.8
13:15	0	0	3	0	0	0	0	3	3	0	0	1	0	0	0	0	1	1	2	1	32	1	0	0	1	37	35.8
13:30	0	0	3	0	1	0	0	4	4.5	0	0	1	0	0	0	0	1	1	0	0	26	5	1	0	2	34	36.5
13:45	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1	0	0	38	5	1	0	1	45	46.5
H/TOT	0	0	8	0	1	0	0	9	9.5	0	0	3	0	0	0	0	3	3	2	3	127	12	2	0	6	152	155.6
14:00	0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	0	2	2	0	0	34	1	0	0	2	37	39
14:15	0	0	1	0	0	0	0	1	1	0	0	1	0	1	0	0	2	2.5	2	0	38	2	0	0	1	43	42.4
14:30	0	0	1	1	0	0	0	2	2	0	0	1	0	0	0	0	1	1	1	0	35	2	0	0	2	40	41.2
14:45	0	0	4	0	0	0	0	4	4	0	0	3	0	0	0	0	3	3	0	1	27	3	1	0	2	34	35.9
H/TOT	0	0	7	1	0	0	0	8	8	0	0	7	0	1	0	0	8	8.5	3	1	134	8	1	0	7	154	158.5
15:00	1	0	0	0	0	0	0	1	0.2	0	0	1	0	0	0	0	1	1	0	0	33	4	1	0	2	40	42.5
15:15	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	1	29	2	2	1	1	36	38.7
15:30	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1	2	1	32	7	0	0	3	45	45.8
15:45	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	35	2	0	0	1	40	39.4
H/TOT	1	0	4	1	0	0	0	6	5.2	0	0	2	0	0	0	0	2	2	4	2	129	15	3	1	7	161	166.4
16:00	2	0	0	0	0	0	0	2	0.4	0	0	3	0	0	0	0	3	3	3	0	25	5	0	0	2	35	34.6
16:15	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	1	0	29	2	0	0	1	33	33.2
16:30	0	0	3	0	0	0	0	3	3	0	0	1	0	0	0	0	1	1	0	0	36	4	0	0	2	42	44
16:45	0	0	5	0	0	0	0	5	5	0	0	2	0	0	0	0	2	2	0	0	27	2	0	0	1	30	31
H/TOT	2	0	11	0	0	0	0	13	11.4	0	0	6	0	0	0	0	6	6	4	0	117	13	0	0	6	140	142.8
17:00	1	0	6	0	0	0	0	7	6.2	0	0	2	0	0	0	0	2	2	0	1	54	1	0	0	2	58	59.4
17:15	2	0	8	0	0	0	0	10	8.4	0	0	1	1	0	0	0	2	2	0	0	37	1	0	0	1	39	40
17:30	1	0	7	0	0	0	0	8	7.2	0	0	3	0	0	0	0	3	3	2	0	40	0	0	0	2	44	44.4
17:45	0	0	7	0	0	0	0	7	7	0	0	2	0	0	0	0	2	2	1	0	57	5	0	0	2	65	66.2
H/TOT	4	0	28	0	0	0	0	32	28.8	0	0	8	1	0	0	0	9	9	3	1	188	7	0	0	7	206	210
18:00	0	0	2	2	0	0	0	4	4	0	0	2	0	0	0	0	2	2	0	0	39	4	1	0	2	46	48.5
18:15	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	1	41	4	0	0	1	47	47.4
18:30	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1	0	0	45	6	0	0	2	53	55
18:45	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	39	3	0	0	2	44	46
H/TOT	0	0	11	2	0	0	0	13	13	0	0	3	0	0	0	0	3	3	0	1	164	17	1	0	7	190	196.9
19:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	2	0	57	2	0	0	1	62	61.4
19:15	0	0	3	1	0	0	0	4	4	0	0	2	0	0	0	0	2	2	0	0	40	3	0	0	2	45	47
19:30	0	0	2	1	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0	2	29	31
19:45	0	0	2	0	0	0	0	2	2	0	0	1	0	0	0	0	1	1	1	1	27	1	1	0	2	33	34.1
H/TOT	0	0	7	2	0	0	0	9	9	0	0	6	0	0	0	0	6	6	3	1	151	6	1	0	7	169	173.5
14 TOT	8	0	135	13	2	0	0	158	152.6	0	1	62	6	2	0	0	71	71.4	44	11	1885	191	22	1	98	2252	2320.5

	C => A									C => B									C => C								
TIME	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU	P/C	M/C	CAR	LGV	OGV1	OGV2	PSV	TOT	PCU
06:00	0	0	1	0	0	0	0	1	1	0	0	2	0	0	0	1	3	4	0	0	0	0	0	0	0	0	0
06:15	0	0	1	0	0	0	0	1	1	1	0	9	1	0	0	2	13	14.2	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	3	4	0	0	2	9	11	0	0	0	0	0	0	0	0	0
06:45	0	0	1	0	0	0	0	1	1	1	0	7	2	1	0	1	12	12.7	0	0	0	0	0	0	0	0	0
H/TOT	0	0	3	0	0	0	0	3	3	2	0	21	7	1	0	6	37	41.9	0	0	0	0	0	0	0	0	0
07:00	0	0	1	4	0	0	0	5	5	0	0	9	1	1	0	0	11	11.5	0	0	0	1	0	0	0	1	1
07:15	0	0	2	0	0	0	0	2	2	0	0	13	1	1	0	4	19	23.5	0	0	0	0	0	0	0	0	0
07:30	0	0	1	0	0	0	0	1	1	2	0	13	3	0	0	1	19	18.4	0	0	0	0	0	0	0	0	0
07:45	0	0	1	0	0	0	0	1	1	1	0	20	2	0	0	2	25	26.2	0	0	0	0	0	0	0	0	0
H/TOT	0	0	5	4	0	0	0	9	9	3	0	55	7	2	0	7	74	79.6	0	0	0	1	0	0	0	1	1
08:00	0	0	1	0	0	0	0	1	1	2	0	21	3	0	0	1	27	26.4	0	0	0	0	0	0	0	0	0
08:15	0	0	7	1	1	0	0	9	9.5	1	0	23	2	1	0	2	29	30.7	0	0	0	0	0	0	0	0	0
08:30	0	0	8	0	0	0	0	8	8	3	0	24	1	1	0	1	30	29.1	0	0	0	0	0	0	0	0	0
08:45	0	0	10	0	0	0	0	10	10	1	0	26	2	2	0	1	32	33.2	0	0	0	0	0	0	0	0	0
H/TOT	0	0	26	1	1	0	0	28	28.5	7	0	94	8	4	0	5	118	119.4	0	0	0	0	0	0	0	0	0
09:00	0	1	9	0	0	0	0	10	9.4	1	0	42	3	1	0	2	49	50.7	0	0	0	0	0	0	0	0	0
09:15	0	0	3	0	0	0	0	3	3	0	0	31	6	1	0	2	40	42.5	0	0	0	0	0	0	0	0	0
09:30	1	0	6	0	0	0	0	7	6.2	1	0	19	2	0	0	3	25	27.2	0	0	0	0	0	0	0	0	0
09:45	0	0	6	0	1	0	0	7	7.5	2	0	30	1	1	0	0	34	32.9	0	0	0	0	0	0	0	0	0
H/TOT	1	1	24	0	1	0	0	27	26.1	4	0	122	12	3	0	7	148	153.3	0	0	0	0	0	0	0	0	0
10:00	0	0	4	1	0	0	0	5	5	1	0	24	2	0	0	5	32	36.2	0	0	0	0	0	0	0	0	0
10:15	0	0	3	2	0	0	0	5	5	0	0	17	2	0	0	3	22	25	0	0	0	0	0	0	0	0	0
10:30	0	0	0	1	0	0	0	1	1	0	0	22	1	0	0	2	25	27	0	0	0	0	0	0	0	0	0
10:45	0	0	0	1	0	0	0	1	1	1	0	17	4	1	0	2	25	26.7	0	0	0	0	0	0	0	0	0
H/TOT	0	0	7	5	0	0	0	12	12	2	0	80	9	1	0	12	104	114.9	0	0	0	0	0	0	0	0	0
11:00	0	0	4	0	0	0	0	4	4	0	0	25	2	0	0	1	28	29	0	0	0	0	0	0	0	0	0
11:15	0	0	5	0	0	0	0	5	5	2	0	33	0	0	0	1	36	35.4	0	0	1	0	0	0	0	1	1
11:30	0	0	6	0	0	0	0	6	6	0	0	29	3	1	0	1	34	35.5	0	0	0	0	0	0	0	0	0
11:45	1	0	6	0	0	0	0	7	6.2	2	0	21	1	0	0	3	27	28.4	0	0	0	0	0	0	0	0	0
H/TOT	1	0	21	0	0	0	0	22	21.2	4	0	108	6	1	0	6	125	128.3	0	0	1	0	0	0	0	1	1
12:00	1	0	8	0	0	0	0	9	8.2	0	0	33	4	2	0	2	41	44	0	0	0	0	0	0	0	0	0
12:15	0	0	4	0	0	0	0	4	4	0	0	39	2	1	0	2	44	46.5	0	0	0	0	0	0	0	0	0
12:30	0	0	2	0	0	0	0	2	2	1	0	22	1	1	0	1	26	26.7	0	0	0	0	0	0	0	0	0
12:45	0	0	8	0	0	0	0	8	8	0	0	31	5	0	0	1	37	38	0	0	0	0	0	0	0	0	0
H/TOT	1	0	22	0	0	0	0	23	22.2	1	0	125	12	4	0	6	148	155.2	0	0	0	0	0	0	0	0	0
13:00	0	0	2	0	0	0	0	2	2	0	2	29	5	0	0	3	39	40.8	0	0	0	0	0	0	0	0	0
13:15	0	0	6	1	0	0	0	7	7	1	0	27	2	1	0	1	32	32.7	0	0	0	0	0	0	0	0	0
13:30	2	0	6	0	0	0	0	8	6.4	0	0	41	6	0	0	1	48	49	0	0	0	0	0	0	0	0	0
13:45	2	0	5	1	0	0	0	8	6.4	2	1	37	3	0	0	1	44	42.8	0	0	0	0	0	0	0	0	0
H/TOT	4	0	19	2	0	0	0	25	21.8	3	3	134	16	1	0	6	163	165.3	0	0	0	0	0	0	0	0	0
14:00	0	0	9	0	0	0	0	9	9	0	0	32	1	0	0	3	36	39	0	0	0	0	0	0	0	0	0
14:15	0	0	6	0	0	0	0	6	6	0	0	28	2	1	0	2	33	35.5	0	0	0	0	0	0	0	0	0
14:30	0	0	21	0	0	0	0	21	21	6	0	50	4	1	0	0	61	56.7	0	0	0	0	0	0	0	0	0
14:45	0	0	5	1	0	0	0	6	6	2	0	45	3	0	1	2	53	54.7	0	0	0	0	0	0	0	0	0
H/TOT	0	0	41	1	0	0	0	42	42	8	0	155	10	2	1	7	183	185.9	0	0	0	0	0	0	0	0	0
15:00	0	0	3	2	0	0	0	5	5	1	0	42	1	2	0	1	47	48.2	0	0	0	0	1	0	0	1	1.5
15:15	0	0	5	0	0	0	0	5	5	3	1	36	3	1	0	3	47	47.5	0	0	1	1	0	0	0	2	2
15:30	1	0	5	0	0	0	0	6	5.2	3	0	51	3	0	0	1	58	56.6	0	0	0	0	0	0	0	0	0
15:45	0	0	3	0	0	0	0	3	3	2	0	36	8	0	0	0	46	44.4	0	0	0	0	0	0	0	0	0
H/TOT	1	0	16	2	0	0	0	19	18.2	9	1	165	15	3	0	5	198	196.7	0	0	1	1	1	0	0	3	3.5
16:00	0	0	4	0	0	0	0	4	4	0	0	43	4	0	0	3	50	53	0	0	0	0	0	0	0	0	0
16:15	1	0	11	1	0	0	0	13	12.2	0	0	45	8	0	0	2	55	57	0	0	0	0	0	0	0	0	0
16:30	0	0	5	0	0	0	0	5	5	0	0	42	7	0	0	2	51	53	0	0	0	0	0	0	0	0	0
16:45	0	0	7	0	0	0	0	7	7	1	2	39	5	0	0	1	48	47	0	0	0	0	0	0	0	0	0
H/TOT	1	0	27	1	0	0	0	29	28.2	1	2	169	24	0	0	8	204	210	0	0	0	0	0	0	0	0	0
17:00	0	0	15	0	0	0	0	15	15	0	0	60	6	0	0	3	69	72	0	0	0	0	0	0	0	0	0
17:15	0	1	9	0	0	0	0	10	9.4	1	0	53	8	0	0	0	62	61.2	0	0	0	0	0	0	0	0	0
17:30	0	0	5	2	0	0	0	7	7	1	1	54	7	0	0	2	65	65.6	0	0	1	0	0	0	0	1	1
17:45	0	0	13	1	0	0	0	14	14	1	0	46	7	1	0	2	57	58.7	0	0	0	0	0	0	0	0	0
H/TOT	0	1	42	3	0	0	0	46	45.4	3	1	213	28	1	0	7	253	257.5	0	0	1	0	0	0	0	1	1
18:00	1	0	14	0	0	0	0	15	14.2	1	0	52	4	0	0	2	59	60.2	0	0	2	0	0	0	0	2	2
18:15	0	0	13	1	0	0	0	14	14	2	1	44	2	0	0	1	50	48.8	0	0	0	0	0	0	0	0	0
18:30	0	0	5	2	0	0	0	7	7	1	0	53	4	0	0	3	61	63.2	0	0	0	0	0	0	0	0	0
18:45	0	0	11	2	0	0	0	13	13	1	0	45	4	0	0	0	50	49.2	0	0	3	0	0	0	0	3	3
H/TOT	1	0	43	5	0	0	0	49	48.2	5	1	194	14	0	0	6	220	221.4	0	0	5	0	0	0	0	5	5
19:00	1	0	13	1	0	0	0	15	14.2	2	1	56	4	0	0	3	66	66.8	0	0	1	0	0	0	0	1	1
19:15	0	0	12	0	0	0	0	12	12	0	0	64	3	0	0	0	67	67	0	0	0	0	0	0	0	0	0
19:30	0	0	6	1	0	0	0	7	7	2	1	47	0	1	0	2	53	53.3	0	0	0	0	0	0	0	0	0
19:45	0	0	9	0	0	0	0	9	9	0	1	44	3	0	0	3	51	53.4	0	0	0	0	0	0	0	0	0
H/TOT	1	0	40	2	0	0	0	43	42.2	4	3	211	10	1	0	8	237	240.5	0	0	1	0	0	0	0	1	1
14 TOT	11	2	336	26	2	0	0	377	368	56	11	1846	178	24	1	96	2212	2269.9	0	0	9	2	1	0	0	12	12.5



IDASO

Survey Name:	24260 - Belmayne and Clongriffin			Arm A - Marrsfield Avenue
Site:	Site 10			Arm B - Park Avenue
Location:	Marrsfield Avenue / Park Avenue			Arm C - Belmayne
Date:	Thu 11-Apr-2024			
AM Peak:	08:00 — 09:00	**Total:**	432	
PM Peak:	17:30 — 18:30	**Total:**	316	
15 Min Peak:	08:15 — 08:30	**Total:**	130	

	A => A									A => B									A => C								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	3	1	0	0	15	15.5
06:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	6	2	0	0	0	9	8.2
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	4	1	0	0	13	13.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	30	9	2	0	0	42	42.2
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5	0	0	10	2	0	0	0	12	12
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	1	0	0	0	16	16
07:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	1	20	1	0	0	0	22	21.4
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	21	0	0	0	0	23	21.6
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	3.5	1	2	66	4	0	0	0	73	71
08:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	1.2	0	0	34	2	0	0	0	36	36
08:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	2	0	46	3	1	0	0	52	50.9
08:30	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0.8	0	0	33	1	0	0	0	34	34
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	18	1	0	0	0	20	19.2
H/TOT	0	0	0	0	0	0	0	0	0	5	0	5	0	0	0	0	10	6	3	0	131	7	1	0	0	142	140.1
09:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	9	1	0	0	0	10	10
09:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	8	0	0	0	0	8	8
09:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	12	1	1	0	0	14	14.5
09:45	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	3	2.2	0	0	12	1	0	0	0	13	13
H/TOT	0	0	0	0	0	0	0	0	0	1	0	5	0	0	0	0	6	5.2	0	0	41	3	1	0	0	45	45.5
10:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	13	1	2	0	0	16	17
10:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	12	3	0	0	0	15	15
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	2	0	0	0	13	13
10:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	7	0	0	0	0	7	7
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3	3	0	0	43	6	2	0	0	51	52
11:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	7	1	0	0	0	8	8
11:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	9	3	0	0	0	12	12
11:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	12	1	0	0	0	14	13.2
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	11	11
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	5	1	0	38	6	0	0	0	45	44.2
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	3	0	0	0	9	9
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	8	8
12:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	1	18	2	2	0	0	23	23.4
12:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	11	0	0	0	0	11	11
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	0	1	42	6	2	0	0	51	51.4
13:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	8	0	0	0	0	8	8
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	11	11
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
13:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	11	1	0	0	0	14	12.6
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	1	1	36	1	0	0	0	39	37.6
14:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	1	19	1	0	0	0	21	20.4
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	1	0	0	0	12	12
14:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	15	1	0	0	0	17	16.2
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1.5	1	0	11	1	0	0	0	13	12.2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3	3.5	2	1	56	4	0	0	0	63	60.8
15:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	10	4	0	0	0	15	14.2
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	16	0	0	0	0	17	16.2
15:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	17	2	0	0	0	19	19
15:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	10	0	0	0	0	10	10
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	2	0	53	6	0	0	0	61	59.4
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24	2	0	0	0	26	26
16:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	20	1	0	0	0	21	21
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	3	0	0	0	16	16
16:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	14	0	0	0	0	14	14
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	71	6	0	0	0	77	77
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	18	18
17:15	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	18	0	0	0	0	18	18
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	17	0	0	0	0	18	17.2
17:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	24	0	1	0	0	25	25.5
H/TOT	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4	1	0	77	0	1	0	0	79	78.7
18:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	21	0	0	0	0	21	21
18:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	1	24	1	0	0	0	26	25.4
18:30	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	1	1	18	4	0	0	0	24	22.6
18:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	1	0	14	2	0	0	0	17	16.2
H/TOT	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8	2	2	77	7	0	0	0	88	85.2
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0	1	24	25
19:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	15	0	0	0	0	15	15
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	11	11
19:45	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2	0	0	14	0	0	0	0	14	14
H/TOT	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3	0	0	62	1	0	0	1	64	65
14 TOT	0	0	0	0	0	0	0	0	0	6	0	49	2	2	0	0	59	55.2	14	7	823	66	9	0	1	920	910.1

	B => A									B => B									B => C								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
07:00	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	2
07:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	7	1	0	0	0	9	8.2
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	6	0	0	0	0	7	6.2
H/TOT	0	0	3	1	0	0	0	4	4	0	0	0	0	0	0	0	0	0	2	0	19	1	0	0	0	22	20.4
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	18	1	0	0	0	20	19.2
08:15	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	33	1	0	0	0	36	34.4
08:30	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	19	0	0	0	0	19	19
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	19	0	0	0	0	21	19.6
H/TOT	0	0	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	4	1	89	2	0	0	0	96	92.2
09:00	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
09:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	5	0	0	0	0	6	5.2
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1	0	0	6	6.5
H/TOT	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	1	0	24	0	1	0	0	26	25.7
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
10:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	3
H/TOT	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	11	11
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
11:30	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	5
11:45	1	0	1	0	0	0	0	2	1.2	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
H/TOT	1	0	2	0	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	15
12:00	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	1	0	4	0	0	0	0	5	4.2
12:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
12:45	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	4	0	7	0	0	0	0	11	7.8
H/TOT	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	5	0	23	1	0	0	0	29	25
13:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	6	0	0	0	0	7	6.4
13:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	9
13:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	6
13:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	5	1	0	0	0	8	6.4
H/TOT	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	2	1	26	1	0	0	0	30	27.8
14:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	6	1	0	0	0	8	7.2
14:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
14:30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
14:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	8	1	0	0	0	12	9.6
H/TOT	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	4	0	27	3	0	0	0	34	30.8
15:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	11	1	0	0	0	14	12.4
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
H/TOT	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2	0	32	2	0	0	0	36	34.4
16:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	4
16:15	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	7
16:30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	11	11
16:45	1	0	1	0	0	0	0	2	1.2	0	0	0	0	0	0	0	0	0	0	0	9	2	0	0	0	11	11
H/TOT	1	0	6	0	0	0	0	7	6.2	0	0	0	0	0	0	0	0	0	0	0	29	4	0	0	0	33	33
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	16	16
17:15	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	9	1	0	0	0	11	10.2
17:30	0	0	1	1	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	10	10
17:45	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	1	1	7	0	0	0	0	9	7.6
H/TOT	0	0	5	1	0	0	0	6	6	0	0	0	0	0	0	0	0	0	2	1	42	1	0	0	0	46	43.8
18:00	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	4
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	12	12
18:30	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	8	2	1	0	0	11	11.5
18:45	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6	6
H/TOT	0	0	8	0	0	0	0	8	8	0	0	0	0	0	0	0	0	0	0	0	28	4	1	0	0	33	33.5
19:00	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8	8
19:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
19:30	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	15
19:45	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	7
H/TOT	0	0	5	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	37	37
14 TOT	2	0	43	4	0	0	0	49	47.4	0	0	0	0	0	0	0	0	0	22	3	406	21	2	0	0	454	435.6

	C => A									C => B									C => C								
TIME	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**	**P/C**	**M/C**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**TOT**	**PCU**
06:00	0	0	3	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	4	0	0	0	0	4	4	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
06:30	1	0	3	1	0	0	0	5	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	3	1	0	0	0	4	4	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
H/TOT	1	0	13	2	0	0	0	16	15.2	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
07:00	1	0	9	0	0	0	0	10	9.2	0	0	2	0	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0
07:15	0	0	12	1	0	0	0	13	13	0	0	7	2	0	0	0	9	9	0	0	0	0	0	0	0	0	0
07:30	0	0	16	0	0	0	0	16	16	0	0	12	0	2	0	0	14	15	0	0	0	0	0	0	0	0	0
07:45	0	1	15	0	0	0	0	16	15.4	0	0	8	0	0	0	0	8	8	0	0	1	0	0	0	0	1	1
H/TOT	1	1	52	1	0	0	0	55	53.6	0	0	29	2	3	0	0	34	35.5	0	0	1	0	0	0	0	1	1
08:00	0	0	25	1	0	0	0	26	26	0	0	10	0	0	0	0	10	10	0	0	1	0	0	0	0	1	1
08:15	0	0	22	2	0	0	0	24	24	2	0	11	0	0	0	0	13	11.4	0	0	0	0	0	0	0	0	0
08:30	0	0	18	1	0	0	0	19	19	0	0	25	1	0	0	0	26	26	0	0	0	0	0	0	0	0	0
08:45	0	0	31	1	0	0	0	32	32	0	0	29	1	0	0	0	30	30	0	0	1	0	0	0	0	1	1
H/TOT	0	0	96	5	0	0	0	101	101	2	0	75	2	0	0	0	79	77.4	0	0	2	0	0	0	0	2	2
09:00	0	0	20	3	0	0	0	23	23	0	0	20	1	0	0	0	21	21	0	0	0	0	0	0	0	0	0
09:15	0	0	16	2	1	0	0	19	19.5	1	0	5	0	0	0	0	6	5.2	0	0	0	0	0	0	0	0	0
09:30	0	0	9	1	0	0	0	10	10	1	0	5	0	0	0	0	6	5.2	0	0	0	0	0	0	0	0	0
09:45	0	0	13	2	0	0	0	15	15	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
H/TOT	0	0	58	8	1	0	0	67	67.5	2	0	37	1	0	0	0	40	38.4	0	0	0	0	0	0	0	0	0
10:00	0	0	12	1	0	0	0	13	13	0	0	6	2	0	0	0	8	8	0	0	1	1	0	0	0	2	2
10:15	0	0	4	0	0	0	0	4	4	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
10:30	0	0	8	1	0	0	0	9	9	0	0	2	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
10:45	0	0	10	0	0	0	0	10	10	0	0	3	0	0	0	0	3	3	0	0	0	1	0	0	0	1	1
H/TOT	0	0	34	2	0	0	0	36	36	0	0	15	2	0	0	0	17	17	0	0	1	2	0	0	0	3	3
11:00	0	0	8	0	0	0	0	8	8	0	0	4	2	0	0	0	6	6	0	0	0	0	0	0	0	0	0
11:15	0	0	10	2	1	0	0	13	13.5	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
11:30	1	0	8	2	0	0	0	11	10.2	0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0
11:45	0	0	7	0	0	0	0	7	7	0	0	10	0	0	0	0	10	10	0	0	1	0	0	0	0	1	1
H/TOT	1	0	33	4	1	0	0	39	38.7	0	0	22	3	0	0	0	25	25	0	0	1	0	0	0	0	1	1
12:00	0	0	10	2	1	0	0	13	13.5	0	0	7	1	2	0	0	10	11	0	0	1	0	0	0	0	1	1
12:15	1	0	9	3	0	0	0	13	12.2	0	0	4	2	0	1	0	7	8.3	0	0	0	0	0	0	0	0	0
12:30	0	0	16	3	0	0	0	19	19	0	0	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0
12:45	0	0	9	1	0	0	0	10	10	0	0	4	1	0	0	0	5	5	0	0	0	0	0	0	0	0	0
H/TOT	1	0	44	9	1	0	0	55	54.7	0	0	19	4	2	1	0	26	28.3	0	0	1	0	0	0	0	1	1
13:00	0	0	13	0	0	0	0	13	13	0	1	4	0	0	0	0	5	4.4	0	0	0	0	0	0	0	0	0
13:15	0	0	5	0	1	0	0	6	6.5	4	0	7	1	0	0	0	12	8.8	0	0	0	0	0	0	0	0	0
13:30	1	0	14	0	0	0	0	15	14.2	0	0	10	0	0	0	0	10	10	0	0	0	0	0	0	0	0	0
13:45	0	1	10	1	0	0	0	12	11.4	1	0	12	1	0	0	0	14	13.2	0	0	0	0	0	0	0	0	0
H/TOT	1	1	42	1	1	0	0	46	45.1	5	1	33	2	0	0	0	41	36.4	0	0	0	0	0	0	0	0	0
14:00	0	0	11	2	0	0	1	14	15	0	0	7	1	0	0	0	8	8	0	0	0	0	0	0	0	0	0
14:15	0	1	9	1	0	0	0	11	10.4	0	0	13	0	0	0	0	13	13	0	0	0	0	0	0	0	0	0
14:30	2	0	11	2	0	0	0	15	13.4	1	0	12	0	0	0	0	13	12.2	0	0	0	0	0	0	0	0	0
14:45	0	0	20	1	0	0	0	21	21	0	0	14	1	1	0	0	16	16.5	0	0	0	0	0	0	0	0	0
H/TOT	2	1	51	6	0	0	1	61	59.8	1	0	46	2	1	0	0	50	49.7	0	0	0	0	0	0	0	0	0
15:00	1	0	13	1	1	0	0	16	15.7	0	0	10	2	0	0	3	15	18	0	0	1	0	0	0	0	1	1
15:15	0	0	10	2	0	0	0	12	12	0	0	12	1	0	0	0	13	13	0	0	0	0	0	0	0	0	0
15:30	0	0	24	1	0	0	0	25	25	0	0	5	0	0	0	0	5	5	0	0	1	0	0	0	0	1	1
15:45	0	0	28	2	0	0	0	30	30	1	0	9	0	0	0	0	10	9.2	0	0	0	1	0	0	0	1	1
H/TOT	1	0	75	6	1	0	0	83	82.7	1	0	36	3	0	0	3	43	45.2	0	0	2	1	0	0	0	3	3
16:00	0	0	20	4	0	0	0	24	24	0	0	9	0	1	0	0	10	10.5	0	0	0	0	0	0	0	0	0
16:15	0	0	11	3	0	0	0	14	14	1	0	4	1	0	0	0	6	5.2	0	0	0	0	0	0	0	0	0
16:30	0	0	21	1	0	0	0	22	22	0	0	8	2	0	0	0	10	10	0	0	0	0	0	0	0	0	0
16:45	1	0	22	1	1	0	0	25	24.7	0	0	7	0	0	0	0	7	7	0	0	0	0	0	0	0	0	0
H/TOT	1	0	74	9	1	0	0	85	84.7	1	0	28	3	1	0	0	33	32.7	0	0	0	0	0	0	0	0	0
17:00	0	0	26	2	0	0	0	28	28	0	0	10	2	0	0	0	12	12	0	0	0	0	0	0	0	0	0
17:15	0	1	25	1	1	0	0	28	27.9	0	0	16	2	0	0	0	18	18	0	0	0	0	0	0	0	0	0
17:30	1	0	26	0	0	0	0	27	26.2	0	1	17	1	0	0	0	19	18.4	0	0	0	0	0	0	0	0	0
17:45	0	0	28	2	0	0	0	30	30	0	0	14	0	0	0	0	14	14	0	0	1	0	0	0	0	1	1
H/TOT	1	1	105	5	1	0	0	113	112.1	0	1	57	5	0	0	0	63	62.4	0	0	1	0	0	0	0	1	1
18:00	2	0	28	0	0	0	0	30	28.4	0	0	10	2	0	0	0	12	12	0	0	0	0	0	0	0	0	0
18:15	0	1	29	1	0	0	0	31	30.4	0	1	13	1	0	0	0	15	14.4	0	1	0	0	0	0	0	1	0.4
18:30	0	0	14	3	0	0	0	17	17	0	0	13	1	0	0	0	14	14	0	0	0	0	0	0	0	0	0
18:45	0	0	18	1	0	0	0	19	19	1	0	16	0	0	0	0	17	16.2	0	0	1	0	0	0	0	1	1
H/TOT	2	1	89	5	0	0	0	97	94.8	1	1	52	4	0	0	0	58	56.6	0	1	1	0	0	0	0	2	1.4
19:00	1	0	17	0	1	0	1	20	20.7	0	0	10	1	0	0	0	11	11	0	0	0	0	0	0	0	0	0
19:15	0	0	19	1	0	0	0	20	20	0	0	9	1	0	0	0	10	10	0	0	0	0	0	0	0	0	0
19:30	0	0	20	0	0	0	0	20	20	0	0	14	0	0	0	0	14	14	0	0	1	0	0	0	0	1	1
19:45	0	0	15	2	1	0	0	18	18.5	0	0	11	1	0	0	0	12	12	0	0	2	0	0	0	0	2	2
H/TOT	1	0	71	3	2	0	1	78	79.2	0	0	44	3	0	0	0	47	47	0	0	3	0	0	0	0	3	3
14 TOT	13	5	837	66	9	0	2	932	925.1	13	3	495	36	7	1	3	558	553.6	0	1	13	3	0	0	0	17	16.4

Appendix 18.2 Microsimulation Modelling

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.3.332 [14595,13/11/2013]
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Filename: L106 J9 PICADY Model_20260203.arc8
Path: J:\L_JOBS\Job-L106\C_CALCULATIONS\B_TRAFFIC\Modelling\Modelling
Report generation date: 05/02/2026 10:02:11

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	Standard - 2026 Baseline									
Stream B-AC	0.26	8.83	0.21	A	235 % [Stream B-AC]	0.22	9.25	0.18	A	220 % [Stream B-AC]
Stream C-AB	0.04	4.92	0.04	A		0.05	5.19	0.05	A	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
	Standard - 2027 Do-Nothing									
Stream B-AC	0.61	11.85	0.38	B	107 % [Stream B-AC]	0.37	10.66	0.27	B	147 % [Stream B-AC]
Stream C-AB	0.04	4.97	0.04	A		0.05	5.30	0.05	A	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
	Standard - 2027 With Development									
Stream B-AC	0.62	12.02	0.39	B	104 % [Stream B-AC]	0.37	10.78	0.27	B	143 % [Stream B-AC]
Stream C-AB	0.04	5.00	0.04	A		0.05	5.33	0.05	A	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
	Standard - 2028 Do-Nothing									
Stream B-AC	0.63	12.03	0.39	B		0.38	10.81	0.28	B	
Stream C-AB	0.05	4.99	0.04	A		0.05	5.33	0.05	A	

Stream C-A	-	-	-	-	103 % [Stream B-AC]	-	-	-	-	142 % [Stream B-AC]
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
	Standard - 2028 With Development									
Stream B-AC	0.68	12.87	0.41	B	89 % [Stream B-AC]	0.41	11.55	0.29	B	120 % [Stream B-AC]
Stream C-AB	0.05	5.06	0.04	A		0.05	5.51	0.05	A	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
	Standard - 2033 Do-Nothing									
Stream B-AC	0.68	12.49	0.41	B	94 % [Stream B-AC]	0.41	11.22	0.30	B	128 % [Stream B-AC]
Stream C-AB	0.05	5.02	0.05	A		0.06	5.40	0.05	A	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
	Standard - 2033 With Development									
Stream B-AC	0.73	13.39	0.43	B	81 % [Stream B-AC]	0.44	12.02	0.31	B	109 % [Stream B-AC]
Stream C-AB	0.05	5.10	0.05	A		0.06	5.58	0.06	A	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
	Standard - 2043 Do-Nothing									
Stream B-AC	0.76	13.15	0.43	B	84 % [Stream B-AC]	0.46	11.71	0.32	B	115 % [Stream B-AC]
Stream C-AB	0.05	5.07	0.05	A		0.06	5.47	0.06	A	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
	Standard - 2043 Do-Nothing Cumulative									
Stream B-AC	0.35	9.65	0.26	A	174 % [Stream B-AC]	0.30	10.15	0.23	B	163 % [Stream B-AC]
Stream C-AB	0.05	5.02	0.05	A		0.06	5.37	0.06	A	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
	Standard - 2043 With Development									

Stream B-AC	0.82	14.16	0.45	B	72 % [Stream B-AC]	0.49	12.59	0.33	B	98 % [Stream B-AC]
Stream C-AB	0.05	5.14	0.05	A		0.06	5.66	0.06	A	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

"D1 - 2026 Baseline, AM " model duration: 07:45 - 09:15
"D2 - 2026 Baseline, PM" model duration: 16:45 - 18:15
"D3 - 2027 Do-Nothing, AM" model duration: 07:45 - 09:15
"D4 - 2027 Do-Nothing, PM" model duration: 16:45 - 18:15
"D5 - 2027 With Development, AM" model duration: 07:45 - 09:15
"D6 - 2027 With Development, PM" model duration: 16:45 - 18:15
"D7 - 2028 Do-Nothing, AM" model duration: 07:45 - 09:15
"D8 - 2028 Do-Nothing, PM" model duration: 16:45 - 18:15
"D9 - 2028 With Development, AM" model duration: 07:45 - 09:15
"D10 - 2028 With Development, PM" model duration: 16:45 - 18:15
"D11 - 2033 Do-Nothing, AM" model duration: 07:45 - 09:15
"D12 - 2033 Do-Nothing, PM" model duration: 16:45 - 18:15
"D13 - 2033 With Development, AM" model duration: 07:45 - 09:15
"D14 - 2033 With Development, PM" model duration: 16:45 - 18:15
"D15 - 2043 Do-Nothing, AM" model duration: 07:45 - 09:15
"D16 - 2043 Do-Nothing, PM" model duration: 16:45 - 18:15
"D17 - 2043 With Development, AM" model duration: 07:45 - 09:15
"D18 - 2043 With Development, PM" model duration: 16:45 - 18:15
"D19 - 2043 Do-Nothing Cumulative, AM" model duration: 07:45 - 09:15
"D20 - 2043 Do-Nothing Cumulative, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.3.332 at 05/02/2026 10:01:58

File summary

File Description

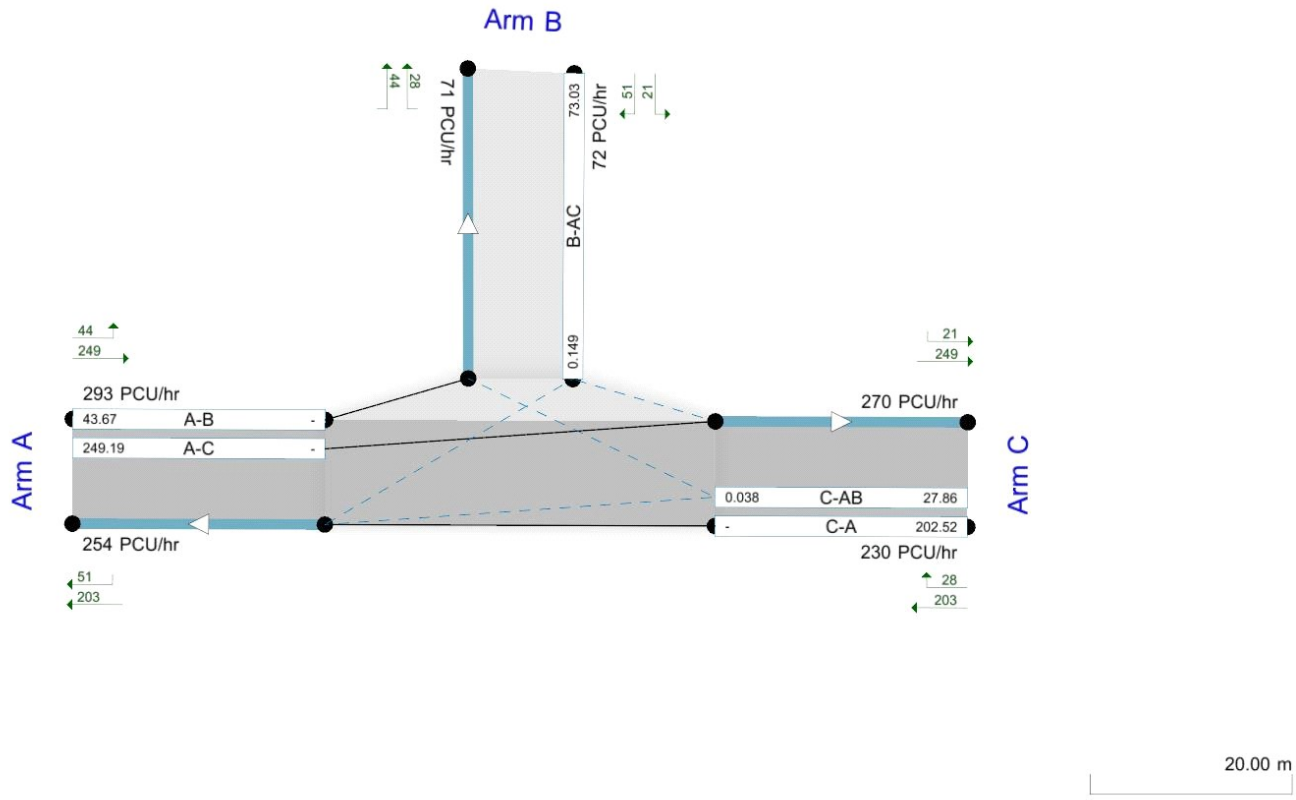
Title	Clongriffin Phase 2
Location	Dublin 13
Site Number	9
Date	05/02/2026
Version	
Status	
Identifier	
Client	
Jobnumber	L106
Enumerator	FB
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75		✓	RFC	0.90	36.00	20.00

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



Text overlays show modelled flow through the junction (entry and exit flows, PCU/hr).
Streams (upstreams) show Total Demand (PCU/hr); Streams (downstreams) show RFC ()
Time Segment: (07:45-08:00)
Showing Analysis Set "A1 - Standard "; Demand Set "D1 - 2026 Baseline, AM "

The junction diagram reflects the last run of ARCADY.

Standard - 2026 Baseline, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2026 Baseline, AM	2026 Baseline	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	7.96	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	235	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	155.00	100.000
B	ONE HOUR	✓	98.00	100.000
C	ONE HOUR	✓	279.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	30.000	125.000
	B	58.000	0.000	40.000
	C	251.000	28.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.19	0.81
	B	0.59	0.00	0.41
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.21	8.83	0.26	A
C-AB	0.04	4.92	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	73.78	73.14	0.00	530.25	0.139	0.16	7.864	A
C-AB	21.08	20.97	0.00	773.47	0.027	0.03	4.784	A
C-A	188.97	188.97	0.00	-	-	-	-	-
A-B	22.59	22.59	0.00	-	-	-	-	-
A-C	94.11	94.11	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	88.10	87.94	0.00	524.16	0.168	0.20	8.250	A
C-AB	25.17	25.15	0.00	768.91	0.033	0.03	4.839	A
C-A	225.64	225.64	0.00	-	-	-	-	-
A-B	26.97	26.97	0.00	-	-	-	-	-
A-C	112.37	112.37	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	107.90	107.65	0.00	515.73	0.209	0.26	8.816	A
C-AB	30.83	30.80	0.00	762.61	0.040	0.04	4.919	A
C-A	276.36	276.36	0.00	-	-	-	-	-
A-B	33.03	33.03	0.00	-	-	-	-	-
A-C	137.63	137.63	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	107.90	107.89	0.00	515.72	0.209	0.26	8.827	A
C-AB	30.83	30.83	0.00	762.61	0.040	0.04	4.919	A
C-A	276.36	276.36	0.00	-	-	-	-	-
A-B	33.03	33.03	0.00	-	-	-	-	-
A-C	137.63	137.63	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	88.10	88.34	0.00	524.16	0.168	0.20	8.266	A
C-AB	25.17	25.20	0.00	768.91	0.033	0.03	4.840	A
C-A	225.64	225.64	0.00	-	-	-	-	-
A-B	26.97	26.97	0.00	-	-	-	-	-
A-C	112.37	112.37	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	73.78	73.94	0.00	530.23	0.139	0.16	7.892	A
C-AB	21.08	21.10	0.00	773.47	0.027	0.03	4.786	A
C-A	188.97	188.97	0.00	-	-	-	-	-
A-B	22.59	22.59	0.00	-	-	-	-	-
A-C	94.11	94.11	0.00	-	-	-	-	-

Standard - 2026 Baseline, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2026 Baseline, PM	2026 Baseline	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	8.14	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	220	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	318.00	100.000
B	ONE HOUR	✓	80.00	100.000
C	ONE HOUR	✓	251.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	47.000	271.000
	B	57.000	0.000	23.000
	C	221.000	30.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.15	0.85
	B	0.71	0.00	0.29
	C	0.88	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.18	9.25	0.22	A
C-AB	0.05	5.19	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	60.23	59.69	0.00	500.20	0.120	0.14	8.162	A
C-AB	22.59	22.46	0.00	748.77	0.030	0.03	4.956	A
C-A	166.38	166.38	0.00	-	-	-	-	-
A-B	35.38	35.38	0.00	-	-	-	-	-
A-C	204.02	204.02	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	71.92	71.78	0.00	490.62	0.147	0.17	8.592	A
C-AB	26.97	26.94	0.00	739.41	0.036	0.04	5.052	A
C-A	198.67	198.67	0.00	-	-	-	-	-
A-B	42.25	42.25	0.00	-	-	-	-	-
A-C	243.62	243.62	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	88.08	87.87	0.00	477.36	0.185	0.22	9.238	A
C-AB	33.03	32.99	0.00	726.48	0.045	0.05	5.190	A
C-A	243.33	243.33	0.00	-	-	-	-	-
A-B	51.75	51.75	0.00	-	-	-	-	-
A-C	298.38	298.38	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	88.08	88.08	0.00	477.35	0.185	0.22	9.247	A
C-AB	33.03	33.03	0.00	726.48	0.045	0.05	5.190	A
C-A	243.33	243.33	0.00	-	-	-	-	-
A-B	51.75	51.75	0.00	-	-	-	-	-
A-C	298.38	298.38	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	71.92	72.12	0.00	490.61	0.147	0.17	8.608	A
C-AB	26.97	27.01	0.00	739.41	0.036	0.04	5.053	A
C-A	198.67	198.67	0.00	-	-	-	-	-
A-B	42.25	42.25	0.00	-	-	-	-	-
A-C	243.62	243.62	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	60.23	60.37	0.00	500.18	0.120	0.14	8.189	A
C-AB	22.59	22.61	0.00	748.77	0.030	0.03	4.957	A
C-A	166.38	166.38	0.00	-	-	-	-	-
A-B	35.38	35.38	0.00	-	-	-	-	-
A-C	204.02	204.02	0.00	-	-	-	-	-

Standard - 2027 Do-Nothing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2027 Do-Nothing, AM	2027 Do-Nothing	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	10.86	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	107	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	187.00	100.000
B	ONE HOUR	✓	171.00	100.000
C	ONE HOUR	✓	286.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	59.000	128.000
	B	130.000	0.000	41.000
	C	257.000	29.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.32	0.68
	B	0.76	0.00	0.24
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.38	11.85	0.61	B
C-AB	0.04	4.97	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	128.74	127.40	0.00	508.64	0.253	0.33	9.410	A
C-AB	21.83	21.72	0.00	768.62	0.028	0.03	4.820	A
C-A	193.48	193.48	0.00	-	-	-	-	-
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	96.37	96.37	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	153.73	153.32	0.00	501.60	0.306	0.44	10.323	B
C-AB	26.07	26.05	0.00	763.12	0.034	0.04	4.883	A
C-A	231.04	231.04	0.00	-	-	-	-	-
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	115.07	115.07	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	188.27	187.58	0.00	491.87	0.383	0.61	11.804	B
C-AB	31.93	31.89	0.00	755.52	0.042	0.04	4.974	A
C-A	282.96	282.96	0.00	-	-	-	-	-
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	140.93	140.93	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	188.27	188.25	0.00	491.86	0.383	0.61	11.855	B
C-AB	31.93	31.93	0.00	755.52	0.042	0.04	4.974	A
C-A	282.96	282.96	0.00	-	-	-	-	-
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	140.93	140.93	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	153.73	154.38	0.00	501.59	0.306	0.45	10.388	B
C-AB	26.07	26.10	0.00	763.12	0.034	0.04	4.886	A
C-A	231.04	231.04	0.00	-	-	-	-	-
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	115.07	115.07	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	128.74	129.16	0.00	508.62	0.253	0.34	9.497	A
C-AB	21.83	21.86	0.00	768.62	0.028	0.03	4.820	A
C-A	193.48	193.48	0.00	-	-	-	-	-
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	96.37	96.37	0.00	-	-	-	-	-

Standard - 2027 Do-Nothing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2027 Do-Nothing, PM	2027 Do-Nothing	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	9.52	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	147	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	380.00	100.000
B	ONE HOUR	✓	114.00	100.000
C	ONE HOUR	✓	257.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	102.000	278.000
	B	90.000	0.000	24.000
	C	226.000	31.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.00	0.27	0.73
	B	0.79	0.00	0.21
	C	0.88	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.27	10.66	0.37	B
C-AB	0.05	5.30	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	85.83	84.98	0.00	488.12	0.176	0.21	8.911	A
C-AB	23.34	23.21	0.00	739.37	0.032	0.03	5.027	A
C-A	170.14	170.14	0.00	-	-	-	-	-
A-B	76.79	76.79	0.00	-	-	-	-	-
A-C	209.29	209.29	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	102.48	102.25	0.00	477.63	0.215	0.27	9.584	A
C-AB	27.87	27.84	0.00	728.19	0.038	0.04	5.139	A
C-A	203.17	203.17	0.00	-	-	-	-	-
A-B	91.70	91.70	0.00	-	-	-	-	-
A-C	249.92	249.92	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	125.52	125.13	0.00	463.14	0.271	0.37	10.642	B
C-AB	34.13	34.09	0.00	712.74	0.048	0.05	5.304	A
C-A	248.83	248.83	0.00	-	-	-	-	-
A-B	112.30	112.30	0.00	-	-	-	-	-
A-C	306.08	306.08	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	125.52	125.51	0.00	463.13	0.271	0.37	10.662	B
C-AB	34.13	34.13	0.00	712.74	0.048	0.05	5.304	A
C-A	248.83	248.83	0.00	-	-	-	-	-
A-B	112.30	112.30	0.00	-	-	-	-	-
A-C	306.08	306.08	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	102.48	102.85	0.00	477.62	0.215	0.28	9.615	A
C-AB	27.87	27.91	0.00	728.19	0.038	0.04	5.142	A
C-A	203.17	203.17	0.00	-	-	-	-	-
A-B	91.70	91.70	0.00	-	-	-	-	-
A-C	249.92	249.92	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	85.83	86.07	0.00	488.09	0.176	0.22	8.961	A
C-AB	23.34	23.37	0.00	739.37	0.032	0.03	5.027	A
C-A	170.14	170.14	0.00	-	-	-	-	-
A-B	76.79	76.79	0.00	-	-	-	-	-
A-C	209.29	209.29	0.00	-	-	-	-	-

Standard - 2027 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2027 With Development, AM	2027 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	11.00	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	104	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	205.00	100.000
B	ONE HOUR	✓	171.00	100.000
C	ONE HOUR	✓	299.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	59.000	146.000
	B	130.000	0.000	41.000
	C	270.000	29.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.29	0.71
	B	0.76	0.00	0.24
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.39	12.02	0.62	B
C-AB	0.04	5.00	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	128.74	127.39	0.00	505.84	0.255	0.34	9.480	A
C-AB	21.83	21.72	0.00	765.89	0.029	0.03	4.837	A
C-A	203.27	203.27	0.00	-	-	-	-	-
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	109.92	109.92	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	153.73	153.32	0.00	498.25	0.309	0.44	10.424	B
C-AB	26.07	26.05	0.00	759.86	0.034	0.04	4.905	A
C-A	242.72	242.72	0.00	-	-	-	-	-
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	131.25	131.25	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	188.27	187.57	0.00	487.75	0.386	0.62	11.963	B
C-AB	31.93	31.89	0.00	751.53	0.042	0.04	5.002	A
C-A	297.28	297.28	0.00	-	-	-	-	-
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	160.75	160.75	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	188.27	188.25	0.00	487.74	0.386	0.62	12.018	B
C-AB	31.93	31.93	0.00	751.53	0.042	0.04	5.002	A
C-A	297.28	297.28	0.00	-	-	-	-	-
A-B	64.96	64.96	0.00	-	-	-	-	-
A-C	160.75	160.75	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	153.73	154.40	0.00	498.24	0.309	0.45	10.492	B
C-AB	26.07	26.10	0.00	759.86	0.034	0.04	4.906	A
C-A	242.72	242.72	0.00	-	-	-	-	-
A-B	53.04	53.04	0.00	-	-	-	-	-
A-C	131.25	131.25	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	128.74	129.17	0.00	505.81	0.255	0.35	9.568	A
C-AB	21.83	21.86	0.00	765.89	0.029	0.03	4.840	A
C-A	203.27	203.27	0.00	-	-	-	-	-
A-B	44.42	44.42	0.00	-	-	-	-	-
A-C	109.92	109.92	0.00	-	-	-	-	-

Standard - 2027 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2027 With Development, PM	2027 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	9.62	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	143	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	393.00	100.000
B	ONE HOUR	✓	114.00	100.000
C	ONE HOUR	✓	275.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	102.000	291.000
	B	90.000	0.000	24.000
	C	244.000	31.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.26	0.74
	B	0.79	0.00	0.21
	C	0.89	0.11	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.27	10.78	0.37	B
C-AB	0.05	5.33	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	85.83	84.98	0.00	485.56	0.177	0.21	8.968	A
C-AB	23.34	23.21	0.00	737.40	0.032	0.03	5.041	A
C-A	183.70	183.70	0.00	-	-	-	-	-
A-B	76.79	76.79	0.00	-	-	-	-	-
A-C	219.08	219.08	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	102.48	102.24	0.00	474.57	0.216	0.27	9.663	A
C-AB	27.87	27.84	0.00	725.84	0.038	0.04	5.157	A
C-A	219.35	219.35	0.00	-	-	-	-	-
A-B	91.70	91.70	0.00	-	-	-	-	-
A-C	261.60	261.60	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	125.52	125.12	0.00	459.38	0.273	0.37	10.757	B
C-AB	34.13	34.09	0.00	709.86	0.048	0.05	5.327	A
C-A	268.65	268.65	0.00	-	-	-	-	-
A-B	112.30	112.30	0.00	-	-	-	-	-
A-C	320.40	320.40	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	125.52	125.50	0.00	459.37	0.273	0.37	10.782	B
C-AB	34.13	34.13	0.00	709.86	0.048	0.05	5.327	A
C-A	268.65	268.65	0.00	-	-	-	-	-
A-B	112.30	112.30	0.00	-	-	-	-	-
A-C	320.40	320.40	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	102.48	102.86	0.00	474.56	0.216	0.28	9.694	A
C-AB	27.87	27.91	0.00	725.84	0.038	0.04	5.159	A
C-A	219.35	219.35	0.00	-	-	-	-	-
A-B	91.70	91.70	0.00	-	-	-	-	-
A-C	261.60	261.60	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	85.83	86.07	0.00	485.53	0.177	0.22	9.017	A
C-AB	23.34	23.37	0.00	737.40	0.032	0.03	5.043	A
C-A	183.70	183.70	0.00	-	-	-	-	-
A-B	76.79	76.79	0.00	-	-	-	-	-
A-C	219.08	219.08	0.00	-	-	-	-	-

Standard - 2028 Do-Nothing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 Do-Nothing, AM	2028 Do-Nothing	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	11.00	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	103	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	191.00	100.000
B	ONE HOUR	✓	174.00	100.000
C	ONE HOUR	✓	294.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	60.000	131.000
	B	132.000	0.000	42.000
	C	264.000	30.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.31	0.69
	B	0.76	0.00	0.24
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.39	12.03	0.63	B
C-AB	0.04	4.99	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	131.00	129.63	0.00	507.89	0.258	0.34	9.484	A
C-AB	22.59	22.47	0.00	768.02	0.029	0.03	4.828	A
C-A	198.75	198.75	0.00	-	-	-	-	-
A-B	45.17	45.17	0.00	-	-	-	-	-
A-C	98.62	98.62	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	156.42	156.00	0.00	500.68	0.312	0.45	10.432	B
C-AB	26.97	26.94	0.00	762.40	0.035	0.04	4.894	A
C-A	237.33	237.33	0.00	-	-	-	-	-
A-B	53.94	53.94	0.00	-	-	-	-	-
A-C	117.77	117.77	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	191.58	190.86	0.00	490.69	0.390	0.63	11.976	B
C-AB	33.03	32.99	0.00	754.63	0.044	0.05	4.988	A
C-A	290.67	290.67	0.00	-	-	-	-	-
A-B	66.06	66.06	0.00	-	-	-	-	-
A-C	144.23	144.23	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	191.58	191.55	0.00	490.68	0.390	0.63	12.032	B
C-AB	33.03	33.03	0.00	754.63	0.044	0.05	4.988	A
C-A	290.67	290.67	0.00	-	-	-	-	-
A-B	66.06	66.06	0.00	-	-	-	-	-
A-C	144.23	144.23	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	156.42	157.11	0.00	500.66	0.312	0.46	10.499	B
C-AB	26.97	27.00	0.00	762.40	0.035	0.04	4.897	A
C-A	237.33	237.33	0.00	-	-	-	-	-
A-B	53.94	53.94	0.00	-	-	-	-	-
A-C	117.77	117.77	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	131.00	131.43	0.00	507.87	0.258	0.35	9.574	A
C-AB	22.59	22.61	0.00	768.02	0.029	0.03	4.831	A
C-A	198.75	198.75	0.00	-	-	-	-	-
A-B	45.17	45.17	0.00	-	-	-	-	-
A-C	98.62	98.62	0.00	-	-	-	-	-

Standard - 2028 Do-Nothing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 Do-Nothing, PM	2028 Do-Nothing	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	9.62	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	142	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	388.00	100.000
B	ONE HOUR	✓	116.00	100.000
C	ONE HOUR	✓	264.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	104.000	284.000
	B	92.000	0.000	24.000
	C	232.000	32.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.27	0.73
	B	0.79	0.00	0.21
	C	0.88	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.28	10.81	0.38	B
C-AB	0.05	5.33	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	87.33	86.47	0.00	486.46	0.180	0.22	8.982	A
C-AB	24.09	23.96	0.00	738.16	0.033	0.03	5.041	A
C-A	174.66	174.66	0.00	-	-	-	-	-
A-B	78.30	78.30	0.00	-	-	-	-	-
A-C	213.81	213.81	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	104.28	104.04	0.00	475.72	0.219	0.28	9.680	A
C-AB	28.77	28.74	0.00	726.75	0.040	0.04	5.157	A
C-A	208.56	208.56	0.00	-	-	-	-	-
A-B	93.49	93.49	0.00	-	-	-	-	-
A-C	255.31	255.31	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	127.72	127.32	0.00	460.86	0.277	0.38	10.780	B
C-AB	35.23	35.19	0.00	710.96	0.050	0.05	5.327	A
C-A	255.44	255.44	0.00	-	-	-	-	-
A-B	114.51	114.51	0.00	-	-	-	-	-
A-C	312.69	312.69	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	127.72	127.71	0.00	460.86	0.277	0.38	10.805	B
C-AB	35.23	35.23	0.00	710.96	0.050	0.05	5.327	A
C-A	255.44	255.44	0.00	-	-	-	-	-
A-B	114.51	114.51	0.00	-	-	-	-	-
A-C	312.69	312.69	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	104.28	104.66	0.00	475.70	0.219	0.28	9.714	A
C-AB	28.77	28.81	0.00	726.75	0.040	0.04	5.159	A
C-A	208.56	208.56	0.00	-	-	-	-	-
A-B	93.49	93.49	0.00	-	-	-	-	-
A-C	255.31	255.31	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	87.33	87.58	0.00	486.43	0.180	0.22	9.031	A
C-AB	24.09	24.12	0.00	738.16	0.033	0.03	5.041	A
C-A	174.66	174.66	0.00	-	-	-	-	-
A-B	78.30	78.30	0.00	-	-	-	-	-
A-C	213.81	213.81	0.00	-	-	-	-	-

Standard - 2028 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, AM	2028 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	11.72	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	89	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	237.00	100.000
B	ONE HOUR	✓	174.00	100.000
C	ONE HOUR	✓	430.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	60.000	177.000
	B	132.000	0.000	42.000
	C	400.000	30.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.25	0.75
	B	0.76	0.00	0.24
	C	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.41	12.87	0.68	B
C-AB	0.04	5.06	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	131.00	129.58	0.00	494.66	0.265	0.35	9.823	A
C-AB	22.59	22.46	0.00	761.04	0.030	0.03	4.874	A
C-A	301.14	301.14	0.00	-	-	-	-	-
A-B	45.17	45.17	0.00	-	-	-	-	-
A-C	133.25	133.25	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	156.42	155.97	0.00	484.82	0.323	0.47	10.931	B
C-AB	26.97	26.94	0.00	754.07	0.036	0.04	4.950	A
C-A	359.59	359.59	0.00	-	-	-	-	-
A-B	53.94	53.94	0.00	-	-	-	-	-
A-C	159.12	159.12	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	191.58	190.77	0.00	471.17	0.407	0.67	12.799	B
C-AB	33.03	32.99	0.00	744.43	0.044	0.05	5.059	A
C-A	440.41	440.41	0.00	-	-	-	-	-
A-B	66.06	66.06	0.00	-	-	-	-	-
A-C	194.88	194.88	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	191.58	191.55	0.00	471.17	0.407	0.68	12.870	B
C-AB	33.03	33.03	0.00	744.43	0.044	0.05	5.059	A
C-A	440.41	440.41	0.00	-	-	-	-	-
A-B	66.06	66.06	0.00	-	-	-	-	-
A-C	194.88	194.88	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	156.42	157.19	0.00	484.80	0.323	0.48	11.014	B
C-AB	26.97	27.01	0.00	754.07	0.036	0.04	4.953	A
C-A	359.59	359.59	0.00	-	-	-	-	-
A-B	53.94	53.94	0.00	-	-	-	-	-
A-C	159.12	159.12	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	131.00	131.47	0.00	494.63	0.265	0.37	9.927	A
C-AB	22.59	22.61	0.00	761.04	0.030	0.03	4.876	A
C-A	301.14	301.14	0.00	-	-	-	-	-
A-B	45.17	45.17	0.00	-	-	-	-	-
A-C	133.25	133.25	0.00	-	-	-	-	-

Standard - 2028 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, PM	2028 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	10.24	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	120	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	487.00	100.000
B	ONE HOUR	✓	116.00	100.000
C	ONE HOUR	✓	320.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	104.000	383.000
	B	92.000	0.000	24.000
	C	288.000	32.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.21	0.79
	B	0.79	0.00	0.21
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.29	11.55	0.41	B
C-AB	0.05	5.51	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	87.33	86.43	0.00	471.87	0.185	0.22	9.319	A
C-AB	24.09	23.95	0.00	723.15	0.033	0.03	5.149	A
C-A	216.82	216.82	0.00	-	-	-	-	-
A-B	78.30	78.30	0.00	-	-	-	-	-
A-C	288.34	288.34	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	104.28	104.02	0.00	458.28	0.228	0.29	10.155	B
C-AB	28.77	28.74	0.00	708.83	0.041	0.04	5.293	A
C-A	258.91	258.91	0.00	-	-	-	-	-
A-B	93.49	93.49	0.00	-	-	-	-	-
A-C	344.31	344.31	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	127.72	127.27	0.00	439.46	0.291	0.40	11.513	B
C-AB	35.23	35.19	0.00	689.02	0.051	0.05	5.505	A
C-A	317.09	317.09	0.00	-	-	-	-	-
A-B	114.51	114.51	0.00	-	-	-	-	-
A-C	421.69	421.69	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	127.72	127.70	0.00	439.45	0.291	0.41	11.547	B
C-AB	35.23	35.23	0.00	689.02	0.051	0.05	5.505	A
C-A	317.09	317.09	0.00	-	-	-	-	-
A-B	114.51	114.51	0.00	-	-	-	-	-
A-C	421.69	421.69	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	104.28	104.71	0.00	458.26	0.228	0.30	10.194	B
C-AB	28.77	28.81	0.00	708.83	0.041	0.04	5.293	A
C-A	258.91	258.91	0.00	-	-	-	-	-
A-B	93.49	93.49	0.00	-	-	-	-	-
A-C	344.31	344.31	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	87.33	87.61	0.00	471.84	0.185	0.23	9.375	A
C-AB	24.09	24.12	0.00	723.15	0.033	0.03	5.151	A
C-A	216.82	216.82	0.00	-	-	-	-	-
A-B	78.30	78.30	0.00	-	-	-	-	-
A-C	288.34	288.34	0.00	-	-	-	-	-

Standard - 2033 Do-Nothing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Do-Nothing, AM	2033 Do-Nothing	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	11.37	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	94	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	205.00	100.000
B	ONE HOUR	✓	181.00	100.000
C	ONE HOUR	✓	316.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	63.000	142.000
	B	136.000	0.000	45.000
	C	284.000	32.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.31	0.69
	B	0.75	0.00	0.25
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.41	12.49	0.68	B
C-AB	0.05	5.02	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	136.27	134.81	0.00	505.89	0.269	0.36	9.664	A
C-AB	24.09	23.96	0.00	765.89	0.031	0.03	4.852	A
C-A	213.81	213.81	0.00	-	-	-	-	-
A-B	47.43	47.43	0.00	-	-	-	-	-
A-C	106.91	106.91	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	162.72	162.26	0.00	498.14	0.327	0.48	10.702	B
C-AB	28.77	28.74	0.00	759.86	0.038	0.04	4.923	A
C-A	255.31	255.31	0.00	-	-	-	-	-
A-B	56.64	56.64	0.00	-	-	-	-	-
A-C	127.66	127.66	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	199.28	198.49	0.00	487.41	0.409	0.68	12.425	B
C-AB	35.23	35.19	0.00	751.53	0.047	0.05	5.025	A
C-A	312.69	312.69	0.00	-	-	-	-	-
A-B	69.36	69.36	0.00	-	-	-	-	-
A-C	156.34	156.34	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	199.28	199.26	0.00	487.40	0.409	0.68	12.488	B
C-AB	35.23	35.23	0.00	751.53	0.047	0.05	5.025	A
C-A	312.69	312.69	0.00	-	-	-	-	-
A-B	69.36	69.36	0.00	-	-	-	-	-
A-C	156.34	156.34	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	162.72	163.48	0.00	498.13	0.327	0.49	10.783	B
C-AB	28.77	28.81	0.00	759.86	0.038	0.04	4.926	A
C-A	255.31	255.31	0.00	-	-	-	-	-
A-B	56.64	56.64	0.00	-	-	-	-	-
A-C	127.66	127.66	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	136.27	136.74	0.00	505.87	0.269	0.37	9.767	A
C-AB	24.09	24.12	0.00	765.89	0.031	0.03	4.852	A
C-A	213.81	213.81	0.00	-	-	-	-	-
A-B	47.43	47.43	0.00	-	-	-	-	-
A-C	106.91	106.91	0.00	-	-	-	-	-

Standard - 2033 Do-Nothing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 Do-Nothing, PM	2033 Do-Nothing	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	9.92	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	128	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	415.00	100.000
B	ONE HOUR	✓	122.00	100.000
C	ONE HOUR	✓	285.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	108.000	307.000
	B	96.000	0.000	26.000
	C	250.000	35.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.26	0.74
	B	0.79	0.00	0.21
	C	0.88	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.30	11.22	0.41	B
C-AB	0.05	5.40	0.06	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	91.85	90.92	0.00	482.85	0.190	0.23	9.165	A
C-AB	26.35	26.20	0.00	734.07	0.036	0.04	5.084	A
C-A	188.21	188.21	0.00	-	-	-	-	-
A-B	81.31	81.31	0.00	-	-	-	-	-
A-C	231.13	231.13	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	109.68	109.41	0.00	471.29	0.233	0.30	9.941	A
C-AB	31.46	31.43	0.00	721.86	0.044	0.05	5.213	A
C-A	224.74	224.74	0.00	-	-	-	-	-
A-B	97.09	97.09	0.00	-	-	-	-	-
A-C	275.99	275.99	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	134.32	133.88	0.00	455.28	0.295	0.41	11.185	B
C-AB	38.54	38.49	0.00	704.98	0.055	0.06	5.401	A
C-A	275.26	275.26	0.00	-	-	-	-	-
A-B	118.91	118.91	0.00	-	-	-	-	-
A-C	338.01	338.01	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	134.32	134.31	0.00	455.28	0.295	0.41	11.216	B
C-AB	38.54	38.54	0.00	704.98	0.055	0.06	5.401	A
C-A	275.26	275.26	0.00	-	-	-	-	-
A-B	118.91	118.91	0.00	-	-	-	-	-
A-C	338.01	338.01	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	109.68	110.11	0.00	471.27	0.233	0.31	9.981	A
C-AB	31.46	31.51	0.00	721.86	0.044	0.05	5.216	A
C-A	224.74	224.74	0.00	-	-	-	-	-
A-B	97.09	97.09	0.00	-	-	-	-	-
A-C	275.99	275.99	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	91.85	92.13	0.00	482.82	0.190	0.24	9.220	A
C-AB	26.35	26.38	0.00	734.07	0.036	0.04	5.088	A
C-A	188.21	188.21	0.00	-	-	-	-	-
A-B	81.31	81.31	0.00	-	-	-	-	-
A-C	231.13	231.13	0.00	-	-	-	-	-

Standard - 2033 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 With Development, AM	2033 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	12.15	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	81	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	251.00	100.000
B	ONE HOUR	✓	181.00	100.000
C	ONE HOUR	✓	452.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	63.000	188.000
	B	136.000	0.000	45.000
	C	420.000	32.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.25	0.75
	B	0.75	0.00	0.25
	C	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.43	13.39	0.73	B
C-AB	0.05	5.10	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	136.27	134.76	0.00	492.69	0.277	0.38	10.017	B
C-AB	24.09	23.96	0.00	758.92	0.032	0.03	4.898	A
C-A	316.20	316.20	0.00	-	-	-	-	-
A-B	47.43	47.43	0.00	-	-	-	-	-
A-C	141.54	141.54	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	162.72	162.22	0.00	482.31	0.337	0.50	11.228	B
C-AB	28.77	28.74	0.00	751.54	0.038	0.04	4.980	A
C-A	377.57	377.57	0.00	-	-	-	-	-
A-B	56.64	56.64	0.00	-	-	-	-	-
A-C	169.01	169.01	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	199.28	198.39	0.00	467.92	0.426	0.72	13.311	B
C-AB	35.23	35.19	0.00	741.33	0.048	0.05	5.097	A
C-A	462.43	462.43	0.00	-	-	-	-	-
A-B	69.36	69.36	0.00	-	-	-	-	-
A-C	206.99	206.99	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	199.28	199.25	0.00	467.92	0.426	0.73	13.395	B
C-AB	35.23	35.23	0.00	741.33	0.048	0.05	5.097	A
C-A	462.43	462.43	0.00	-	-	-	-	-
A-B	69.36	69.36	0.00	-	-	-	-	-
A-C	206.99	206.99	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	162.72	163.57	0.00	482.30	0.337	0.52	11.325	B
C-AB	28.77	28.81	0.00	751.54	0.038	0.04	4.982	A
C-A	377.57	377.57	0.00	-	-	-	-	-
A-B	56.64	56.64	0.00	-	-	-	-	-
A-C	169.01	169.01	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	136.27	136.79	0.00	492.66	0.277	0.39	10.132	B
C-AB	24.09	24.12	0.00	758.92	0.032	0.03	4.900	A
C-A	316.20	316.20	0.00	-	-	-	-	-
A-B	47.43	47.43	0.00	-	-	-	-	-
A-C	141.54	141.54	0.00	-	-	-	-	-

Standard - 2033 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2033 With Development, PM	2033 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	10.58	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	109	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	514.00	100.000
B	ONE HOUR	✓	122.00	100.000
C	ONE HOUR	✓	341.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	108.000	406.000
	B	96.000	0.000	26.000
	C	306.000	35.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.21	0.79
	B	0.79	0.00	0.21
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.31	12.02	0.44	B
C-AB	0.06	5.58	0.06	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	91.85	90.88	0.00	468.27	0.196	0.24	9.516	A
C-AB	26.35	26.20	0.00	719.06	0.037	0.04	5.194	A
C-A	230.37	230.37	0.00	-	-	-	-	-
A-B	81.31	81.31	0.00	-	-	-	-	-
A-C	305.66	305.66	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	109.68	109.38	0.00	453.84	0.242	0.31	10.443	B
C-AB	31.46	31.43	0.00	703.94	0.045	0.05	5.352	A
C-A	275.09	275.09	0.00	-	-	-	-	-
A-B	97.09	97.09	0.00	-	-	-	-	-
A-C	364.99	364.99	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	134.32	133.82	0.00	433.87	0.310	0.44	11.977	B
C-AB	38.54	38.48	0.00	683.04	0.056	0.06	5.585	A
C-A	336.91	336.91	0.00	-	-	-	-	-
A-B	118.91	118.91	0.00	-	-	-	-	-
A-C	447.01	447.01	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	134.32	134.31	0.00	433.86	0.310	0.44	12.015	B
C-AB	38.54	38.53	0.00	683.04	0.056	0.06	5.585	A
C-A	336.91	336.91	0.00	-	-	-	-	-
A-B	118.91	118.91	0.00	-	-	-	-	-
A-C	447.01	447.01	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	109.68	110.16	0.00	453.83	0.242	0.32	10.491	B
C-AB	31.46	31.51	0.00	703.94	0.045	0.05	5.353	A
C-A	275.09	275.09	0.00	-	-	-	-	-
A-B	97.09	97.09	0.00	-	-	-	-	-
A-C	364.99	364.99	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	91.85	92.15	0.00	468.24	0.196	0.25	9.581	A
C-AB	26.35	26.39	0.00	719.06	0.037	0.04	5.199	A
C-A	230.37	230.37	0.00	-	-	-	-	-
A-B	81.31	81.31	0.00	-	-	-	-	-
A-C	305.66	305.66	0.00	-	-	-	-	-

Standard - 2043 Do-Nothing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2043 Do-Nothing, AM	2043 Do-Nothing	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	11.90	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	84	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	218.00	100.000
B	ONE HOUR	✓	191.00	100.000
C	ONE HOUR	✓	342.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	65.000	153.000
	B	142.000	0.000	49.000
	C	307.000	35.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.30	0.70
	B	0.74	0.00	0.26
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.43	13.15	0.76	B
C-AB	0.05	5.07	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	143.79	142.22	0.00	503.73	0.285	0.39	9.917	A
C-AB	26.35	26.21	0.00	763.92	0.034	0.04	4.880	A
C-A	231.13	231.13	0.00	-	-	-	-	-
A-B	48.94	48.94	0.00	-	-	-	-	-
A-C	115.19	115.19	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	171.71	171.19	0.00	495.39	0.347	0.52	11.086	B
C-AB	31.46	31.43	0.00	757.51	0.042	0.04	4.957	A
C-A	275.99	275.99	0.00	-	-	-	-	-
A-B	58.43	58.43	0.00	-	-	-	-	-
A-C	137.54	137.54	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	210.29	209.38	0.00	483.85	0.435	0.75	13.069	B
C-AB	38.54	38.49	0.00	748.64	0.051	0.05	5.069	A
C-A	338.01	338.01	0.00	-	-	-	-	-
A-B	71.57	71.57	0.00	-	-	-	-	-
A-C	168.46	168.46	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	210.29	210.26	0.00	483.84	0.435	0.76	13.154	B
C-AB	38.54	38.54	0.00	748.64	0.051	0.05	5.069	A
C-A	338.01	338.01	0.00	-	-	-	-	-
A-B	71.57	71.57	0.00	-	-	-	-	-
A-C	168.46	168.46	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	171.71	172.58	0.00	495.38	0.347	0.54	11.184	B
C-AB	31.46	31.51	0.00	757.51	0.042	0.04	4.960	A
C-A	275.99	275.99	0.00	-	-	-	-	-
A-B	58.43	58.43	0.00	-	-	-	-	-
A-C	137.54	137.54	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	143.79	144.33	0.00	503.70	0.285	0.41	10.034	B
C-AB	26.35	26.38	0.00	763.92	0.034	0.04	4.882	A
C-A	231.13	231.13	0.00	-	-	-	-	-
A-B	48.94	48.94	0.00	-	-	-	-	-
A-C	115.19	115.19	0.00	-	-	-	-	-

Standard - 2043 Do-Nothing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2043 Do-Nothing, PM	2043 Do-Nothing	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	10.32	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	115	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	443.00	100.000
B	ONE HOUR	✓	129.00	100.000
C	ONE HOUR	✓	306.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	112.000	331.000
	B	101.000	0.000	28.000
	C	269.000	37.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.25	0.75
	B	0.78	0.00	0.22
	C	0.88	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.32	11.71	0.46	B
C-AB	0.06	5.47	0.06	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	97.12	96.11	0.00	478.97	0.203	0.25	9.379	A
C-AB	27.86	27.70	0.00	729.82	0.038	0.04	5.125	A
C-A	202.52	202.52	0.00	-	-	-	-	-
A-B	84.32	84.32	0.00	-	-	-	-	-
A-C	249.19	249.19	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	115.97	115.67	0.00	466.57	0.249	0.33	10.249	B
C-AB	33.26	33.23	0.00	716.79	0.046	0.05	5.266	A
C-A	241.83	241.83	0.00	-	-	-	-	-
A-B	100.69	100.69	0.00	-	-	-	-	-
A-C	297.56	297.56	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	142.03	141.52	0.00	449.40	0.316	0.45	11.672	B
C-AB	40.74	40.69	0.00	698.77	0.058	0.06	5.470	A
C-A	296.17	296.17	0.00	-	-	-	-	-
A-B	123.31	123.31	0.00	-	-	-	-	-
A-C	364.44	364.44	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	142.03	142.02	0.00	449.39	0.316	0.46	11.709	B
C-AB	40.74	40.74	0.00	698.77	0.058	0.06	5.470	A
C-A	296.17	296.17	0.00	-	-	-	-	-
A-B	123.31	123.31	0.00	-	-	-	-	-
A-C	364.44	364.44	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	115.97	116.46	0.00	466.55	0.249	0.34	10.297	B
C-AB	33.26	33.31	0.00	716.79	0.046	0.05	5.269	A
C-A	241.83	241.83	0.00	-	-	-	-	-
A-B	100.69	100.69	0.00	-	-	-	-	-
A-C	297.56	297.56	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	97.12	97.43	0.00	478.94	0.203	0.26	9.443	A
C-AB	27.86	27.89	0.00	729.82	0.038	0.04	5.128	A
C-A	202.52	202.52	0.00	-	-	-	-	-
A-B	84.32	84.32	0.00	-	-	-	-	-
A-C	249.19	249.19	0.00	-	-	-	-	-

Standard - 2043 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2043 With Development, AM	2043 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	12.76	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	72	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	264.00	100.000
B	ONE HOUR	✓	191.00	100.000
C	ONE HOUR	✓	478.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	65.000	199.000
	B	142.000	0.000	49.000
	C	443.000	35.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.25	0.75
	B	0.74	0.00	0.26
	C	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.45	14.16	0.82	B
C-AB	0.05	5.14	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	143.79	142.16	0.00	490.56	0.293	0.41	10.285	B
C-AB	26.35	26.21	0.00	756.95	0.035	0.04	4.926	A
C-A	333.51	333.51	0.00	-	-	-	-	-
A-B	48.94	48.94	0.00	-	-	-	-	-
A-C	149.82	149.82	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	171.71	171.15	0.00	479.60	0.358	0.55	11.648	B
C-AB	31.46	31.43	0.00	749.19	0.042	0.04	5.015	A
C-A	398.25	398.25	0.00	-	-	-	-	-
A-B	58.43	58.43	0.00	-	-	-	-	-
A-C	178.90	178.90	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	210.29	209.26	0.00	464.39	0.453	0.81	14.050	B
C-AB	38.54	38.49	0.00	738.45	0.052	0.05	5.142	A
C-A	487.75	487.75	0.00	-	-	-	-	-
A-B	71.57	71.57	0.00	-	-	-	-	-
A-C	219.10	219.10	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	210.29	210.25	0.00	464.38	0.453	0.82	14.159	B
C-AB	38.54	38.54	0.00	738.45	0.052	0.05	5.142	A
C-A	487.75	487.75	0.00	-	-	-	-	-
A-B	71.57	71.57	0.00	-	-	-	-	-
A-C	219.10	219.10	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	171.71	172.70	0.00	479.58	0.358	0.57	11.768	B
C-AB	31.46	31.51	0.00	749.19	0.042	0.04	5.017	A
C-A	398.25	398.25	0.00	-	-	-	-	-
A-B	58.43	58.43	0.00	-	-	-	-	-
A-C	178.90	178.90	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	143.79	144.38	0.00	490.52	0.293	0.42	10.418	B
C-AB	26.35	26.38	0.00	756.95	0.035	0.04	4.927	A
C-A	333.51	333.51	0.00	-	-	-	-	-
A-B	48.94	48.94	0.00	-	-	-	-	-
A-C	149.82	149.82	0.00	-	-	-	-	-

Standard - 2043 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2043 With Development, PM	2043 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	11.04	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	98	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	542.00	100.000
B	ONE HOUR	✓	129.00	100.000
C	ONE HOUR	✓	362.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	112.000	430.000
	B	101.000	0.000	28.000
	C	325.000	37.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.21	0.79
	B	0.78	0.00	0.22
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.33	12.59	0.49	B
C-AB	0.06	5.66	0.06	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	97.12	96.07	0.00	464.39	0.209	0.26	9.747	A
C-AB	27.86	27.69	0.00	714.82	0.039	0.04	5.237	A
C-A	244.68	244.68	0.00	-	-	-	-	-
A-B	84.32	84.32	0.00	-	-	-	-	-
A-C	323.73	323.73	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	115.97	115.64	0.00	449.12	0.258	0.34	10.784	B
C-AB	33.26	33.22	0.00	698.87	0.048	0.05	5.408	A
C-A	292.17	292.17	0.00	-	-	-	-	-
A-B	100.69	100.69	0.00	-	-	-	-	-
A-C	386.56	386.56	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	142.03	141.45	0.00	427.97	0.332	0.49	12.537	B
C-AB	40.74	40.68	0.00	676.83	0.060	0.06	5.658	A
C-A	357.83	357.83	0.00	-	-	-	-	-
A-B	123.31	123.31	0.00	-	-	-	-	-
A-C	473.44	473.44	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	142.03	142.01	0.00	427.96	0.332	0.49	12.587	B
C-AB	40.74	40.74	0.00	676.83	0.060	0.06	5.658	A
C-A	357.83	357.83	0.00	-	-	-	-	-
A-B	123.31	123.31	0.00	-	-	-	-	-
A-C	473.44	473.44	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	115.97	116.52	0.00	449.10	0.258	0.35	10.842	B
C-AB	33.26	33.32	0.00	698.87	0.048	0.05	5.408	A
C-A	292.17	292.17	0.00	-	-	-	-	-
A-B	100.69	100.69	0.00	-	-	-	-	-
A-C	386.56	386.56	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	97.12	97.46	0.00	464.35	0.209	0.27	9.822	A
C-AB	27.86	27.89	0.00	714.82	0.039	0.04	5.242	A
C-A	244.68	244.68	0.00	-	-	-	-	-
A-B	84.32	84.32	0.00	-	-	-	-	-
A-C	323.73	323.73	0.00	-	-	-	-	-

Standard - 2043 Do-Nothing Cumulative, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2043 Do-Nothing Cumulative, AM	2043 Do-Nothing Cumulative	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	8.60	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	174	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	190.00	100.000
B	ONE HOUR	✓	120.00	100.000
C	ONE HOUR	✓	342.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	37.000	153.000
	B	71.000	0.000	49.000
	C	307.000	35.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.19	0.81
	B	0.59	0.00	0.41
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.26	9.65	0.35	A
C-AB	0.05	5.02	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	90.34	89.52	0.00	523.18	0.173	0.21	8.286	A
C-AB	26.35	26.21	0.00	768.17	0.034	0.04	4.852	A
C-A	231.13	231.13	0.00	-	-	-	-	-
A-B	27.86	27.86	0.00	-	-	-	-	-
A-C	115.19	115.19	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	107.88	107.66	0.00	515.67	0.209	0.26	8.818	A
C-AB	31.46	31.43	0.00	762.58	0.041	0.04	4.923	A
C-A	275.99	275.99	0.00	-	-	-	-	-
A-B	33.26	33.26	0.00	-	-	-	-	-
A-C	137.54	137.54	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	132.12	131.77	0.00	505.26	0.261	0.35	9.630	A
C-AB	38.54	38.49	0.00	754.85	0.051	0.05	5.025	A
C-A	338.01	338.01	0.00	-	-	-	-	-
A-B	40.74	40.74	0.00	-	-	-	-	-
A-C	168.46	168.46	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	132.12	132.11	0.00	505.25	0.262	0.35	9.647	A
C-AB	38.54	38.54	0.00	754.85	0.051	0.05	5.025	A
C-A	338.01	338.01	0.00	-	-	-	-	-
A-B	40.74	40.74	0.00	-	-	-	-	-
A-C	168.46	168.46	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	107.88	108.21	0.00	515.66	0.209	0.27	8.844	A
C-AB	31.46	31.51	0.00	762.58	0.041	0.04	4.924	A
C-A	275.99	275.99	0.00	-	-	-	-	-
A-B	33.26	33.26	0.00	-	-	-	-	-
A-C	137.54	137.54	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	90.34	90.57	0.00	523.15	0.173	0.21	8.327	A
C-AB	26.35	26.38	0.00	768.17	0.034	0.04	4.852	A
C-A	231.13	231.13	0.00	-	-	-	-	-
A-B	27.86	27.86	0.00	-	-	-	-	-
A-C	115.19	115.19	0.00	-	-	-	-	-

Standard - 2043 Do-Nothing Cumulative, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Standard			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2043 Do-Nothing Cumulative, PM	2043 Do-Nothing Cumulative	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Main Street / Park Avenue	T-Junction	Two-way	A,B,C	8.83	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	163	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Main Street (West)		Major
B	Park Avenue (North)		Minor
C	Main Street (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	14.00	✓	2.90	✓	3.20	250.00	✓	6.00

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	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	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	One lane	2.80										29	28

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	522.495	0.058	0.147	0.093	0.210
9	B-C	628.717	0.063	0.159	-	-
9	C-B	796.964	0.201	0.201	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	389.00	100.000
B	ONE HOUR	✓	97.00	100.000
C	ONE HOUR	✓	306.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	58.000	331.000
	B	69.000	0.000	28.000
	C	269.000	37.000	0.000

Turning Proportions (PCU) - Junction 9 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.15	0.85
	B	0.71	0.00	0.29
	C	0.88	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 9 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 9 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.23	10.15	0.30	B
C-AB	0.06	5.37	0.06	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	73.03	72.33	0.00	489.41	0.149	0.17	8.618	A
C-AB	27.86	27.70	0.00	738.01	0.038	0.04	5.066	A
C-A	202.52	202.52	0.00	-	-	-	-	-
A-B	43.67	43.67	0.00	-	-	-	-	-
A-C	249.19	249.19	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	87.20	87.01	0.00	477.67	0.183	0.22	9.210	A
C-AB	33.26	33.23	0.00	726.56	0.046	0.05	5.192	A
C-A	241.83	241.83	0.00	-	-	-	-	-
A-B	52.14	52.14	0.00	-	-	-	-	-
A-C	297.56	297.56	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	106.80	106.49	0.00	461.42	0.231	0.30	10.133	B
C-AB	40.74	40.69	0.00	710.74	0.057	0.06	5.372	A
C-A	296.17	296.17	0.00	-	-	-	-	-
A-B	63.86	63.86	0.00	-	-	-	-	-
A-C	364.44	364.44	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	106.80	106.79	0.00	461.41	0.231	0.30	10.151	B
C-AB	40.74	40.74	0.00	710.74	0.057	0.06	5.372	A
C-A	296.17	296.17	0.00	-	-	-	-	-
A-B	63.86	63.86	0.00	-	-	-	-	-
A-C	364.44	364.44	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	87.20	87.49	0.00	477.65	0.183	0.23	9.235	A
C-AB	33.26	33.31	0.00	726.56	0.046	0.05	5.194	A
C-A	241.83	241.83	0.00	-	-	-	-	-
A-B	52.14	52.14	0.00	-	-	-	-	-
A-C	297.56	297.56	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	73.03	73.22	0.00	489.37	0.149	0.18	8.656	A
C-AB	27.86	27.89	0.00	738.01	0.038	0.04	5.069	A
C-A	202.52	202.52	0.00	-	-	-	-	-
A-B	43.67	43.67	0.00	-	-	-	-	-
A-C	249.19	249.19	0.00	-	-	-	-	-

Appendix 18.3 Trip Rate Information Computer System (TRICS)

Calculation Reference: AUDIT-656801-240417-0436

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HF	HERTFORDSHIRE	3 days
	WS	WEST SUSSEX	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	1 days
09	NORTH		
	TW	TYNE & WEAR	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: Total Bedrooms
Actual Range: 36 to 152 (units:)
Range Selected by User: 10 to 1231 (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: 01/01/16 to 13/09/23

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	2 days
Tuesday	1 days
Wednesday	2 days
Thursday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	7 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:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	3
Neighbourhood Centre (PPS6 Local 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	6
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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	29 days - Selected
Servicing vehicles Excluded	8 days - Selected

Secondary Filtering selection:

Use Class:

C3	7 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

20,001 to 25,000	5 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

125,001 to 250,000	7 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	5 days
1.1 to 1.5	2 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	3 days
No	4 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

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1	CA-03-C-03	BLOCKS OF FLATS	CAMBRIDGESHIRE
	CROMWELL ROAD		
	CAMBRIDGE		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Total Bedrooms:	152	
	Survey date: MONDAY	*18/09/17*	*Survey Type: MANUAL*
2	HF-03-C-06	BLOCKS OF FLATS	HERTFORDSHIRE
	FERNDOWN ROAD		
	WATFORD		
	SOUTH OXHEY		
	Edge of Town		
	Residential Zone		
	Total Total Bedrooms:	45	
	Survey date: THURSDAY	*08/06/23*	*Survey Type: MANUAL*
3	HF-03-C-07	BLOCKS OF FLATS	HERTFORDSHIRE
	OXHEY DRIVE		
	WATFORD		
	SOUTH OXHEY		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Total Bedrooms:	139	
	Survey date: WEDNESDAY	*07/06/23*	*Survey Type: MANUAL*
4	HF-03-C-08	BLOCKS OF FLATS	HERTFORDSHIRE
	HAYLING ROAD		
	WATFORD		
	SOUTH OXHEY		
	Edge of Town		
	Residential Zone		
	Total Total Bedrooms:	38	
	Survey date: TUESDAY	*06/06/23*	*Survey Type: MANUAL*
5	NF-03-C-02	MIXED FLATS & HOUSES	NORFOLK
	HALL ROAD		
	NORWICH		
	LAKENHAM		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Total Bedrooms:	143	
	Survey date: MONDAY	*18/11/19*	*Survey Type: MANUAL*
6	TW-03-C-01	BLOCKS OF FLATS	TYNE & WEAR
	CAULDWELL AVENUE		
	WHITLEY BAY		
	MONKESEATON		
	Edge of Town		
	Residential Zone		
	Total Total Bedrooms:	90	
	Survey date: FRIDAY	*15/10/21*	*Survey Type: MANUAL*
7	WS-03-C-01	BLOCKS OF FLATS	WEST SUSSEX
	GORING ROAD		
	WORTHING		
	GORING-BY-SEA		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Total Bedrooms:	36	
	Survey date: WEDNESDAY	*11/05/22*	*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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.34

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	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	7	92	0.011	7	92	0.104	7	92	0.115
08:00 - 09:00	7	92	0.048	7	92	0.121	7	92	0.169
09:00 - 10:00	7	92	0.053	7	92	0.058	7	92	0.111
10:00 - 11:00	7	92	0.042	7	92	0.061	7	92	0.103
11:00 - 12:00	7	92	0.054	7	92	0.053	7	92	0.107
12:00 - 13:00	7	92	0.051	7	92	0.048	7	92	0.099
13:00 - 14:00	7	92	0.050	7	92	0.070	7	92	0.120
14:00 - 15:00	7	92	0.062	7	92	0.050	7	92	0.112
15:00 - 16:00	7	92	0.103	7	92	0.054	7	92	0.157
16:00 - 17:00	7	92	0.078	7	92	0.059	7	92	0.137
17:00 - 18:00	7	92	0.117	7	92	0.053	7	92	0.170
18:00 - 19:00	7	92	0.076	7	92	0.036	7	92	0.112
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.745			0.767			1.512

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:	36 - 152 (units:)
Survey date date range:	01/01/16 - 13/09/23
Number of weekdays (Monday-Friday):	7
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
Surveys manually removed from selection:	0

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL OGVS
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	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	7	92	0.000	7	92	0.000	7	92	0.000
08:00 - 09:00	7	92	0.000	7	92	0.000	7	92	0.000
09:00 - 10:00	7	92	0.000	7	92	0.000	7	92	0.000
10:00 - 11:00	7	92	0.000	7	92	0.000	7	92	0.000
11:00 - 12:00	7	92	0.000	7	92	0.000	7	92	0.000
12:00 - 13:00	7	92	0.000	7	92	0.000	7	92	0.000
13:00 - 14:00	7	92	0.000	7	92	0.000	7	92	0.000
14:00 - 15:00	7	92	0.000	7	92	0.000	7	92	0.000
15:00 - 16:00	7	92	0.000	7	92	0.000	7	92	0.000
16:00 - 17:00	7	92	0.002	7	92	0.000	7	92	0.002
17:00 - 18:00	7	92	0.000	7	92	0.002	7	92	0.002
18:00 - 19:00	7	92	0.000	7	92	0.000	7	92	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.34

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	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	7	92	0.016	7	92	0.255	7	92	0.271
08:00 - 09:00	7	92	0.089	7	92	0.383	7	92	0.472
09:00 - 10:00	7	92	0.100	7	92	0.151	7	92	0.251
10:00 - 11:00	7	92	0.079	7	92	0.134	7	92	0.213
11:00 - 12:00	7	92	0.118	7	92	0.128	7	92	0.246
12:00 - 13:00	7	92	0.114	7	92	0.118	7	92	0.232
13:00 - 14:00	7	92	0.112	7	92	0.149	7	92	0.261
14:00 - 15:00	7	92	0.140	7	92	0.114	7	92	0.254
15:00 - 16:00	7	92	0.255	7	92	0.103	7	92	0.358
16:00 - 17:00	7	92	0.188	7	92	0.112	7	92	0.300
17:00 - 18:00	7	92	0.281	7	92	0.123	7	92	0.404
18:00 - 19:00	7	92	0.201	7	92	0.076	7	92	0.277
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.693			1.846			3.539

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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL LGVS
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	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	7	92	0.002	7	92	0.005	7	92	0.007
08:00 - 09:00	7	92	0.005	7	92	0.008	7	92	0.013
09:00 - 10:00	7	92	0.006	7	92	0.003	7	92	0.009
10:00 - 11:00	7	92	0.006	7	92	0.008	7	92	0.014
11:00 - 12:00	7	92	0.006	7	92	0.005	7	92	0.011
12:00 - 13:00	7	92	0.006	7	92	0.003	7	92	0.009
13:00 - 14:00	7	92	0.003	7	92	0.008	7	92	0.011
14:00 - 15:00	7	92	0.006	7	92	0.005	7	92	0.011
15:00 - 16:00	7	92	0.008	7	92	0.002	7	92	0.010
16:00 - 17:00	7	92	0.003	7	92	0.008	7	92	0.011
17:00 - 18:00	7	92	0.003	7	92	0.000	7	92	0.003
18:00 - 19:00	7	92	0.003	7	92	0.003	7	92	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.057			0.058			0.115

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.*

Calculation Reference: AUDIT-656801-240417-0452

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
Category : D - NURSERY
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	BH	BRIGHTON & HOVE	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
	NN	NORTH NORTHAMPTONSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	DR	DONCASTER	1 days
09	NORTH		
	TW	TYNE & WEAR	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:	Number of pupils
Actual Range:	45 to 111 (units:)
Range Selected by User:	37 to 138 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/16 to 07/06/22

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	3 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	5 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:

Suburban Area (PPS6 Out of Centre)	4
Neighbourhood Centre (PPS6 Local Centre)	1

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	5

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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	5 days - Selected
Servicing vehicles Excluded	X days - Selected

Secondary Filtering selection:

Use Class:

E(f)	5 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 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	1 days
15,001 to 20,000	2 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.

Secondary Filtering selection (Cont.):

Population within 5 miles:

25,001 to 50,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	2 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	1 days
0.6 to 1.0	1 days
1.1 to 1.5	2 days
2.1 to 2.5	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:

No	5 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	5 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 BH-04-D-01 NURSERY BRIGHTON & HOVE
CONNAUGHT ROAD
BRIGHTON
HOVE
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of pupils: 45
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

2 DR-04-D-01 NURSERY DONCASTER
BAWTRY ROAD
DONCASTER

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 111
Survey date: FRIDAY *13/05/22* *Survey Type: MANUAL*

3 LN-04-D-01 NURSERY LINCOLNSHIRE
NEWARK ROAD
LINCOLN
SWALLOW BECK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 49
Survey date: TUESDAY *31/10/17* *Survey Type: MANUAL*

4 NN-04-D-01 NURSERY NORTH NORTHAMPTONSHIRE
ROCKINGHAM ROAD
KETTERING

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 90
Survey date: TUESDAY *07/06/22* *Survey Type: MANUAL*

5 TW-04-D-03 NURSERY TYNE & WEAR
JUBILEE ROAD
NEWCASTLE UPON TYNE
GOSFORTH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 108
Survey date: TUESDAY *21/05/19* *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.

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.44

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	5	81	0.114	5	81	0.032	5	81	0.146
08:00 - 09:00	5	81	0.181	5	81	0.114	5	81	0.295
09:00 - 10:00	5	81	0.060	5	81	0.047	5	81	0.107
10:00 - 11:00	5	81	0.007	5	81	0.005	5	81	0.012
11:00 - 12:00	5	81	0.002	5	81	0.002	5	81	0.004
12:00 - 13:00	5	81	0.065	5	81	0.084	5	81	0.149
13:00 - 14:00	5	81	0.067	5	81	0.087	5	81	0.154
14:00 - 15:00	5	81	0.012	5	81	0.020	5	81	0.032
15:00 - 16:00	5	81	0.037	5	81	0.035	5	81	0.072
16:00 - 17:00	5	81	0.055	5	81	0.057	5	81	0.112
17:00 - 18:00	5	81	0.119	5	81	0.181	5	81	0.300
18:00 - 19:00	5	81	0.010	5	81	0.065	5	81	0.075
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.729			0.729			1.458

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:	45 - 111 (units:)
Survey date date range:	01/01/16 - 07/06/22
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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.

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL TAXIS
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	5	81	0.000	5	81	0.000	5	81	0.000
08:00 - 09:00	5	81	0.002	5	81	0.002	5	81	0.004
09:00 - 10:00	5	81	0.000	5	81	0.000	5	81	0.000
10:00 - 11:00	5	81	0.000	5	81	0.000	5	81	0.000
11:00 - 12:00	5	81	0.000	5	81	0.000	5	81	0.000
12:00 - 13:00	5	81	0.007	5	81	0.007	5	81	0.014
13:00 - 14:00	5	81	0.000	5	81	0.000	5	81	0.000
14:00 - 15:00	5	81	0.000	5	81	0.000	5	81	0.000
15:00 - 16:00	5	81	0.000	5	81	0.000	5	81	0.000
16:00 - 17:00	5	81	0.000	5	81	0.000	5	81	0.000
17:00 - 18:00	5	81	0.002	5	81	0.002	5	81	0.004
18:00 - 19:00	5	81	0.000	5	81	0.000	5	81	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.011			0.011			0.022

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.*

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL CYCLISTS
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	5	81	0.005	5	81	0.000	5	81	0.005
08:00 - 09:00	5	81	0.002	5	81	0.000	5	81	0.002
09:00 - 10:00	5	81	0.000	5	81	0.000	5	81	0.000
10:00 - 11:00	5	81	0.000	5	81	0.000	5	81	0.000
11:00 - 12:00	5	81	0.000	5	81	0.000	5	81	0.000
12:00 - 13:00	5	81	0.007	5	81	0.002	5	81	0.009
13:00 - 14:00	5	81	0.002	5	81	0.005	5	81	0.007
14:00 - 15:00	5	81	0.000	5	81	0.000	5	81	0.000
15:00 - 16:00	5	81	0.000	5	81	0.005	5	81	0.005
16:00 - 17:00	5	81	0.000	5	81	0.000	5	81	0.000
17:00 - 18:00	5	81	0.000	5	81	0.002	5	81	0.002
18:00 - 19:00	5	81	0.000	5	81	0.000	5	81	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.014			0.030

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.*

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.44

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	5	81	0.318	5	81	0.062	5	81	0.380
08:00 - 09:00	5	81	0.489	5	81	0.169	5	81	0.658
09:00 - 10:00	5	81	0.146	5	81	0.062	5	81	0.208
10:00 - 11:00	5	81	0.015	5	81	0.007	5	81	0.022
11:00 - 12:00	5	81	0.020	5	81	0.057	5	81	0.077
12:00 - 13:00	5	81	0.221	5	81	0.236	5	81	0.457
13:00 - 14:00	5	81	0.164	5	81	0.199	5	81	0.363
14:00 - 15:00	5	81	0.030	5	81	0.040	5	81	0.070
15:00 - 16:00	5	81	0.074	5	81	0.139	5	81	0.213
16:00 - 17:00	5	81	0.082	5	81	0.184	5	81	0.266
17:00 - 18:00	5	81	0.199	5	81	0.447	5	81	0.646
18:00 - 19:00	5	81	0.017	5	81	0.189	5	81	0.206
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.775			1.791			3.566

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.

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TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL CARS
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	5	81	0.114	5	81	0.032	5	81	0.146
08:00 - 09:00	5	81	0.176	5	81	0.109	5	81	0.285
09:00 - 10:00	5	81	0.060	5	81	0.047	5	81	0.107
10:00 - 11:00	5	81	0.005	5	81	0.005	5	81	0.010
11:00 - 12:00	5	81	0.000	5	81	0.000	5	81	0.000
12:00 - 13:00	5	81	0.055	5	81	0.072	5	81	0.127
13:00 - 14:00	5	81	0.065	5	81	0.087	5	81	0.152
14:00 - 15:00	5	81	0.010	5	81	0.017	5	81	0.027
15:00 - 16:00	5	81	0.037	5	81	0.032	5	81	0.069
16:00 - 17:00	5	81	0.052	5	81	0.057	5	81	0.109
17:00 - 18:00	5	81	0.117	5	81	0.176	5	81	0.293
18:00 - 19:00	5	81	0.010	5	81	0.065	5	81	0.075
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.701			0.699			1.400

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.

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TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL LGVS
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	5	81	0.000	5	81	0.000	5	81	0.000
08:00 - 09:00	5	81	0.002	5	81	0.002	5	81	0.004
09:00 - 10:00	5	81	0.000	5	81	0.000	5	81	0.000
10:00 - 11:00	5	81	0.002	5	81	0.000	5	81	0.002
11:00 - 12:00	5	81	0.002	5	81	0.002	5	81	0.004
12:00 - 13:00	5	81	0.002	5	81	0.005	5	81	0.007
13:00 - 14:00	5	81	0.002	5	81	0.000	5	81	0.002
14:00 - 15:00	5	81	0.002	5	81	0.002	5	81	0.004
15:00 - 16:00	5	81	0.000	5	81	0.002	5	81	0.002
16:00 - 17:00	5	81	0.002	5	81	0.000	5	81	0.002
17:00 - 18:00	5	81	0.000	5	81	0.002	5	81	0.002
18:00 - 19:00	5	81	0.000	5	81	0.000	5	81	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.014			0.015			0.029

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.

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TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL Servicing Vehicles
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	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	5	81	0.000	5	81	0.000	5	81	0.000
08:00 - 09:00	5	81	0.002	5	81	0.002	5	81	0.004
09:00 - 10:00	5	81	0.000	5	81	0.000	5	81	0.000
10:00 - 11:00	5	81	0.002	5	81	0.000	5	81	0.002
11:00 - 12:00	5	81	0.002	5	81	0.002	5	81	0.004
12:00 - 13:00	5	81	0.002	5	81	0.005	5	81	0.007
13:00 - 14:00	5	81	0.002	5	81	0.000	5	81	0.002
14:00 - 15:00	5	81	0.000	5	81	0.000	5	81	0.000
15:00 - 16:00	5	81	0.000	5	81	0.002	5	81	0.002
16:00 - 17:00	5	81	0.000	5	81	0.000	5	81	0.000
17:00 - 18:00	5	81	0.000	5	81	0.000	5	81	0.000
18:00 - 19:00	5	81	0.000	5	81	0.000	5	81	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.010			0.011			0.021

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.

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Appendix 19.1 Resource Waste Management Plan

REPORT



Resource & Waste Management Plan

Project Title: Large-Scale Residential Development for Zones 7,8, & 9 at Clongriffin, Dublin 13

Appendix 19.1

CLIENT	DOCUMENT REFERENCE	DATE
The Land Development Agency	247501.0410WMR01	06/05/2026

AWN Consulting Ltd, The Tecpro Building, IDA Business & Technology Park, Clonshaugh, Dublin 17, D17 XD90

DOCUMENT CONTROL SHEET

Document Control Sheet	
Our Reference	247501.0410WMR01
Original Issue Date	06/05/2026
Client:	The Land Development Agency

Revision	Revision Date	Description

Details	Written by	Approved by
Signature		
Name	Laura Griffin	Chonaill Bradley
Title	Senior Environmental Consultant	Associate (Environmental)
Date	06/05/2026	06/05/2026

Disclaimer
This report considers the specific instructions and requirements of our client. It is not intended for third-party use or reliance, and no responsibility is accepted for any third party. The provisions in this report apply solely to this project and should not be assumed applicable to other developments without review and modification.

ENVIRONMENT I.S. EN ISO 14001:2015 NSAI Certified | HEALTH & SAFETY I.S. ISO 45001:2018 NSAI Certified | QUALITY I.S. EN ISO 9001:2015 NSAI Certified

TABLE OF CONTENTS

1. INTRODUCTION 1

2. OVERVIEW OF WASTE MANAGEMENT IN IRELAND 2
   - 2.1 National level 2
   - 2.2 Regional Level 3
   - 2.3 Legislative Requirements 5

3. DESIGN APPROACH 7
   - 3.1 Designing For Prevention, Reuse and Recycling 7
   - 3.2 Designing for Green Procurement 7
   - 3.3 Designing for Off-Site Construction 7
   - 3.4 Designing for Materials Optimisation During Construction 8
   - 3.5 Designing for Flexibility and Deconstruction 8

4. DESCRIPTION OF THE PROPOSED DEVELOPMENT 9
   - 4.1 Location, Size and Scale of the Proposed Development 9
   - 4.2 Details of the Non-Hazardous Wastes to be Produced 12
   - 4.3 Potential Hazardous Wastes Arising 12
     - 4.3.1 Contaminated Soil 12
     - 4.3.2 Fuel/Oils 13
     - 4.3.3 Invasive Plant Species 13
     - 4.3.4 Asbestos 13
     - 4.3.5 Other Known Hazardous Substances 14

5. ROLES AND RESPONSIBILITIES 15
   - 5.1 Role of the Client 15
   - 5.2 Role of the Client Advisory Team 15
   - 5.3 Future Role of the Contractor 15

6. KEY MATERIALS & QUANTITIES 17
   - 6.1 Project Resource Targets 17
   - 6.2 Main Construction and Demolition Waste Categories 17
   - 6.3 Demolition Waste Generation 18
   - 6.4 Construction Waste Generation 18
   - 6.5 Proposed Resource and Waste Management Options 19
   - 6.6 Tracking and Documentation Procedures for Off-Site Waste 22

7. ESTIMATED COST OF WASTE MANAGEMENT 23
   - 7.1 Reuse 23
   - 7.2 Recycling 23
   - 7.3 Disposal 23

8. TRAINING PROVISIONS 24
   - 8.1 Resource Manager Training and Responsibilities 24
   - 8.2 Site Crew Training 24

9. TRACKING AND TRACING / RECORD KEEPING 25

10. OUTLINE WASTE AUDIT PROCEDURE 26
    - 10.1 Responsibility for Waste Audit 26
    - 10.2 Review of Records and Identification of Corrective Actions 26
    - 10.3 Pest Management 26

11. CONSULTATION WITH RELEVANT BODIES 27
11.1 Local Authority 27
11.2 Recycling / Salvage Companies 27
12. SUMMARY AND CONCLUSION 28
13. REFERENCES 29
APPENDIX A. WASTE FACILITIES IN THE DUBLIN AREA 30

LIST OF TABLES

Table 6.1 Typical Waste Types Generated and LoW codes (Individual Waste Types may contain Hazardous Substances) 17

Table 6.2 Waste Materials Generated on a Typical Irish Construction Site 18

Table 6.3 Predicted on and off-site Reuse, Recycle and Disposal Rates for Construction Waste 18

LIST OF FIGURES

Figure 4.1 Proposed Development Site Location (Source: Henry J Lyons Architects (Drawing No. CWL-HJL-P2-00-DR-A-ST P0001, 2026) 10

Figure 4.2 Proposed Development Site Layout (Source: Henry J Lyons Architects (Drawing No. CWL-HJL-ZZ-ZZ-DR-A-0005) 11

1. INTRODUCTION

AWN Consulting, a Trinity Consultants Team, has prepared this Construction and Demolition (C&D) Resource & Waste Management Plan (RWMP) on behalf of The Land Development Agency (the Client) for the construction of a residential development set out in 3 no. blocks (identified as Zone 7, 8 & 9), ranging in height from 5 to 10 storeys, to accommodate 711 no. apartments including café/restaurant/retail units, community/cultural spaces, a standalone creche building and the completion of Market St (the Proposed Development) at Clongriffin, Dublin 13 (the site).

This plan provides information necessary to ensure that the management of C&D waste at the site is undertaken in accordance with the current legal and industry standards including the *Waste Management Act 1996* as amended and associated Regulations [1], *Environmental Protection Agency Act 1992* as amended [2], *Litter Pollution Act 1997* as amended [3], the *National Waste Management Plan for a Circular Economy 2024 - 2030 (NWMPCE)* (2024) [4]. In particular, this plan aims to ensure maximum recycling, reuse and recovery of waste with diversion from landfill, wherever possible. It also provides appropriate measures in relation to the collection and transport of waste from the site to prevent issues associated with litter or more serious environmental pollution (e.g. contamination of soil and / or water).

This RWMP includes information on the legal and policy framework for C&D waste management in Ireland, estimates of the type and quantity of waste to be generated by the Proposed Development and prescribes measures for the management of different waste streams. The RWMP should be viewed as a live document and will be regularly revisited throughout the Proposed Development's lifecycle so that opportunities to maximise waste reduction / efficiencies are exploited throughout, and that data is collected on an ongoing basis so that it is as accurate as possible.

2. OVERVIEW OF WASTE MANAGEMENT IN IRELAND

2.1 National level

The Irish Government issued a policy statement in September 1998*, Changing Our Ways* [5], which 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 a five year period (by 2003), with a progressive increase to at least 85% over fifteen years (i.e. 2018).

In response to the *Changing Our Ways* report, a task force (Task Force B4) representing the waste sector of the already established Forum for the Construction Industry, released a report entitled '*Recycling of Construction and Demolition Waste'* [6] concerning the development and implementation of a voluntary construction industry programme to meet the Government's objectives for the recovery of C&D waste.

In September 2020, the Irish Government published a policy document outlining a new action plan for Ireland to cover the period of 2020-2025. This plan, *'A Waste Action Plan for a Circular Economy'* [7] (WAPCE), replaces the previous national waste management plan, *"A Resource Opportunity"* (2012), and was prepared in response to the 'European Green Deal' which sets a roadmap for a transition to an altered economical model, where climate and environmental challenges are turned into opportunities.

The *WAPCE* sets the direction for waste planning and management in Ireland up to 2025. This reorientates policy from a focus on managing waste to a much greater focus on creating circular patterns of production and consumption. Other policy statements of a number of public bodies already acknowledge the circular economy as a national policy priority.

The policy document contains over 200 measures across various waste areas including circular economy, municipal waste, consumer protection and citizen engagement, plastics and packaging, construction and demolition, textiles, green public procurement and waste enforcement.

One of the first actions to be taken was the development of the *Whole of Government Circular Economy Strategy 2022-2023 'Living More, Using Less'* (2021) [8] to set a course for Ireland to transition across all sectors and at all levels of Government toward circularity and was issued in December 2021. It is anticipated that the Strategy will be updated in full every 18 months to 2 years. The latest version of the strategy, *Whole of Government Circular Economy Strategy 2026-2028: Accelerating Action* (2026) [9] , was issued in February 2026 and has, as its primary objective, the acceleration of Ireland's circular material use rate by two percentage points per year.

The *Circular Economy and Miscellaneous Provisions Act* 2022 [10] was signed into law in July 2022. The Act underpins Ireland's shift from a "take-make-waste" linear model to a more sustainable pattern of production and consumption, that retains the value of resources in our economy for as long as possible and that will work to significantly reduce our greenhouse gas emissions. The Act defines Circular Economy for the first time in Irish law, incentivises the use of recycled and reusable alternatives to wasteful, single-use disposable packaging, introduces a mandatory segregation and incentivised charging regime for commercial waste, streamlines the national processes for End-of-Waste and By-Products decisions, tackling the delays which can be encountered by industry, and supporting the availability of recycled secondary raw materials in the Irish market, and tackles illegal fly-tipping and littering.

The Environmental Protection Agency (EPA) of Ireland issued '*Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects' in November 2021* [11]. These guidelines replace the previous 2006 guidelines issued by The National Construction and Demolition Waste Council (NCDWC) and the Department of the Environment, Heritage and Local Government (DoEHLG) in 2006 [12]. The guidelines provide a practical approach which is informed by best practice in the prevention and management of C&D wastes and resources from design to construction of a project,

including consideration of the deconstruction of a project. 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;*
- *Design teams roles and approach;*
- *Relevant EU, national and local waste policy, legislation and guidelines;*
- *Waste disposal/recycling of C&D wastes at the site;*
- *Provision of training for Resource Waste Manager (RM) 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, Local Authority, etc.*

Section 3 of the Guidelines identifies thresholds above which there is a requirement for the preparation of a bespoke RWMP for developments. The new guidance classifies developments on a two-tiered system. Developments which do not exceed any of the following thresholds may be classed as Tier 1 development, which require a simplified RWMP:

- *New residential development of less than 10 dwellings.*
- *Retrofit of 20 dwellings or less.*
- *New commercial, industrial, infrastructural, institutional, educational, health and other developments with an aggregate floor area less than 1,250m^2.*
- *Retrofit of commercial, industrial, infrastructural, institutional, educational, health and other developments with an aggregate floor area less than 2,000m^2; and*
- *Demolition projects generating in total less than 100m^3 in volume of C&D waste.*

A development which exceeds one or more of these thresholds is classed as Tier-2 development.

The Proposed Development requires a RWMP as a Tier 2 development as it is above following criterion:

- *New residential development of less than 10 dwellings.*
- *New commercial, industrial, infrastructural, institutional, educational, health and other developments with an aggregate floor area less than 1,250m^2.*

Other guidelines followed in the preparation of this report include *'Construction and Demolition Waste Management – a handbook for Contractors and Site Managers'* [13] published by FÁS and the Construction Industry Federation in 2002 and the previous guidelines, `*Best Practice Guidelines for the Preparation of Waste Management Plans for Construction and Demolition Projects'* (2006).

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

2.2 Regional Level

The Proposed Development is located in the Local Authority area of Dublin City Council (DCC).

The *Eastern Midlands Region (EMR) Waste Management Plan 2015 – 2021* [14], which previously governed waste management policy in the DCC area, has been superseded as of March 2024 by the *NWMPCE 2024 – 2030,* the national waste management plan for Ireland.

The *NWMPCE* does not dissolve the three regional waste areas. The *NWMPCE* sets the ambition of the plan to have a 0% total waste growth per person over the life of the Plan with an emphasis on non-household waste, including waste from commercial activities and the construction and demolition sector.

This plan seeks to influence sustainable consumption and prevent the generation of waste, improve the capture of materials to optimise circularity and enable compliance with policy and legislation.

The national plan sets out the following strategic targets for waste management in the country that are relevant to the development:

National Targets

- *1B. (Construction Materials) 12% Reduction in Construction & Demolition Waste Generated by 2030.*
- *3B. (Reuse Facilities) Provide for reuse at 10 Civic Amenity Sites, minimum.*

Municipal landfill charges in Ireland are based on the weight of waste disposed. In the Leinster Region, charges are approximately €140 - €160 per tonne of waste which includes an €85 per tonne landfill levy introduced under the *Waste Management (Landfill Levy) (Amendment) Regulations 2015 (as amended)* [15]*. The Circular Economy (Waste Recovery Levy) Regulations 2024* [16] *will also a e levy of €10 per tonne to waste accepted for recovery.* This will include backfilling at authorised recovery sites and at municipal waste landfills.

The *Dublin City Development Plan 2022 – 2028* [17] sets out a number of policies and objectives for Dublin City in line with the objectives of the National climate action policy and emphasises the need to take action to address climate action across all sectors of society and the economy. In the waste sector, policy on climate action is focused on a shift towards a 'circular economy' encompassing three core principles: designing out waste and pollution; keeping products and material in use; and regenerating natural systems. Further policies and objectives can be found within the development plan.

<u>Policies:</u>

- *CA8 (f): (New development should generally demonstrate/ provide for:) minimising the generation of site and construction waste and maximising reuse or recycling.*
- *CA8 (G): (New development should generally demonstrate/ provide for:) the use of construction materials that have low to zero embodied energy and CO2 emissions*
- *CA23: The Circular economy: To support the shift towards the circular economy approach as set out in 'a Waste Action Plan for a Circular Economy 2020 to 2025, Ireland's National Waste Policy', or as updated.*
- *CA24: To have regard to existing Best Practice Guidance on Waste Management Plans for Construction and Demolition Projects as well as any future updates to these guidelines in order to ensure the consistent application of planning requirements.*
- *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: To prevent and minimise waste generation and disposal, and to prioritise prevention, recycling, preparation for reuse and recovery in order to develop Dublin as a circular city and 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.*
- *SI30: 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 2020 (or and any future updated versions of these guidelines produced during the lifetime of this plan).*

Objectives:

- *SIO14 Local Recycling/Reuse Infrastructure: To provide for a citywide network of municipal civic amenity facilities/ multi-material public recycling and reuse facilities in accessible locations throughout the city in line with the objectives of the circular economy and 15 minute city.*
- *SIO16 Eastern-Midlands Region Waste Management Plan: To support the implementation of the Eastern-Midlands Regional Waste Management Plan 2015–2021 and any subsequent plans in order to facilitate the transition from a waste management economy towards a circular economy.*

15.7.1 Re-use of Existing Buildings

- *Where development proposal comprises of existing buildings on the site, applicants are encouraged to reuse and repurpose the buildings for integration within the scheme, where possible in accordance with Policy CA6, CA7 and CA8. Where demolition is proposed, the applicant must submit a demolition justification report to set out the rational for the demolition having regard to the 'embodied carbon' of existing structures as well as the additional use of resources and energy arising from new construction relative to the reuse of existing structures.*

- *Existing building materials should be incorporated and utilised in the new design proposals where feasible and a clear strategy for the reuse and disposal of the materials should be included where demolition is proposed.*

2.3 Legislative Requirements

The primary legislative instruments that govern waste management in Ireland and applicable to the Proposed Development are:

- *Waste Management Act 1996 as amended;*
- *Environmental Protection Agency Act 1992 as amended;*
- *Litter Pollution Act 1997 as amended;*
- *Planning and Development Act 2000 as amended* [18]; and
- *Circular Economy and Miscellaneous Provisions Act 2022.*

One of the guiding principles of European waste legislation, which has in turn been incorporated into the *Waste Management Act 1996* as amended and subsequent Irish legislation, is the principle of *"Duty of Care"*. This implies that the waste producer is responsible for waste from the time it is generated through until its legal recycling, recovery or 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 destination, waste contractors will be employed to physically transport waste to the final destination. Following on from this is the concept of *"Polluter Pays"* whereby the waste producer is liable to be prosecuted for pollution incidents, which may arise from the incorrect management of waste produced, including the actions of any contractors engaged (e.g. for transportation and disposal/recovery/recycling of waste).

It is therefore imperative that the Developer ensures that the waste contractors engaged by demolition and construction contractors are legally compliant with respect to waste transportation, recycling, recovery and disposal. This includes the requirement that a contractor handle, transport and recycle/recover/dispose of waste in a manner that ensures that no adverse environmental impacts occur as a result of any of these activities.

A collection permit to transport waste must be held by each waste contractor which is issued by the National Waste Collection Permit Office (NWCPO). Waste receiving facilities must also be appropriately permitted or licensed. Operators of such facilities cannot receive any waste, unless in possession of a

Certificate of Registration (COR) or waste permit granted by the relevant Local Authority under the *Waste Management (Facility Permit & Registration) Regulations 2007 as amended* or a Waste Licence granted by the EPA. The COR / permit / licence held will specify the type and quantity of waste able to be received, stored, sorted, recycled, recovered and/or disposed of at the specified site.

3. DESIGN APPROACH

The client and the design team have integrated the *'Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects'* guidelines into the design workshops, to help review processes, identify and evaluate resource reduction measures and investigate the impact on cost, time, quality, buildability, second life and management post demolition and construction. Further details on these design principals can be found within the aforementioned guidance document.

The design team have undertaken the design process in line with the international best practice principles to firstly prevent wastes, reuse where possible and thereafter sustainably reduce and recover materials. The below sections have been the focal point of the design process and material selections and will continued to be analysed and investigated throughout the design process and when selecting material.

As noted in the EPA guidelines, the approaches presented are based on international principles of optimising resources and reducing waste on demolition and construction projects generally through:

- *Prevention;*
- *Reuse;*
- *Recycling;*
- *Green Procurement Principles;*
- *Off-Site Construction;*
- *Materials Optimisation; and*
- *Flexibility and Deconstruction.*

3.1 Designing For Prevention, Reuse and Recycling

At the outset and during project feasibility and evaluation the Client and Design Team considered:

- Maximising the potential to reuse natural site materials, such as topsoil and suitable subsoils, noting that the site contains no existing buildings or hard structures that require demolition;
- Enabling the optimum recovery of natural assets on site.

3.2 Designing for Green Procurement

Waste prevention and minimisation pre-procurement have been discussed and will be further detailed in this section. The Design Team will:

- Discuss proposed design solutions to reduce waste generation at source;
- Encourage innovation in tenders and incentivise competitions to recognise sustainable approaches;
- Engage with the main Contractor and subcontractors/suppliers to explore options for packaging reduction, including:
  - Adoption of 'Just-in-Time' delivery strategies; and
  - Implementation of ordering procedures that avoid excessive material waste.

Green procurement principles will extend from the planning stage into detailed design and tender stage and will remain an ongoing part of the long-term design and selection process.

3.3 Designing for Off-Site Construction

Use of off-site manufacturing has been shown to reduce residual wastes by up to 90% (volumetric building versus traditional). The decision to use offsite construction is typically cost led, but there are significant

benefits for resource management. Some further considerations for procurement which are being investigated as part of the planning stage design process are listed as follows:

- Modular buildings as these can displace the use of concrete and the resource losses associated with concrete blocks such as broken blocks, mortars, etc.;
  - Modular buildings are typically pre-fitted with fixed plasterboard and installed insulation, eliminating these residual streams from site.
- Use of pre-cast structural concrete panels which can reduce the residual volumes of concrete blocks, mortars, plasters, etc.;
- The use of prefabricated composite panels for walls and roofing to reduce residual volumes of insulation and plasterboards;
- Using pre-cast hollow-core flooring instead of in-situ ready mix flooring or timber flooring to reduce the residual volumes of concrete/formwork and wood/packaging, respectively; and
- Designing for the preferential use of offsite modular units.

3.4 Designing for Materials Optimisation During Construction

To ensure manufacturers and construction companies adopt lean production models, including maximising the reuse of materials onsite as outlined in Section 3.1, structures should be designed to eliminate waste. This approach reduces environmental impacts associated with transportation of materials and from waste management activities. Key measures include:

- Investigating the use of standardised material sizes to minimise offcuts; and
- Promoting and developing off-site manufacturing methods.

3.5 Designing for Flexibility and Deconstruction

Design flexibility has and will continue to be investigated throughout the design process to ensure that, where possible, products (including buildings) are constructed using materials that can be recycled and are designed for easy disassembly.

Material efficiency is being considered for the duration and end of life of a building project to produce:

- Flexible, adaptable spaces that enable a resource-efficient, low-waste future change of use;
- Durability of materials to ensure long-term performance;
- Strategies for how materials can be recovered effectively during:
  - Maintenance and refurbishment activities; and
  - Disassembly and deconstruction at end of life.

4. DESCRIPTION OF THE PROPOSED DEVELOPMENT

4.1 Location, Size and Scale of the Proposed Development

The site is located within the Clongriffin Masterplan lands in Dublin 13 and comprises Zones 7, 8 and 9. The site is bounded by Park Street to the north, Main Street to the west, Market Street to the south and Station Square/Clongriffin Road to the east.

The Proposed Development will consist of the construction of a residential development set out in 3 no. blocks (identified as Zone 7, 8 & 9), ranging in height from 5 to 10 storeys, to accommodate 711 no. apartments including café/restaurant/retail units, community/cultural spaces, a standalone creche building and the completion of Market St.

The 3 no. residential buildings are arranged around podium courtyards accommodating communal amenity spaces for future residents. Zone 7 is a 5 to 7 storey block onto Main St, Friar's St, Park St and Market St containing 280 apartments. Zone 8 is a 6 to 8 storey block between Main St and Market Street containing 263 apartments. Zone 9 is a 6 to 10 storey block located on Main St, Station Square and Market Street containing 168 units.

Car and cycle parking for both residents and visitors is provided below podium and at surface level throughout the scheme. The proposed development includes all site landscaping works, open space, green roofs, lighting, servicing and utilities, signage, and associated and ancillary works, including site development works above and below ground.

The Proposed Development sits as part of a Masterplan for a wider Clongriffin landbank which includes the under-construction Block 5 & 6 to the north of Market Street.

For a more detailed description please refer to the Statutory Notices.



Figure 4.1 Proposed Development Site Location (Source: Henry J Lyons Architects (Drawing No. CWL-HJL-P2-00-DR-A-ST P0001, 2026)

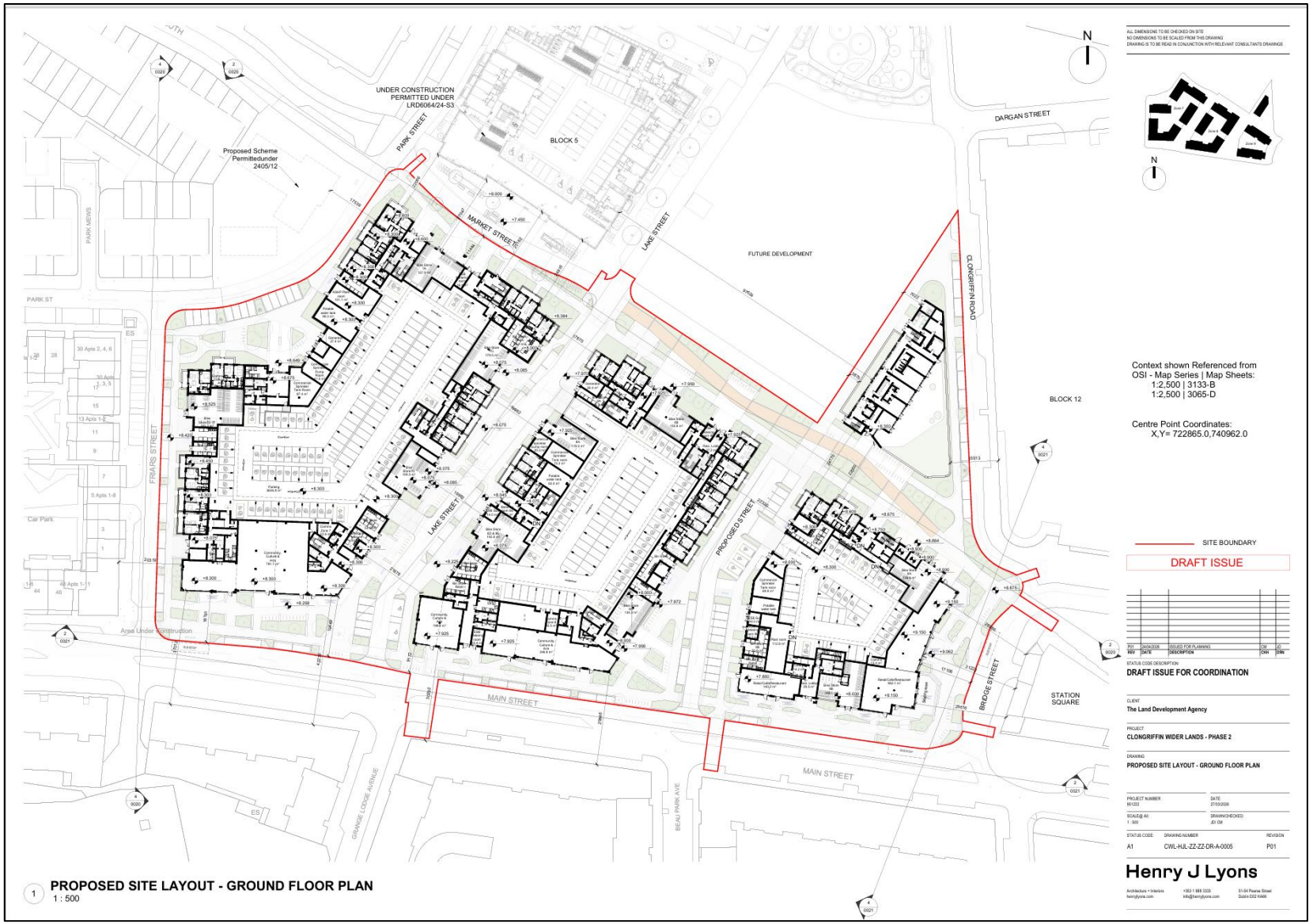


Figure 4.2 Proposed Development Site Layout (Source: Henry J Lyons Architects (Drawing No. CWL-HJL-ZZ-ZZ-DR-A-0005)

4.2 Details of the Non-Hazardous Wastes to be Produced

The Proposed Development will give rise to a range of non-hazardous C&D wastes. These will arise predominantly from site preparation works, general construction activities, and packaging and material cut-offs generated throughout the build.

The Proposed Development will require excavation across the site to facilitate foundations, services, internal road networks, landscaped areas, and other infrastructural elements. CS Consulting Civil, Structural and Traffic Engineering ('CS Consulting') have estimated that approximately 1,550m^3 of material will be excavated as part of these works.

It is currently envisaged that all of this material will be removed from the site for appropriate offsite reuse, recovery, recycling and / or disposal in accordance with relevant waste management legislation and best practice guidance, due to limited viable reuse opportunities onsite.

During the construction phase there may be a surplus of building materials, such as timber off-cuts, broken concrete blocks, cladding, plastics, metals and tiles generated. There may also be excess concrete during construction which will need to be disposed of. Plastic and cardboard waste from packaging and supply of materials will also be generated. The Contractor will be required to ensure that oversupply of materials is kept to a minimum and opportunities for reuse of suitable materials is maximised.

Waste will also be generated from construction workers e.g. organic / food waste, dry mixed recyclables (wastepaper, newspaper, plastic bottles, packaging, aluminium cans, tins and Tetra Pak cartons), mixed non-recyclables and potentially sewage sludge from temporary welfare facilities provided on site during the construction phase. Waste printer / toner cartridges, waste electrical and electronic equipment (WEEE) and waste batteries may also be generated infrequently from site offices.

4.3 Potential Hazardous Wastes Arising

4.3.1 Contaminated Soil

A Site Investigation (SI) was carried out by Ground Investigation Ireland (GII) between July and August 2025 for the Clongriffin Wider Lands, including the site. The investigation confirmed that the site generally comprises topsoil, made ground, cohesive deposits, granular deposits, and bedrock. Within the site, made ground was typically encountered to an average depth of 1.1 m, increasing to approximately 2.9 m in the Zone 8 area where historical settlement pond activity was identified. The made-ground layer contains man-made inclusions such as plastic, timber, rubber, concrete, red brick, glass and organic material.

As part of the 2025 Waste Classification Report (WCR), a total of 121 samples were assessed using *HazWasteOnline™*. The majority of material across the site was classified as inert (Categories B1/B2), with three samples (TP02, TP17, TP18) in the upper 0.5m classified as Category C, meaning they do not meet inert landfill criteria and instead fall into the non-hazardous landfill category. No asbestos fibres or Asbestos Containing Materials (ACMs) were detected in any sample tested.

Although no hazardous soils were identified during the SI, the presence of reworked made ground and occasional organic material means that potentially contaminated material may still be encountered during excavations for foundations, services, and re-profiling works.

If any potentially contaminated material is encountered, it will need to be segregated from clean / inert material, tested and classified as either non-hazardous or hazardous in accordance with the EPA publication entitled *'Waste Classification: List of Waste & Determining if Waste is Hazardous or Non-Hazardous'* [19] using the *HazWasteOnline* application (or similar approved classification method). The

material will then need to be classified as clean, inert, non-hazardous or hazardous in accordance with the *EC Council Decision 2003/33/EC* [20], which establishes the criteria for the acceptance of waste at landfills.

The 2025 SI confirmed that no ACMs were detected in any laboratory samples; however, as with all made-ground environments, the potential ACMs during excavation cannot be fully ruled out. In the event that ACMs are found within the excavated material, the removal will only be carried out by a suitably permitted waste contractor, in accordance with *the Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010* [21] *and the Best Practice Guidance for Handling Asbestos (2023)* [22]. All asbestos will be taken to a suitably licensed or permitted facility.

In the event that hazardous soil, or historically deposited waste is encountered during the construction phase, the Contractor will notify DCC and provide a Hazardous / Contaminated Soil Management Plan, to include:

- Estimated tonnages;
- Description of location and extent of material;
- Any relevant mitigation;
- Proposed destination for disposal or treatment; and
- Details of authorised waste collector(s).

4.3.2 Fuel/Oils

Fuels and oils are classed as hazardous materials; any on-site storage of fuel / oil, and all storage tanks and all draw-off points will be bunded and located in a dedicated, secure area of the site. Provided that these requirements are adhered to and the site crew are trained in the appropriate refueling techniques, it is not expected that there will be any fuel / oil waste generated at the site.

4.3.3 Invasive Plant Species

A series of habitat and ecological surveys were undertaken across the site in May and July 2025, with additional inspections carried out throughout 2025 and 2026 by Brady Shipman Martin. No invasive species listed on the Third Schedule of European Communities (Birds and Natural Habitats) Regulations 2011 (as amended), were recorded on site.

In the event that any Third Schedule Invasive species are subsequently identified on site, an Invasive Species Management Plan (ISMP) will be prepared and implemented, including an eradication and treatment program which will be submitted to DCC for approval. This management plan will implemented and maintained as required during the operational phase until eradication is complete.

4.3.4 Asbestos

The 2025 SI and associated WCR confirmed that no asbestos fibres or ACMs were detected in any of the soil samples analysed as part of the intrusive investigation. As no existing buildings are being demolished as part of the Proposed Development, ACMs are not anticipated on site.

However, given the presence of made ground across parts of the site, and the fact that buried anthropogenic materials were recorded during the SI, the unexpected discovery of ACMs cannot be fully ruled out during excavation works.

In the unlikely event that ACMs are identified during the construction phase, the following will apply:

- All works in the affected area will cease immediately;
- The material will be sampled and confirmed by an accredited laboratory;

- Removal of confirmed ACMs will be carried out by a suitably qualified and permitted asbestos contractor only;
- ACMs will only be removed from site by a permitted and licensed waste contractor, in full compliance with the *Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010 and the Best Practice Guidance for Handling Asbestos (2023)*; and
- All ACMs will be taken to a suitably licensed or permitted facility.

4.3.5 Other Known Hazardous Substances

Paints, glues, adhesives and other known hazardous substances will be stored in designated areas. They will generally be present in small volumes only and associated waste volumes generated will be kept to a minimum. Wastes will be stored in appropriate receptacles pending collection by an authorised waste contractor.

In addition, WEEE (containing hazardous components), printer toner / cartridges, batteries (Lead, Ni-Cd or Mercury) and / or fluorescent tubes and other mercury containing waste may be generated from during C&D activities or temporary site offices. This waste, if generated, will be stored in appropriate receptacles in designated areas of the site pending collection by an authorised waste contractor.

5. ROLES AND RESPONSIBILITIES

The *Best Practice Guidelines on the Preparation of Resource Waste Management Plans for Construction and Demolition Projects* promotes that a suitably qualified Resource Manager (RM) with expertise in waste and resource management to implement the RWMP should be appointed. The RM may be performed by number of different individuals over the life-cycle of the Proposed Development, however it is intended to be a reliable person chosen from within the Planning/Design/Contracting Team, who is technically competent and appropriately trained, who takes responsibility to ensure that the objectives and measures within the Project RWMP are complied with. The RM is assigned the requisite authority to meet the objective and obligations of the RWMP. The role will include the important activities of conducting waste checks/audits and adopting construction and demolition methodology that is designed to facilitate maximum reuse and/or recycling of waste.

5.1 Role of the Client

The Client is responsible for establishing the aims and the performance targets for the Proposed Development.

- The Client has commissioned the preparation and submission of this RWMP as part of the design and planning submission;
- The Client is to commission the preparation and submission of an updated RWMP as part of the demolition and construction tendering process;
- The Client will ensure that the RWMP is agreed on and submitted to the local authority and their agreement obtained prior to commencement of works on site; and
- The Client will request the end-of-project RWMP from the Contractor.

5.2 Role of the Client Advisory Team

The Client Advisory Team or Design Team is formed of architects, consultants, quantity surveyors and engineers and is responsible for:

- Drafting and maintaining the RWMP through the design, planning and procurement phases of the Proposed Development;
- Appointing a RM to track and document the design process, inform the Design Team and prepare the RWMP;
- Including details and estimated quantities of all projected waste streams with the support of environmental consultants/scientists. This will also include data on waste types (e.g. waste characterisation data, contaminated land assessments, site investigation information) and prevention mechanisms (such as by-products) to illustrate the positive circular economy principles applied by the Design Team;
- Managing and valuing the demolition work with the support of quantity surveyors;
- Handing over of the RWMP to the selected Contractor upon commencement of demolition and/or construction of the Proposed Development, in a similar fashion to how the safety file is handed over to the Contractor; and
- Working with the Contractor as required to meet the performance targets for the Proposed Development.

5.3 Future Role of the Contractor

The future demolition and construction contractors have not yet been decided upon for this RWMP. However, once selected they will have major roles to fulfil. They will be responsible for:

- Preparing, implementing and reviewing the (including the Pre-Demolition) RWMP throughout the demolition and construction phases (including the management of all suppliers and sub-contractors) as per the requirements of the EPA guidelines;
- Identifying a designated and suitably qualified RM who will be responsible for implementing the RWMP;
- Identifying all hauliers to be engaged to transport each of the resources / wastes off-site;
- Implementing waste management policies whereby waste materials generated on site are to be segregated as far as practicable;
- Renting and operating a mobile-crusher to crush concrete for temporary reuse onsite during demolition/construction and reduce the amount of HGV loads required to remove material from site;
- Applying for the appropriate waste permit to crush concrete onsite;
- Identifying all destinations for resources taken off-site. As above, any resource that is legally classified as a 'waste' must only be transported to an authorised waste facility;
- End-of-waste and by-product notifications addressed with the EPA where required;
- Clarification of any other statutory waste management obligations, which could include on-site processing;
- Full records of all resources (both wastes and other resources) will be maintained for the duration of the Proposed Development; and
- Preparing a RWMP Implementation Review Report at project handover.

6. KEY MATERIALS & QUANTITIES

6.1 Project Resource Targets

Project specific resource and waste management targets for the site have not yet been set, and this information will be updated for these targets once these targets have been confirmed by the client. However, it is expected for projects of this nature that a minimum of 70% of waste is fully re-used, recycled or recovered. Target setting will inform the setting of project-specific benchmarks to track target progress. Typical Key Performance Indicators (KPIs) that will be used to set targets include (as per guidelines):

- *Weight (tonnes) or Volume (m^3) of waste generated per construction value;*
- *Weight (tonnes) or Volume (m^3) of waste generated per construction floor area (m^2);*
- *Fraction of resource reused on site;*
- *Fraction of resource notified as by-product;*
- *Fraction of waste segregated at source before being sent off-site for recycling/recovery; and*
- *Fraction of waste recovered, fraction of waste recycled, or fraction of waste disposed.*

6.2 Main Construction and Demolition Waste Categories

The main non-hazardous and hazardous waste streams that could be generated by the demolition and construction activities at a typical site are shown in Table 6.1. The List of Waste (LoW) code (2018) for each waste stream is also shown.

Table 6.1 Typical Waste Types Generated and LoW codes (Individual Waste Types may contain Hazardous Substances)

Waste Material	LoW Code
Concrete, bricks, tiles, ceramics	17 01 01-03 & 07
Wood, glass and plastic	17 02 01-03
Treated wood, glass, plastic, containing hazardous substances	17-02-04*
Bituminous mixtures, coal tar and tarred products	17 03 01*, 02 & 03*
Metals (including their alloys) and cable	17 04 01-11
Soil and stones	17 05 03* & 04
Gypsum-based construction material	17 08 01* & 02
Paper and cardboard	20 01 01
Mixed C&D waste	17 09 04
Green waste	20 02 01
Electrical and electronic components	20 01 35 & 36
Batteries and accumulators	20 01 33 & 34
Liquid fuels	13 07 01-10
Chemicals (solvents, pesticides, paints, adhesives, detergents etc.)	20 01 13, 19, 27-30
Insulation materials	17 06 04
Organic (food) waste	20 01 08
Mixed Municipal Waste	20 03 01

* Individual waste type may contain hazardous substances

6.3 Demolition Waste Generation

There are no demolition works proposed as part of the Proposed Development.

6.4 Construction Waste Generation

Table 6.2 shows the breakdown of C&D waste types produced on a typical site based on data from the EPA *National Waste Reports* [23] *and the joint EPA & GMIT study* [24].

Table 6.2 Waste Materials Generated on a Typical Irish Construction Site

Waste Types	%
Mixed C&D	33
Timber	28
Plasterboard	10
Metals	8
Concrete	6
Other	15
Total	100

Table 6.3 presents the estimated construction waste generation for the Proposed Development based on the gross floor area of construction and other information available to date, along with indicative targets for management of the waste streams. The estimated amounts for the main waste types (with the exception of soils, stones and clay) are based on an average large-scale development waste generation rate per m^2, using the waste breakdown rates shown in Table 6.2. These have been calculated from the schedule of development areas provided by the Project Architect.

Table 6.3 Predicted on and off-site Reuse, Recycle and Disposal Rates for Construction Waste

Waste Type	Tonnes	Reuse		Recycle / Recovery		Disposal	
		%	Tonnes	%	Tonnes	%	Tonnes
Mixed C&D	1361.5	10	136.2	80	1089.2	10	136.2
Timber	1155.2	40	462.1	55	635.4	5	57.8
Plasterboard	412.6	30	123.8	60	247.5	10	41.3
Metals	330.1	5	16.5	90	297.1	5	16.5
Concrete	123.8	30	37.1	65	80.5	5	6.2
Other	618.9	20	123.8	60	371.3	20	123.8
Total	**4002.0**		**899.4**		**2721.0**	**381.6**	**381.6**

In addition to the information in Table 6.3, 1,550m^3 of soil will be excavated to facilitate the construction of foundations, services, internal road networks, landscaped areas, and other infrastructural elements. It is currently envisaged that all of this material will be removed from the site for appropriate offsite reuse, recovery, recycling and / or disposal in accordance with relevant waste management legislation and best practice guidance, due to limited viable reuse opportunities onsite.

It should be noted that until final materials and detailed construction methodologies have been confirmed, it is difficult to predict with a high level of accuracy the construction waste that will be generated from the proposed works as the exact materials and quantities may be subject to some degree of change and variation during the construction process.

6.5 Proposed Resource and Waste Management Options

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, where feasible. All waste receptacles leaving the site will be covered or enclosed. The appointed waste contractor will collect and transfer the wastes as receptacles are filled. There are numerous waste contractors in the Dublin region that provide this service.

All waste arisings will be handled by an approved waste contractor holding a current waste collection permit. All waste arisings requiring disposal off-site will be reused, recycled, recovered or disposed of at a facility holding the appropriate registration, permit or licence, as required.

National End-of-Waste Decision EoW-N001/2023 (Regulation 28) published by the EPA in September 2023, establishes criteria determining when recycled aggregate resulting from a recovery operation ceases to be waste. Material from this Proposed Development will be investigated to see if it can cease to be a waste under the requirements of the National End of Waste Criteria for Aggregates.

During construction, some of the sub-contractors on site will generate waste in relatively low quantities. The transportation of non-hazardous waste by persons who are not directly involved with the waste business, at weights less than or equal to 2 tonnes, and in vehicles not designed for the carriage of waste, are exempt from the requirement to have a waste collection permit (per Article 30 (1) (b) of the Waste Collection Permit Regulations 2007, as amended). Any sub-contractors engaged that do not generate more than 2 tonnes of waste at any one time can transport this waste off-site in their work vehicles (which are not designed for the carriage of waste). However, they are required to ensure that the receiving facility has the appropriate COR / permit / licence.

Written records will be maintained by the contractor(s), detailing the waste arising throughout the C&D phases, the classification of each waste type, waste collection permits for all waste contactors who collect waste from the site and COR / permit / licence for the receiving waste facility for all waste removed off-site for appropriate reuse, recycling, recovery and / or disposal.

Dedicated bunded storage containers will be provided for hazardous wastes which may arise, such as batteries, paints, oils, chemicals, if required.

The anticipated management of the main waste streams is outlined as follows:

Soil, Stone, Clay & Made Ground

The waste hierarchy states that the preferred option for waste management is prevention and minimisation of waste, followed by preparing for reuse and recycling / recovery, energy recovery (i.e. incineration) and, least favoured of all, disposal. The excavations are required to facilitate construction works so the preferred option (prevention and minimisation) cannot be accommodated for the excavation phase.

When material is removed off-site it could be reused as a by-product (and not as a waste). If this is done, it will be done in accordance with Regulation 27 of the European Communities (Waste Directive) Regulations 2011, as amended, which requires that certain conditions are met and that by-product notifications are made to the EPA via their online notification form. Excavated material should not be removed from site until approval from the EPA has been received. The potential to reuse material as a by-product will be confirmed during the course of the excavation works, with the objective of eliminating any unnecessary disposal of material.

The next option (beneficial reuse) may be appropriate for the excavated material, pending environmental testing to classify the material as hazardous or non-hazardous in accordance with the EPA *Waste*

Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous publication. Clean inert material may be used as fill material in other construction projects or engineering fill for waste licensed sites. Beneficial reuse of surplus excavation material as engineering fill may be subject to further testing to determine if materials meet the specific engineering standards for their proposed end use.

Any nearby sites requiring clean fill/capping material will be contacted to investigate reuse opportunities for clean and inert material. If any of the material is to be reused on another site as a by-product (and not as a waste), this will be done in accordance with Regulation 27. Similarly, if any soils/stones are imported onto the site from another construction site as a by-product, this will also be done in accordance with Regulation 27. Regulation 27 will be investigated to see if the material can be imported onto this site for beneficial reuse instead of using virgin materials.

If the material is deemed to be a waste, then removal and reuse / recovery / disposal of the material will be carried out in accordance with the Waste Framework Directive (Directive 2008/98/EC), the *Waste Management Act 1996* as amended, the *Waste Management (Collection Permit) Regulations 2007* as amended and the *Waste Management (Facility Permit & Registration) Regulations 2007* as amended. Once all available beneficial reuse options have been exhausted, the options of recycling and recovery at waste permitted and licensed sites will be considered.

In the event that contaminated material is encountered and subsequently classified as hazardous, this material will be stored separately to any non-hazardous material. It will require off-site treatment at a suitable facility or disposal abroad via Transfrontier Shipment of Wastes (TFS).

Bedrock

While it is not envisaged that bedrock will be encountered, if bedrock is encountered, it is anticipated that it will not be crushed on site. Any excavated rock is expected to be removed off-site for appropriate reuse, recovery and / or disposal. If bedrock is to be crushed on-site, the appropriate mobile waste facility permit will be obtained from DCC.

Silt & Sludge

During the construction phase, silt and petrochemical interception will be carried out on run-off and pumped water from site works, where required. Sludge and silt will then be collected by a suitably licensed contractor and removed off-site.

Concrete Blocks, Bricks, Tiles & Ceramics

The majority of concrete blocks, bricks, tiles and ceramics generated as part of the construction works are expected to be clean, inert material and will be recycled, where possible. If concrete is to be crushed on-site, the appropriate mobile waste facility permit will be obtained from DCC.

Hard Plastic

As hard plastic is a highly recyclable material, much of the plastic generated will be primarily from material off-cuts. All recyclable plastic will be segregated and recycled, where possible.

Timber

Timber that is uncontaminated, i.e. free from paints, preservatives, glues, etc., will be disposed of in a separate skip and recycled off-site.

Metal

Metals will be segregated, where practical, and stored in skips. Metal is highly recyclable and there are numerous companies that will accept these materials.

Plasterboard

There are currently a number of recycling services for plasterboard in Ireland. Plasterboard from the construction phase will be stored in a separate skip, pending collection for recycling. The site Manager will ensure that oversupply of new plasterboard is carefully monitored to minimise waste.

Glass

Glass materials will be segregated for recycling, where possible.

Waste Electrical & Electronic Equipment (WEEE)

Any WEEE will be stored in dedicated covered cages / receptacles / pallets pending collection for recycling.

Other Recyclables

Where any other recyclable wastes, such as cardboard and soft plastic, are generated, these will be segregated at source into dedicated skips and removed off-site.

Non-Recyclable Waste

C&D waste which is not suitable for reuse or recovery, such as polystyrene, some plastics and some cardboards, will be placed in separate skips or other receptacles. Prior to removal from site, the non-recyclable waste skip / receptacle will be examined by a member of the waste team (see Section 9.0) to determine if recyclable materials have been placed in there by mistake. If this is the case, efforts will be made to determine the cause of the waste not being segregated correctly and recyclable waste will be removed and placed into the appropriate receptacle.

Asbestos Containing Materials

Any asbestos or ACM found on-site will be removed by a suitably competent contractor and disposed of as asbestos waste before the works begin. All asbestos removal work or encapsulation work must be carried out in accordance with the *Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006-2010.*

Other Hazardous Wastes

On-site storage of any hazardous wastes produced (i.e. contaminated soil if encountered and / or waste fuels) will be kept to a minimum, with removal off-site organised on a regular basis. Storage of all hazardous wastes on-site will be undertaken so as to minimise exposure to on-site personnel and the public and to also minimise potential for environmental impacts. Hazardous waste will be recovered, wherever possible, and failing this, disposed of appropriately.

On-Site Crushing

It is currently not envisaged that the crushing of waste materials will occur on-site. However, if the crushing of material is to be undertaken, a mobile waste facility permit will first be obtained from DCC and the destination of the accepting waste facility or if an application under regulation 28 will be made using National End-of-Waste Decision EoW-N001/2023, will be supplied to the DCC waste unit.

It should be noted that until a construction contractor is appointed it is not possible to provide information on the specific destinations of each construction waste stream. Prior to commencement of construction and removal of any waste offsite, details of the proposed destination of each waste stream will be provided to DCC by the project team.

6.6 Tracking and Documentation Procedures for Off-Site Waste

All waste will be documented prior to leaving the site. Waste will be weighed by the contractor, either by a weighing mechanism on the truck or at the receiving facility. These waste records will be maintained on site by the nominated project RM (see Section 9.0).

All movement of waste and the use of waste contractors will be undertaken in accordance with the Waste Framework Directive (Directive 2008/98/EC), the *Waste Management Act 1996* as amended, *Waste Management (Collection Permit) Regulations 2007* as amended and *Waste Management (Facility Permit & Registration) Regulations 2007* and amended. This includes the requirement for all waste contractors to have a waste collection permit issued by the NWCPO. The nominated project RM (see Section 9.0) will maintain a copy of all waste collection permits on-site.

If the waste is being transported to another site, a copy of the Local Authority waste COR / permit or EPA Waste Licence for that site will be provided to the nominated project Waste Manager (see Section 9.0). If the waste is being shipped abroad, a copy of the Transfrontier Shipping (TFS) notification document will be obtained from DCC (as the relevant authority on behalf of all Local Authorities in Ireland) and kept on-site along with details of the final destination (COR, permits, licences, etc.). A receipt from the final destination of the material will be kept as part of the on-site waste management records.

All information will be entered in a waste management recording system to be maintained on-site.

7. ESTIMATED COST OF WASTE MANAGEMENT

An outline of the costs associated with different aspects of waste management is outlined below. The total cost of C&D waste management will be measured and will take into account handling costs, storage costs, transportation costs, revenue from rebates and disposal costs.

7.1 Reuse

By reusing materials on site, there will be a reduction in the transport and recycle / recovery / disposal costs associated with the requirement for a waste contractor to take the material off-site. Clean and inert soils, gravel, stones, etc., which cannot be reused on-site may be used as access roads or capping material for landfill sites, etc. This material is often taken free of charge or at a reduced fee for such purposes, reducing final waste disposal costs.

7.2 Recycling

Salvageable metals will earn a rebate, which can be offset against the costs of collection and transportation of the skips.

Clean, uncontaminated cardboard and certain hard plastics can also be recycled. Waste contractors will charge considerably less to take segregated waste, such as recyclable waste, from a site than mixed waste.

Timber can be recycled as chipboard. Again, waste contractors will charge considerably less to take segregated waste, such as timber, from a site than mixed waste.

7.3 Disposal

Municipal landfill charges in Ireland are based on the weight of waste disposed. In the Leinster Region, charges are approximately €140 - €160 per tonne of waste which includes an €85 per tonne landfill levy introduced under the *Waste Management (Landfill Levy) (Amendment) Regulations*. *The Circular Economy (Waste Recovery Levy)* will also incur a levy of €10 per tonne for waste accepted for recovery. This will include backfilling at authorised recovery sites and at municipal waste landfills.

Collection of segregated C&D waste usually costs less than municipal waste. Specific C&D waste contractors take the waste off-site to a licensed or permitted facility and, where possible, remove salvageable items from the waste stream before disposing of the remainder to landfill. Clean soil, rubble, etc., is also used as fill / capping material, wherever possible.

8. TRAINING PROVISIONS

A member of the construction team will be appointed as the RM to ensure commitment, operational efficiency and accountability in relation to waste management during the C&D phases of Proposed Development.

8.1 Resource Manager Training and Responsibilities

The nominated RM will be given responsibility and authority to select a waste team if required, i.e. members of the site crew that will aid them in the organisation, operation and recording of the waste management system implemented on site.

The RM will have overall responsibility to oversee, record and provide feedback to the client on everyday waste management at the site. Authority will be given to the Waste Manager to delegate responsibility to sub-contractors, where necessary, and to coordinate with suppliers, service providers and sub-contractors to prioritise waste prevention and material salvage.

The RM will be trained in how to set up and maintain a record keeping system, how to perform an audit and how to establish targets for waste management on site. The RM will also be trained in the best methods for segregation and storage of recyclable materials, have information on the materials that can be reused on site and be knowledgeable in how to implement this RWMP.

8.2 Site Crew Training

Training of site crew in relation to waste is the responsibility of the RM and, as such, a waste training program will be organised. A basic awareness course will be held for all site crew to outline the RWMP and to detail the segregation of waste materials at source. This may be incorporated with other site training needs such as general site induction, health and safety awareness and manual handling.

This basic course will describe the materials to be segregated, the storage methods and the location of the Waste Storage Areas (WSAs). A sub-section on hazardous wastes will be incorporated into the training program and the particular dangers of each hazardous waste will be explained.

9. TRACKING AND TRACING / RECORD KEEPING

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

A waste tracking log will be used to track each waste movement from the site. On exit from the site, the waste collection vehicle driver will stop at the site office and sign out as a visitor and provide the security personnel or RM with a waste docket (or Waste Transfer Form (WTF) for hazardous waste) for the waste load collected. At this time, the security personnel will complete and sign the Waste Tracking Register with the following information:

- Date;
- Time;
- Waste Contractor;
- Company waste contractor appointed by, e.g. Contractor or subcontractor name;
- Collection Permit No.;
- Vehicle Reg.;
- Driver Name;
- Docket No.;
- Waste Type;
- LoW; and
- Weight/Quantity.

The waste vehicle will be checked by security personnel or the RM to ensure it has the waste collection permit no. displayed and a copy of the waste collection permit in the vehicle before they are allowed to remove the waste from the site.

The waste transfer dockets will be transferred to the RM on a weekly basis and can be placed in the Waste Tracking Log file. This information will be forwarded onto the DCC Waste Regulation Unit when requested.

Each subcontractor that has engaged their own waste contractor will be required to maintain a similar waste tracking log with the waste dockets / WTF maintained on file and available for inspection on site by the main Contractor as required. These subcontractor logs will be merged with the main waste log.

Waste receipts from the receiving waste facility will also be obtained by the site contractor(s) and retained. A copy of the Waste Collection Permits, CORs, Waste Facility Permits and Waste Licenses will be maintained on site at all times and will be periodically reviewed by the RM. Subcontractors who have engaged their own waste contractors, will provide the main Contractor with a copy of the waste collection permits and COR / permit / licence for the receiving waste facilities and maintain a copy on file, available for inspection on site as required.

10. OUTLINE WASTE AUDIT PROCEDURE

10.1 Responsibility for Waste Audit

The appointed RM will be responsible for conducting a waste audit at the site during the C&D phase of the Proposed Development. Contact details for the nominated RM will be provided to the DCC Waste Regulation Unit after the main Contractor is appointed and prior to any material being removed from site.

10.2 Review of Records and Identification of Corrective Actions

A review of all waste management costs and the records for the waste generated and transported off-site will be undertaken mid-way through the construction phase of the Proposed Development.

If waste movements are not accounted for, the reasons for this will be established in order to see if and why the record keeping system has not been maintained. The waste records will be 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.

Upon completion of the C&D phase, a final report will be prepared, summarising the outcomes of waste management processes adopted and the total recycling / reuse / recovery figures for the Proposed Development.

10.3 Pest Management

A pest control operator will be appointed as required to manage pest onsite during the construction phase of the Proposed Development. Organic and food waste generated by staff will not be stored in open skips, but in closed waste receptacles. Any waste receptacles will be carefully managed to prevent leaks, odours and pest problems.

11. CONSULTATION WITH RELEVANT BODIES

11.1 Local Authority

Once a construction contractor has been appointed and have appointed waste contractors, and prior to removal of any C&D waste materials off-site, details of the proposed destination of each waste stream will be provided to the DCC Waste Regulation Unit.

DCC will also be consulted, as required, throughout the excavation and construction phases in order to ensure that all available waste reduction, reuse and recycling opportunities are identified and utilised and that compliant waste management practices are carried out.

11.2 Recycling / Salvage Companies

The appointed waste contractor for the main waste streams managed by the construction contractor will be audited in order to ensure that relevant and up-to-date waste collection permits and facility registrations / permits / licenses are held. In addition, information will be obtained regarding the feasibility of recycling each material, the costs of recycling / reclamation, the means by which the wastes will be collected and transported off-site, and the recycling / reclamation process each material will undergo off-site.

12. SUMMARY AND CONCLUSION

Adherence to this plan will also ensure that waste management during the construction phase at the Proposed Development is carried out in accordance with the requirements in the EPA's *Best Practice Guidelines for the Preparation of Resource & Waste Management Plans for Construction & Demolition Projects* and the DCC *Waste Bye-Laws* [25] and the *NWMPCE*.

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24. EPA and Galway-Mayo Institute of Technology (GMIT), *EPA Research Report 146 – A Review of Design and Construction Waste Management Practices in Selected Case Studies – Lessons Learned* (2015).
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APPENDIX A. WASTE FACILITIES IN THE DUBLIN AREA

A full list of currently licensed waste facilities that can potentially be used for this development can be found on the National Waste Collection Permit Office Website - https://facilityregister.nwcpo.ie/.

Authorisation Reference	Name	Trading As	Address
WFP-DC-20-0054-01	Shanowen Plant Hire Ltd - Mobile Plant		Various Sites Various Sites Various Sites
WFP-DC-20-0053-01	Loftus Demolition & Recycling Ltd - Mobile PLant		Various Sites Various Sites Various Sites Various Sites
WFP-DC-20-0055-01	Padraig Thornton Waste Disposal Ltd	Thornton's Recycling	Unit S3A Henry Road Park West Business Park Dublin 12
WFP-DC-09-0015-03	Chevron Environmental Ltd	Electronic Recycling	Unit 20 Jamestown Business Park Jamestown Road Finglas D11 X2HN
WFP-DC-11-0023-03	Padraig Thornton Waste Disposal Ltd (PTWDL)	Thornton's Recycling	Unit 6 S3B Henry Road Park West Business Park D12 KT91
COR-DC-21-0010-01	Fridge Spares Wholesale Ltd		Unit 15, Blackwater Road Dublin Industrial Estate Glasnevin Dublin 11 D11 YK26
WFP-DC-11-0022-03	Dawnlane Limited	Mullen Scrap	31 & 32 Upper Clanbrassil Street Dublin 8 D08 XY92
WFP-DC-11-0025-03	Rehab Enterprises Limited	Rehab Recycle	The Rehab Building Kylemore Road Ballyfermot Dublin 10 D10 Y443
WFP-DC-11-0027-03	Tom Murphy Recovery & Towing Services Ltd		Block 4, Unit 24 Port Tunnel Business Park Clonshaugh Industrial Estate Dublin 17
WFP-DC-22-0059-01	Derek Beahan Limited	Derek Beahan Recovery	Unit 7 Concorde Industrial Estate Naas Road Dublin 12 D12 YD30
COR-DC-22-0011-01	Soaktech Limited		Unit 16, Butterly Business Park Kilmore Road Artane Dublin 5, D05 X079
WFP-DC-22-0060-01	Edward O'Reilly	E.O'Reilly Recycling	92E Fairview Strand Ballybough Dublin 3
WFP-DC-10-0021-04	Padraig Thornton Waste Disposal Ltd	Thornton's Recycling	Unit 51 Henry Road Park West Business Park Dublin 12 D12 FH68
WFP-DC-11-0028-03	Mitchell Taylor (Exports) Limited	MT oils	The Old Brewery Newmarket Dublin 8 D08 FPF6
WFP-DC-18-0045-02	J. Ryan Haulage Limited - Mobile Plant		Former Bailey Gibson Site 326-328 South Circular Road Dublin 8 D08 N8X6
WFP-DC-10-0018-03	Summerhill Spares Limited		Unit 3 Newtown Industrial Estate Malahide Road Coolock Dublin 17 D17 VY80

Authorisation Reference	Name	Trading As	Address
WFP-DC-10-0020-03	Everyday Waste & Skiphire	All Away Recycling	84E Pigeon House Road Ringsend Dublin 4 D04 R7N0
WFP-DC-23-0061-01	Wills Bros Limited		Terminal 4 North Lands, Dublin Port (bounded by Bond Road, Tolka Quay Road & Promenade Road) Dublin 1
WFP-DC-24-0062-01	Tinnelly Group	John Tinnelly & Sons Ireland Limited	Unit 5B, Unit 5H Fingal Bay Business Park Co. Dublin K32 NY57
WFP-DC-24-0063-01	Micks Recycling Limited	Micks Skips	Unit 3a Ballyboggan Business Centre Glasnevin Dublin 11
WFP-DC-19-0048-02	Sunflower Recycling Company (Limited by Guarantee)		Shamrock Terrace Five Lamps, North Strand Dublin 1 D01 DX67
WFP-DC-08-0002-04	G & T McGoverns Ltd		2-4, 9 & 12 Prices Lane Rear 31 Ranelagh Road Ranelagh Dublin 6
WFP-DC-22-0056-01 (T)	Dembachel Ltd.		Kylemore Business Park 2 Kylemore Way Inchicore Dublin 8
WFP-DC-25-0064-01	Martin Services (Industrial) Ltd		Unit 10/11 Bluebell Business Park Bluebell, Old Naas Road Dublin 12 D12 W995

Appendix 19.2 Operational Waste Management Plan

REPORT



Operational Waste Management Plan

Large-Scale Residential Development for Zones 7, 8 & 9 at Clongriffin, Dublin 13

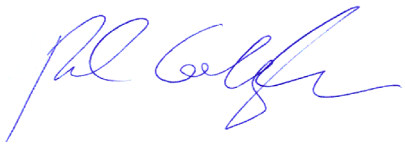
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Signature		
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Title	Associate (Environmental)	Director
Date	07/05/2026	07/05/2026

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This report considers the specific instructions and requirements of our client. It is not intended for third-party use or reliance, and no responsibility is accepted for any third party. The provisions in this report apply solely to this project and should not be assumed applicable to other developments without review and modification.

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TABLE OF CONTENTS

1. INTRODUCTION 1-1

2. OVERVIEW OF WASTE MANAGEMENT IN IRELAND 2-2
   - 2.1 National level 2-2
   - 2.2 Regional Level 2-3
   - 2.3 Legislative Requirements 2-5
   - 2.4 Dublin City Council Waste Management Bye-Laws 2-5
   - 2.5 Regional Waste Management Service Providers and Facilities 2-6

3. DESCRIPTION OF THE DEVELOPMENT 3-7
   - 3.1 Location, Size and Scale of the Development 3-7
   - 3.2 Typical Waste Categories 3-9
   - 3.3 List of Waste Codes 3-10

4. ESTIMATED WASTE ARISING 4-11

5. WASTE STORAGE AND COLLECTION 5-13
   - 5.1 Waste Storage – Residential Units 5-15
   - 5.2 Waste Storage – Commercial Units 5-16
   - 5.3 Waste Collection 5-17
   - 5.4 Additional Waste Materials 5-18
   - 5.5 Waste Storage Area Design 5-20
   - 5.6 Facility Management Responsibilities 5-20
   - 5.7 Pest Management 5-21

6. SUMMARY AND CONCLUSION 6-22

7. REFERENCES 7-23

APPENDIX A. ROAD SWEEP ANALYSIS FOR REFUSE TRUCK A-24

APPENDIX B. WASTE STORAGE AREA LOCATIONS B-25

LIST OF TABLES

Table 3.1	Typical Waste Types Generated and LoW Codes	3-10
Table 4.1	Estimated Waste Generation for Proposed Development	4-11
Table 4.2	Estimated Waste Generation for Proposed Development	4-11
Table 4.3	Estimated Waste Generation for Proposed Development	4-11
Table 4.4	Estimated Waste Generation for Proposed Development	4-11
Table 4.5	Estimated Waste Generation for Proposed Development	4-12
Table 5.1	Waste storage requirements for the proposed development	5-13

1. INTRODUCTION

AWN Consulting, a Trinity Consultants Team, has prepared this Operational Waste Management Plan (OWMP) on behalf of The Land Development Agency (the Client). The Proposed Development will consist of the construction of a residential development set out in 3 no. blocks (identified as Zone 7, 8 & 9), ranging in height from 5 to 10 storeys, to accommodate 711 no. apartments including café/restaurant/retail units, community/cultural spaces, a standalone creche building and the completion of Market St.

This OWMP has been prepared to ensure that the management of waste during the operational phase of the proposed development is undertaken in accordance with the current legal and industry standards including, the Waste Management Act 1996 as amended and associated Regulations [1], Environmental Protection Agency Act 1992 as amended [2], Litter Pollution Act 1997 as amended [3], the National Waste Management Plan for a Circular Economy 2024 - 2030 (NWMPCE) (2024) [4] and Dublin City Council (DCC) 'Dublin City Council (Storage, Presentation and Segregation of Household and Commercial Waste) Bye-Laws' 2018 [5]. In particular, this OWMP aims to provide a robust strategy for the storage, handling, collection and transport of the wastes generated at Site.

This OWMP aims to ensure maximum recycling, reuse and recovery of waste with diversion from landfill, wherever possible. The OWMP also seeks to provide guidance on the appropriate collection and transport of waste to prevent issues associated with litter or more serious environmental pollution (e.g. contamination of soil or water resources). The plan estimates the type and quantity of waste to be generated from the proposed development during the operational phase and provides a strategy for managing the different waste streams.

At present, there are no specific national guidelines in Ireland for the preparation of OWMPs. Therefore, in preparing this document, consideration has been given to the requirements of national and regional waste policy, legislation and other guidelines.

2. OVERVIEW OF WASTE MANAGEMENT IN IRELAND

2.1 National level

The Irish Government issued a policy statement in September 1998 entitled 'Changing Our Ways' [6], which identified objectives for the prevention, minimisation, reuse, recycling, recovery and disposal of waste in Ireland. A heavy emphasis was placed on reducing reliance on landfill and finding alternative methods for managing waste. Amongst other things, Changing Our Ways stated a target of at least 35% recycling of municipal (i.e. household, commercial and non-process industrial) waste.

A further policy document, 'Preventing and Recycling Waste – Delivering Change' was published in 2002 [7]. This document proposed a number of programmes to increase recycling of waste and allow diversion from landfill. The need for waste minimisation at source was considered a priority.

This view was also supported by a review of sustainable development policy in Ireland and achievements to date, which was conducted in 2002, entitled 'Making Ireland's Development Sustainable – Review, Assessment and Future Action' [8]. This document also stressed the need to decouple economic growth and waste generation, again through waste minimisation and reuse of discarded material.

In order to establish the progress of the Government policy document Changing Our Ways, a review document was published in April 2004 entitled '*Taking Stock and Moving Forward'* [9]. Covering the period 1998 – 2003, the aim of this document was to assess progress to date with regard to waste management in Ireland, to consider developments since the policy framework and the local authority waste management plans were put in place, and to identify measures that could be undertaken to further support progress towards the objectives outlined in *Changing Our Ways*.

In particular, *Taking Stock and Moving Forward* noted a significant increase in the amount of waste being brought to local authority landfills. The report noted that one of the significant challenges in the coming years was the extension of the dry recyclable collection services.

In September 2020, the Irish Government published a new policy document outlining a new action plan for Ireland to cover the period of 2020-2025. This plan *'A Waste Action Plan for a Circular Economy'* [10] (WAPCE), was prepared in response to the 'European Green Deal' which sets a roadmap for a transition to a new economy, where climate and environmental challenges are turned into opportunities, replacing the previous national waste management plan *"A Resource Opportunity"* (2012).

The WAPCE sets the direction for waste planning and management in Ireland up to 2025. This reorientates policy from a focus on managing waste to a much greater focus on creating circular patterns of production and consumption. Other policy statements of a number of public bodies already acknowledge the circular economy as a national policy priority.

The policy document contains over 200 measures across various waste areas including circular economy, municipal waste, consumer protection and citizen engagement, plastics and packaging, construction and demolition, textiles, green public procurement and waste enforcement.

One of the first actions to be taken was the development of the Whole of Government Circular Economy Strategy 2022-2023 'Living More, Using Less' (2021) [12] to set a course for Ireland to transition across all sectors and at all levels of Government toward circularity. This was issued in December 2021. The Strategy states "*It is anticipated that the Strategy will be updated in full every 18 months to 2 years*". The latest version of this stratergy has been issued as of Feb 2026 *Whole of Government Circular Economy Strategy 2026-2028: 'Accelerating Action' (2026)* [13], with the main purpose of this stratergy being to increase Ireland's circular material use rate by two percentage points per year.

The Circular Economy and Miscellaneous Provisions Act 2022 [14] was signed into law in July 2022. The Act underpins Ireland's shift from a "take-make-waste" linear model to a more sustainable pattern of production and consumption, that retains the value of resources in our economy for as long as possible and that will to significantly reduce our greenhouse gas emissions. The Act defines Circular Economy for the first time in Irish law, incentivises the use of recycled and reusable alternatives to wasteful, single-use disposable packaging, introduces a mandatory segregation and incentivised charging regime for commercial waste, streamlines the national processes for End-of-Waste and By-Products decisions, tackling the delays which can be encountered by industry, and supporting the availability of recycled secondary raw materials in the Irish market, and tackles illegal fly-tipping and littering.

The Department of Housing, Local Government and Heritage authored Sustainable Residential Development and Compact Settlements - Guidelines for Planning Authorities (2024) [15], suggests the below thresholds at which the need for the supplemental information such as the OWMP should be considered.

- 30 or more residential units,
- 1,000 sq. metres of mixed-us development

Since 1998, the Environmental Protection Agency (EPA) has produced periodic 'National Waste (Database) Reports' which, as of 2023, have been renamed Circular Economy and Waste Statistics Highlight Reports [16] detailing, among other things, estimates for household and commercial (municipal) waste generation in Ireland and the level of recycling, recovery and disposal of these materials. The 2025 National Circular Economy and Waste Statistics web resource, which is the most recent study published, along with the national waste statistics web resource (2025) reported the following key statistics for 2023:

- Ireland generated 3.13 million tonnes of municipal waste in 2023, relatively unchanged compared to the 3.19 million tonnes generated in 2022.
- Between 2016 and 2023, municipal waste increased from 2.7 million tonnes to 3.13 million tonnes.
- Some 1.3 million tonnes of municipal waste generated in Ireland was recycled in 2023, resulting in a recycling rate of 42%. This indicates that we face significant challenges to meet the upcoming EU recycling targets for 2025 to 2035.
- Of the municipal waste recycled in 2023, over 814,000 tonnes went for material recycling (approximately the same as 2022) and over 480,000 tonnes were treated by composting/anaerobic digestion (approximately the same as 2022 but up 37% on 2020).
- A rounded 1.3 million tonnes of Ireland's municipal waste went for incineration with energy recovery in 2023. This tonnage is 43% of municipal waste managed.
- Ireland's landfill rate for municipal waste managed was 14% in 2023. This is a 1% decrease from 2022's rate of 15%.
- There has been a steep decline in Ireland's landfill rate for municipal waste from over 80% in 2001. Ireland must reduce the share of municipal waste landfilled to 10% or less by 2035, which includes waste landfilled at each step along the waste treatment process in Ireland and abroad.
- An estimated 42% (1.2 million tonnes) of all municipal waste managed was exported abroad in 2023, an increase from the 39% in 2022. Of the waste exported, most went for recycling (49%) or energy recovery (36%) while 11% went for composting or anaerobic digestion.

2.2 Regional Level

The proposed development is located in the Local Authority administrative area of Dublin City Council (DCC). The EMR Waste Management Plan 2015 – 2021 has been superseded as of March 2024 by the NWMPCE 2024 - 2030.

The NWMPCE does not dissolve the three regional waste areas. The NWCPCE sets the ambition of the plan to have a 0% total waste growth per person over the life of the Plan with an emphasis on non-household wastes including waste from commercial activities and the construction and demolition sector.

This Plan seeks to influence sustainable consumption and prevent the generation of waste, improve the capture of materials to optimise circularity and enable compliance with policy and legislation.

The national plan sets out the following strategic targets for waste management in the country that are relevant to the development:

This Plan seeks to influence sustainable consumption and prevent the generation of waste, improve the capture of materials to optimise circularity and enable compliance with policy and legislation.

The national plan sets out the following strategic targets for waste management in the country that are relevant to the development:

National Targets

1A. (Residual Municipal Waste) 6% Reduction in Residual Municipal Waste per person by 2030

2A. (Contamination of Materials) 90% of Material in Compliance in the Dry Recycling Bin

2B. (Material Compliance Residual) 10% per annum increase in Material Compliance in the residual bin. (90% by the end of 2030)

3A. (Reuse of Materials) 20kg Per person / year – Reuse of materials like cloths or furniture to prevent waste.

Municipal landfill charges in Ireland are based on the weight of waste disposed. In the Leinster Region, charges are approximately €140-160 per tonne of waste, which includes a €85 per tonne landfill levy introduced under the Waste Management (Landfill Levy) (Amendment) Regulations 2015 [17]. *The Circular Economy (Waste Recovery Levy) Regulations 2024 [18] will also add a levy of €10 per tonne to waste accepted for recovery.*

The *Dublin City Development Plan 2022 – 2028* [19] sets out a number of policies and objectives for Dublin City in line with the objectives of the National climate action policy and emphasises the need to take action to address climate action across all sectors of society and the economy. In the waste sector, policy on climate action is focused on a shift towards a 'circular economy' encompassing three core principles: designing out waste and pollution; keeping products and material in use; and regenerating natural systems. Further policies and objectives can be found within the development plan.

- *CA8 (f): minimising the generation of site and construction waste and maximising reuse or recycling.*
- *CA23: The Circular economy: To support the shift towards the circular economy approach as set out in 'a Waste Action Plan for a Circular Economy 2020 to 2025, Ireland's National Waste Policy, or as updated.*
- *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.*
- *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.*
- *SI30: 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 2020 (or and any future updated versions of these guidelines produced during the lifetime of this plan).*

Objectives:

- *SIO14 Local Recycling/Reuse Infrastructure: To provide for a citywide network of municipal civic amenity facilities/ multi-material public recycling and reuse facilities in accessible locations throughout the city in line with the objectives of the circular economy and 15 minute city.*
- *SIO16 Eastern-Midlands Region Waste Management Plan: To support the implementation of the Eastern-Midlands Regional Waste Management Plan 2015–2021 and any subsequent plans in order to facilitate the transition from a waste management economy towards a circular economy.*

2.3 Legislative Requirements

The primary legislative instruments that govern waste management in Ireland and applicable to the proposed development are:

- *Waste Management Act 1996 as amended;*
- *Environmental Protection Agency Act 1992 as amended;*
- *Litter Pollution Act 1997 as amended;*
- *Planning and Development Act 2000 as amended* [20]*;*
- *Circular Economy and Miscellaneous Provisions Act 2022;*
- *Waste Management (Food Waste) (Amendment Regulations) 2015 (S.I. 190/2015);*
- *the European Union (Household Food Waste and Bio-waste) Regulations 2015 (S.I. 430/2015);*
- *the Waste Management (Food Waste) Regulations 2009 (S.I. 508/2009).*

These Acts and subordinate Regulations transpose the relevant European Union Policy and Directives into Irish law.

One of the guiding principles of European waste legislation, which has in turn been incorporated into the Waste Management Act 1996 as amended and subsequent Irish legislation, is the principle of "Duty of Care". This implies that the waste 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 physically transport waste to the final waste disposal site.

It is, therefore, imperative that the residents, tenants and/or facilities management undertake on-site management of waste in accordance with all legal requirements and that the facilities management company employ suitably permitted / licenced contractors to undertake off-site management of their waste in accordance with all legal requirements. This includes the requirement that a waste contactor handle, transport and reuse / recover / recycle / dispose of waste in a manner that ensures that no adverse environmental impacts occur as a result of any of these activities.

A collection permit to transport waste must be held by each waste contractor which is issued by the National Waste Collection Permit Office (NWCPO). Waste receiving facilities must also be appropriately permitted or licensed. Operators of such facilities cannot receive any waste, unless in possession of a Certificate of Registration (COR) or waste permit granted by the relevant Local Authority under the Waste Management (Facility Permit & Registration) Regulations 2007, as amended, or a Waste Licence granted by the EPA. The COR / permit / licence held will specify the type and quantity of waste able to be received, stored, sorted, recycled, recovered and / or disposed of at the specified site.

2.4 Dublin City Council Waste Management Bye-Laws

The DCC "*Dublin City Council (Storage, Presentation and Segregation of Household and Commercial Waste) Bye-Laws (2018)*" were bought into force in May 2019. These bye-laws repeal the previous Bye-

Laws for the Storage, Presentation and Collection of Household and Commercial Waste. The bye-laws set a number of enforceable requirements on waste holders with regard to storage, separation and presentation of waste within the DCC administrative area. Key requirements under these bye-laws of relevance to the operational phase of the proposed development include the following:

- *Kerbside waste presented for collection shall not be presented for collection earlier than 5.00 pm on the day immediately preceding the designated waste collection day;*
- *All containers used for the presentation of kerbside waste and any uncollected waste shall be removed from any roadway, footway, footpath or any other public place no later than 10:00 am on the day following the designated waste collection day, unless an alternative arrangement has been approved in accordance with bye-law 2.3;*
- *Documentation, including receipts, is obtained and retained for a period of no less than one year to provide proof that any waste removed from the premises has been managed in a manner that conforms to these bye-laws, to the Waste Management Act and, where such legislation is applicable to that person, to the European Union (Household Food Waste and Bio-Waste) Regulations 2015; and*
- *Adequate access and egress onto and from the premises by waste collection vehicles is maintained.*

The full text of the bye-laws is available from the DCC website.

2.5 Regional Waste Management Service Providers and Facilities

Various contractors offer waste collection services for the commercial and residential sector in the DCC region. Details of waste collection permits (granted, pending and withdrawn) for the region are available from the NWCPO.

As outlined in the regional waste management plan, there is a decreasing number of landfills available in the region. Only three municipal solid waste landfills remain operational and all are operated by the private sector. There are a number of other licensed and permitted facilities in operation in the region including waste transfer stations, hazardous waste facilities and integrated waste management facilities. There are two existing thermal treatment facilities, one in Duleek, Co. Meath and a second in Poolbeg in Dublin.

There is a DCC Recycling Centre at Oscar Traynor Road, Coolock, Dublin which are located c.4km to the south west of the development, which can be utilised by the residents of the development for other household waste streams while a bottle bank can be found c. 500m to the west at the Trinity Sports and Leisure Club.

A copy of all CORs and waste permits issued by the Local Authorities are available from the NWCPO website and all Waste Licenses issued are available from the EPA.

3. DESCRIPTION OF THE DEVELOPMENT

3.1 Location, Size and Scale of the Development

The site is located within the Clongriffin Masterplan lands in Dublin 13 and comprises Zones 7, 8 and 9. The site is bounded by Park Street to the north, Main Street to the west, Market Street to the south and Station Square/Clongriffin Road to the east.

The development will consist of the construction of a residential development set out in 3 no. blocks (identified as Zone 7, 8 & 9), ranging in height from 5 to 10 storeys, to accommodate 711 no. apartments including café/restaurant/retail units, community/cultural spaces, a standalone creche building and the completion of Market St.

The 3 no. residential buildings are arranged around podium courtyards accommodating communal amenity spaces for future residents. Zone 7 is a 5 to 7 storey block onto Main St, Friar's St, Park St and Market St containing 280 apartments. Zone 8 is a 6 to 8 storey block between Main St and Market Street containing 263 apartments. Zone 9 is a 6 to 10 storey block located on Main St, Station Square and Market Street containing 168 units.

Car and cycle parking for both residents and visitors is provided below podium and at surface level throughout the scheme. The proposed development includes all site landscaping works, open space, green roofs, lighting, servicing and utilities, signage, and associated and ancillary works, including site development works above and below ground.

The proposed development sits as part of a Masterplan for a wider Clongriffin landbank which includes the under-construction Block 5 & 6 to the north of Market Street.

For a more detailed description please refer to the Statutory Notices.

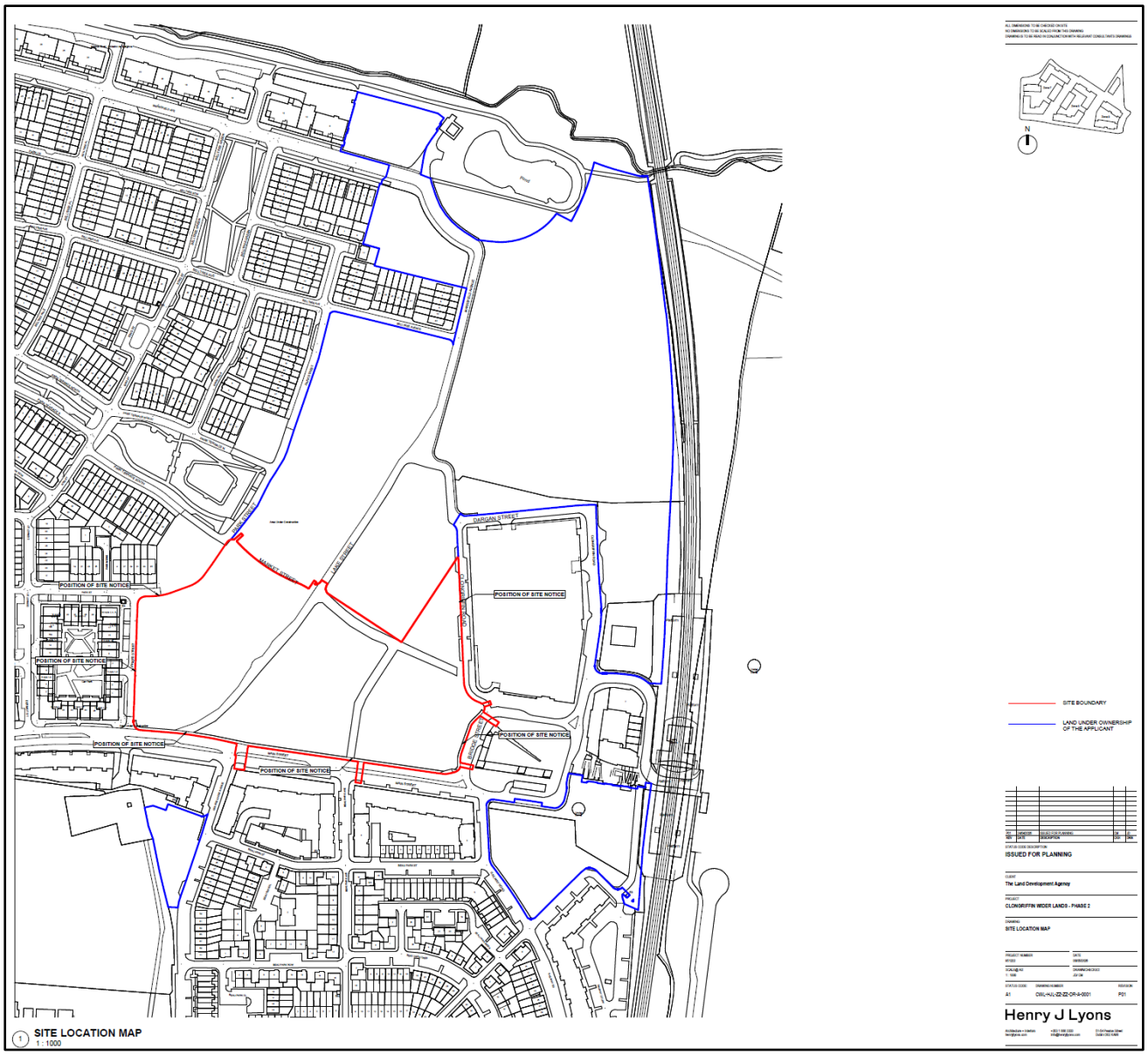


Figure 4.1 Proposed Development Site Location (Source HJL 2026)

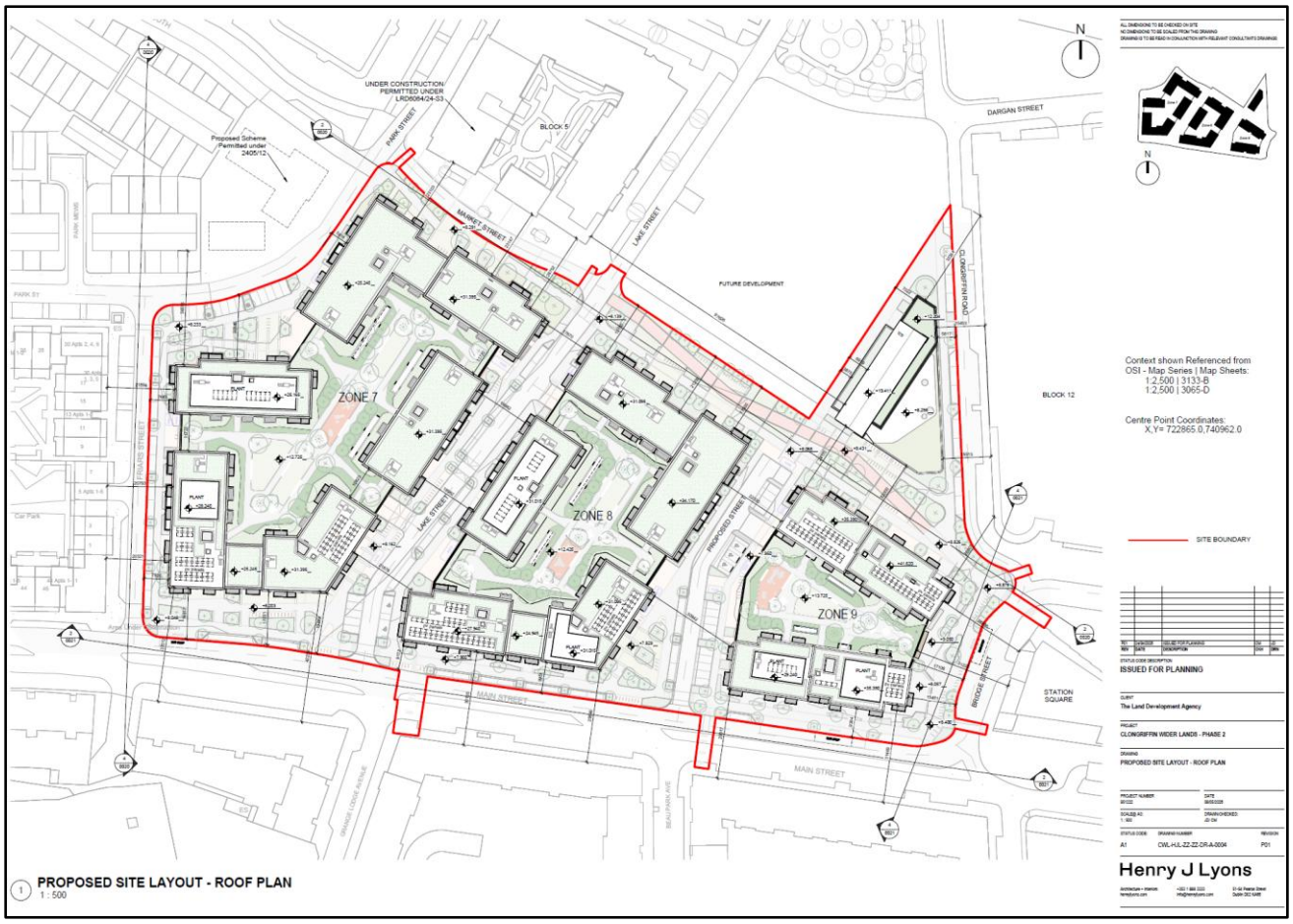


Figure 4.2 Proposed Development Site Layout (Source HJL 2026)

3.2 Typical Waste Categories

The typical non-hazardous and hazardous wastes that will be generated at the proposed development will include the following:

- Dry Mixed Recyclables (DMR) - includes waste paper (including newspapers, magazines, brochures, catalogues, leaflets), metal cans, plastic bottles, aluminium cans, tins and Tetra Pak cartons;
- Cardboard (bailed)
- Plastic packaging (bailed)
- Organic waste – food waste and green waste generated from internal plants / flowers;
- Glass; and
- Mixed Non-Recyclable (MNR)/General Waste.

In addition to the typical waste materials that will be generated at the development on a daily basis, there will be some additional waste types generated less frequently / in smaller quantities which will need to be managed separately including:

- Drink Cans and Bottles (Deposit Return Scheme)
- Green / garden waste may be generated from external landscaping;
- Batteries (both hazardous and non-hazardous);
- Waste electrical and electronic equipment (WEEE) (both hazardous and non-hazardous);
- Printer cartridges / toners;
- Chemicals (paints, adhesives, resins, detergents, etc.);
- Light bulbs;

- Textiles;
- Waste cooking oil (if any generated by the tenants or residents);
- Furniture (and, from time to time, other bulky wastes); and
- Abandoned bicycles.

Wastes should be segregated into the above waste types to ensure compliance with waste legislation and guidance while maximising the re-use, recycling and recovery of waste with diversion from landfill wherever possible.

3.3 List of Waste Codes

In 1994, the *European Waste Catalogue* [21] and *Hazardous Waste List* [22] were published by the European Commission. In 2002, the EPA published a document titled the *European Waste Catalogue and Hazardous Waste List* [23], which was a condensed version of the original two documents and their subsequent amendments. This document has recently been replaced by the EPA '*Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous*' [24] 2018. This waste classification system applies across the EU and is the basis for all national and international waste reporting, such as those associated with waste collection permits, COR's, permits and licences and EPA National Waste Database.

Under the classification system, different types of wastes are fully defined by a code. The List of Waste (LoW) code for typical waste materials expected to be generated during the operation of the proposed development are provided in Table 3-1 below.

Table 3.1 Typical Waste Types Generated and LoW Codes

Waste Material	LoW Code
Paper and Cardboard	20 01 01
Plastics	20 01 39
Metals	20 01 40
Mixed Non-Recyclable Waste	20 03 01
Glass	20 01 02
Biodegradable Kitchen Waste	20 01 08
Oils and Fats	20 01 25
Textiles	20 01 11
Batteries and Accumulators*	20 01 33* - 34
Printer Toner/Cartridges*	20 01 27* - 28
Green Waste	20 02 01
WEEE*	20 01 35*-36
Chemicals (solvents, pesticides, paints & adhesives, detergents, etc.) *	20 01 13*/19*/27*/28/29*30
Fluorescent tubes and other mercury containing waste*	20 01 21*
Bulky Wastes	20 03 07

** Individual waste type may contain hazardous materials*

4. ESTIMATED WASTE ARISING

A waste generation model (WGM) developed by AWN has been used to predict waste types, weights and volumes expected to arise from operations within the proposed development. The WGM incorporates building area and use and combines these with other data, including Irish and US EPA waste generation rates.

The estimated quantum / volume of waste that will be generated from the residential units and shared communal amenity space has been determined based on the predicted occupancy of the units. While the floor area usage (m^2) has been used to estimate the waste arising from the commercial units which include cultural/community, retail/restaurant/café and crèche (commercial units).

The estimated waste generation for the proposed development for the main waste types is presented in Tables 4-1.

Table 4.1 Estimated Waste Generation for Proposed Development

Waste Type	Waste Volume (m^3 / week)			
	Block 7A	Block 7B	Block 7C	Block 7D
Organic Waste	0.62	0.70	0.80	0.74
DMR	4.41	4.96	5.66	5.27
Glass	0.12	0.14	0.15	0.14
MNR	2.32	2.61	2.97	2.77
Total	**7.47**	**8.40**	**9.59**	**8.93**

Table 4.2 Estimated Waste Generation for Proposed Development

Waste Type	Waste Volume (m^3 / week)			
	Block 7E	Block 7F	Block 8A	Block 8B
Organic Waste	0.74	0.49	0.69	1.05
DMR	5.24	3.50	4.86	7.42
Glass	0.14	0.10	0.13	0.20
MNR	2.75	1.84	2.56	3.90
Total	**8.87**	**5.92**	**8.24**	**12.57**

Table 4.3 Estimated Waste Generation for Proposed Development

Waste Type	Waste Volume (m^3 / week)			
	Block 8C	Block 8D	Block 8E	Block 9A
Organic Waste	0.70	0.53	0.78	1.33
DMR	4.96	3.76	5.54	9.41
Glass	0.14	0.10	0.15	0.26
MNR	2.61	1.98	2.91	4.95
Total	**8.41**	**6.38**	**9.38**	**15.94**

Table 4.4 Estimated Waste Generation for Proposed Development

Waste Type	Waste Volume (m^3 / week)			
	Block 9B	Crèche	Community / Cultural Zone 7	Community / Cultural Zone 8
Organic Waste	0.99	0.09	0.67	0.09

DMR	7.04	3.21	2.63	1.81
Glass	0.19	0.01	0.04	0.75
MNR	3.70	1.75	1.10	0.03
Total	**11.93**	**5.06**	**4.42**	**2.68**

Table 4.5 Estimated Waste Generation for Proposed Development

Waste Type	Waste Volume (m^3 / week)			
	Community / Cultural Zone 9	Retail/ Restaurant/ Café Zone 9		
Organic Waste	0.07	0.21		
DMR	1.40	4.13		
Glass	0.02	0.11		
MNR	0.58	1.72		
Total	**2.07**	**6.17**		

BS5906:2005 Waste Management in Buildings – Code of Practice [25]has been considered in the calculations of waste estimates. AWN's modelling methodology is based on recently published data (Irish EPA) and data from numerous other similar developments in Ireland and, as it is based on AWN's experience, it provides a more representative estimate of the likely waste arisings from the proposed development.

5. WASTE STORAGE AND COLLECTION

This section provides information on how waste generated within the site will be stored and collected. This has been prepared with due consideration of the proposed site layout as well as best practice standards, local and national waste management requirements, including those of DCC. In particular, consideration has been given to the following documents:

- BS 5906:2005 Waste Management in Buildings – Code of Practice,
- The NWMPCE (2024);
- Dublin City Council Development Plan 2022 – 2028 (Appendix 7);
- DCC Dublin City Council (Storage, Presentation and Segregation of Household and Commercial Waste) Bye-Laws (2018);
- DoHLGH, *Design Manual for Urban Roads and Streets* (2019) [26]; and
- DoHLGH, Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities (2025) [27].

Waste Storage Areas

Dedicated communal Waste Storage Areas (WSA) have been allocated within the development design at the ground floor level for the residential units and can be viewed in the drawings submitted with the application. Communal area waste will be accommodated in the closest shared residential WSAs and waste estimates are included as part of the overall residential waste figures provided in Table 4.1.

The commercial units have their own commercial waste stores located in each zone in an internal location.

Locations of all Waste Storage Areas (WSAs) can be viewed on the drawings submitted with the planning application.

The waste receptacles from the residential WSAs and commercial WSAs will be collected by facilities management or the waste contractor (agreement dependant), at the time of collection and brought to one of the staging areas, within the development redline boundary.

Waste Storage Requirements

Using the estimated waste generation volumes in Table 4.1, the waste receptacle requirements for MNR, DMR, organic waste and glass have been established for the WSA. These are presented in Table 5.1.

Table 5.1 Waste storage requirements for the proposed development

Area/Use	Bins Required			
	MNR[1]	DMR[2]	Glass	Organic
Residential Block 7A	2 no. 1100 L 1 no. 240L	4 no. 1100 L	1 no. 240 L	3 no. 240 L
Residential Block 7B & 7C	5 no. 1100 L	10 no. 1100 L	1 no. 240 L	7 no. 240 L
Residential Block 7D	3 no. 1100 L	5 no. 1100 L	1 no. 240 L	3 no. 240 L
Residential Block 7E	3 no. 1100 L	5 no. 1100 L	1 no. 240 L	3 no. 240 L
Residential Block 7F	2 no. 1100 L	3 no. 1100 L 1 no. 240L	1 no. 240 L	2 no. 240 L
Residential Block 8A	3 no. 1100 L	5 no. 1100 L	1 no. 240 L	3 no. 240 L

Area/Use	Bins Required			
	MNR[1]	DMR[2]	Glass	Organic
Residential Block 8B	4 no. 1100 L	7 no. 1100 L	1 no. 240 L	5 no. 240 L
Residential Block 8C	3 no. 1100 L	5 no. 1100 L	1 no. 240 L	3 no. 240 L
Residential Block 8D & 8E	5 no. 1100 L	9 no. 1100 L	2 no. 240 L	6 no. 240 L
Residential Block 9A	5 no. 1100 L	9 no. 1100 L	1 no. 240 L	6 no. 240 L
Residential Block 9B	4 no. 1100 L	7 no. 1100 L	1 no. 240 L	4 no. 240 L
Commercial Zone 7	1 no. 1100 L	2 no. 1100 L 1 no. 240L	1 no. 120 L	3 no. 240 L
Commercial Zone 8	1 no. 1100 L	2 no. 1100 L	1 no. 120 L	1 no. 120 L
Commercial Zone 9	2 no. 1100 L 1 no. 240L	5 no. 1100 L	1 no. 240 L	2 no. 240 L
Creche	2 no. 1100 L	3 no. 1100 L	1 no. 120 L	1 no. 120 L

Note: 1 = Mixed Non-Recyclables
2 = Dry Mixed Recyclables

The waste receptacle requirements have been established from distribution of the total weekly waste generation estimate into the holding capacity of each receptacle type, along with collection frequency.

Waste storage receptacles as per Table 5.1 above (or similar appropriate approved containers) will be provided by the waste contractor in the WSA.

As outlined in the current Dublin City Development Plan, it is preferable to use 1,100 L wheelie bins for waste storage, where practical. However, in the case of organic and glass waste, it is considered more suitable to use smaller waste receptacles due to the weight of bins when filled with organic and glass waste. The use of 240 L bins, as recommended in Table 5.1, will reduce the manual handling impacts on the facilities management personnel and waste contractor employees.

The types of bins used will vary in size, design and colour dependent on the appointed waste contractor. However, examples of typical receptacles to be provided in the WSA are shown in Figure 5-1. All waste receptacles used will comply with the SIST EN 840-1:2020 and SIST EN 840-2:2020 as the standards for performance requirements of mobile waste containers, where appropriate.

Figure 5.1 Typical waste receptacles of varying size (240L and 1100L)



Receptacles for organic, DMR, glass and MNR waste will be provided in the WSAs prior to first occupation of the development.

Alternative options can be considered in future by the facilities management company, as technologies are developed. Solely for the purpose of ensuring the WSA is sufficiently sized to accommodate bins which take up more space.

A waste management plan will be provided to each resident and commercial tenants from first occupation of the development. This Plan will be supplemented, as required, by the facilities management company with any new information on waste segregation, storage, reuse and recycling initiatives that are subsequently introduced.

5.1 Waste Storage – Residential Units

Residents will be required to segregate waste into the following main waste streams:

- Organic Waste;
- DMR;
- Glass; and
- MNR.

Provision will be made in all residential units to accommodate 3 no. bin types to facilitate waste segregation at source. An example of a potential 3 bin storage system is provided in Figure 5.3 below.

Figure 5.3 Example three bin storage system to be provided within the unit design



Residents will be required to take their segregated waste materials to their designated residential WSAs and deposit their segregated waste into the appropriate bins. The locations of the residential WSAs are illustrated in the drawings submitted with the planning application under separate cover, and in appendices of this report.

Each bin / container in the residential WSAs will be clearly labelled and colour coded to avoid cross contamination of the different waste streams. Signage will be posted above or on the bins to show exactly which waste types can be placed in each bin. Access to the residential WSA will be restricted to authorised residents, facilities management of the development and waste contractors by means of a key or electronic fob access.

Other waste materials such as textiles, batteries, printer toner/cartridges, waste cooking oil and WEEE may be generated infrequently by the residents. Residents will be required to identify suitable temporary storage areas for these waste items within their own units and dispose of them appropriately. Further details on additional waste types can be found in Section 5.4.

5.2 Waste Storage – Commercial Units

The commercial tenants will be required to segregate waste within their own unit into the following main waste types:

- Organic Waste;
- DMR;
- Glass; and
- MNR;

The commercial tenants will be required to take their segregated waste materials to their designated commercial WSA and deposit their segregated waste into the appropriate waste receptacles. The location of the WSA is illustrated in the drawings submitted with the planning application under separate cover and in the appendices of this report.

Suppliers for the commercial tenants should be requested by the tenant to make deliveries in reusable containers, minimize packaging or remove any packaging after delivery, where possible, to reduce waste generated by the proposed development.

If any kitchens are allocated in unit area, this will contribute an increased portion of the volume of waste generated on a daily basis, and as such it is important that adequate provision is made for the storage and transfer of waste from these areas to the WSA.

If kitchens are required it is anticipated that waste will be generated in kitchens throughout the day, primarily at the following locations:

- Food Storage Areas (i.e. cold stores, dry store, freezer stores and stores for decanting of deliveries);
- Meat Preparation Area;
- Vegetable Preparation Area;
- Cooking Area; and
- Dish-wash and Glass-wash Area.

Small bins will be placed adjacent to each of these areas for temporary storage of waste generated during the day. Waste will then be transferred from each of these areas to the commercial bin stores.

All bins / containers in the commercial tenants s' areas as well as in the WSAs will be clearly labelled and colour coded to avoid cross contamination of the different waste streams. Signage will be posted above or on the bins to show exactly which wastes can be put in each.

Other waste materials such as textiles, batteries, lightbulbs, WEEE, cooking oil and printer toner / cartridges will be generated less frequently. Space has been allocated within the commercial WSAs for the storage of these items. Collections of these items will be arranged as required by the tenant or facilities management depending on the agreement. Further details on additional waste types can be found in Section 5.4.

5.3 Waste Collection

There are numerous private contractors that provide waste collection services in the Dublin City area. All waste contractors servicing the proposed development must hold a valid waste collection permit for the specific waste types collected. All waste collected must be transported to registered / permitted / licensed facilities only.

Bins from the development will be brought to a collection point in the forecourt, or directly from the ground level WSAs by the waste contractor or facilities management, immediately prior to collection. The basement level carpark is insufficient in height for a waste truck to access, all waste will be collected at grade. Temporary storage at the bottom of the basement ramp has been provided to move bins prior to collection.

The waste receptacles from the WSAs will be collected by facilities management, immediately prior to collection and brought to where the bins will be staged temporarily awaiting collection. The staging areas are such that they will not obstruct traffic or pedestrians (allowing a footway path of at least 1.8m, the space needed for two wheelchairs to pass each other) as is recommended in the *Design Manual for Urban Roads and Streets* (2019)[28].

A trolley / tug or suitable vehicle may be required to convey the bins to and from the collection area. The facilities management or waste contractor will ensure that empty bins are promptly returned to the WSAs after collection / emptying.

Suitable access and egress has been provided to enable the bins to be moved easily from the temporary staging area to the waste collection vehicles on the appropriate days. Waste will be collected at agreed days and times by the nominated waste contractors.

All waste receptacles will be clearly identified as required by waste legislation and the requirements of the DCC *Waste Bye-Laws*. Waste will be presented for collection in a manner that will not endanger health, create a risk to traffic, harm the environment or create a nuisance through odours or litter.

It is recommended that bin collection times are staggered to reduce the number of bins required to be emptied at once and the time the waste vehicle is on-Site. This will be determined during the process of appointment of a waste contractor.

5.4 Additional Waste Materials

In addition to the typical waste materials that are generated on a daily basis, there will be some additional waste types generated from time to time that will need to be managed separately. A non-exhaustive list is presented below.

Deposit Return Scheme
Most drinks containers can be recycled via the deposit return scheme, such as bottles, cans and tins made from plastic, aluminium or steel. These items can be returned once they are between 150ml and 3 litres in size and have the Re-turn logo on them.

At the shops you can either return the containers:

- Using a Reverse Vending Machine (RVM)
- Manually in the shop

If a shop does not have a RVM but they sell containers with the Re-turn logo, the shop may allow you to manually return containers in store, unless they have a take back exemption.

Locations of RVM machines can be found via the Re-turn website (www.re-turn.ie)

Green Waste
Green waste may be generated from gardens, external landscaping and internal plants / flowers. Green waste generated from landscaping of external areas will be removed by external landscape contractors. Green waste generated from gardens internal plants / flowers can be placed in the organic waste bins.

Batteries
A take-back service for waste batteries and accumulators (e.g. rechargeable batteries) is in place in order to comply with the S.I. No. 283/2014 - European Union (Batteries and Accumulators) Regulations 2014, as amended. In accordance with these regulations, consumers are able to bring their waste batteries to their local civic amenity centre or can return them free of charge to retailers which supply the equivalent type of battery, regardless of whether or not the batteries were purchased at the retail outlet and regardless of whether or not the person depositing the waste battery purchases any product or products from the retail outlet.

The commercial tenants cannot use a civic amenity centre. They must segregate their waste batteries and either avail of the take-back service provided by retailers or arrange for recycling / recovery of their waste batteries by a suitably permitted / licenced contractor. Facilities management may arrange collection, depending on the agreement.

Waste Electrical and Electronic Equipment (WEEE)
The WEEE Directive (Directive 2002/96/EC) and associated Waste Management (WEEE) Regulations have been enacted to ensure a high level of recycling of electronic and electrical equipment. In accordance with the regulations, consumers can bring their waste electrical and electronic equipment to their local recycling

centre. In addition, consumers can bring back WEEE within 15 days to retailers when they purchase new equipment on a like for like basis. Retailers are also obliged to collect WEEE within 15 days of delivery of a new item, provided the item is disconnected from all mains, does not pose a health and safety risk and is readily available for collection.

As noted above, the commercial tenants cannot use a civic amenity centre. They must segregate their WEEE and either avail of the take-back / collection service provided by retailers or arrange for recycling / recovery of their WEEE by a suitably permitted / licenced contractor. Facilities management may arrange collection, depending on the agreement.

Printer Cartridge / Toners

It is recommended that a printer cartridge / toner bin is provided in the commercial units, where appropriate. The commercial tenants will be required to store this waste within their units and arrange for return to retailers or collection by an authorised waste contractor, as required.

Waste printer cartridge / toners generated by residents can usually be returned to the supplier free of charge or can be brought to a civic amenity centre.

Chemicals

Chemicals (such as solvents, paints, adhesives, resins, detergents, etc) are largely generated from building maintenance works. Such works are will be completed by external contractors who are responsible for the off-site removal and appropriate recovery / recycling / disposal of any waste materials generated.

Any waste cleaning products or waste packaging from cleaning products generated in the commercial units that is classed as hazardous (if they arise) will be appropriately stored pending disposal within the tenants' own space. Facilities management may arrange collection, depending on the agreement.

Any waste cleaning products or waste packaging from cleaning products that are classed as hazardous (if they arise) generated by the residents should be brought to a civic amenity centre.

Light Bulbs

Waste light bulbs (fluorescent, incandescent and LED) may be generated by lighting in the commercial units. It is anticipated that the commercial tenants will be responsible for the off-site removal and appropriate recovery / disposal of these wastes. Facilities management may arrange collection, depending on the agreement.

Waste light bulbs generated by residents should be taken to the nearest civic amenity centre for appropriate storage and recovery / disposal.

Textiles

Where possible, waste textiles should be recycled or donated to a charity organisation for reuse. Commercial tenants and residential units will be responsible for disposing of waste textiles appropriately.

Waste Cooking Oil

If the commercial tenants use cooking oil, waste cooking oil will need to be stored within their units on a bunded area or spill pallet and regular collections by a dedicated waste contractor will need to be organised as required. Under sink grease traps will be installed in any cooking space.

If the residents generate waste cooking oil, this can be brought to a civic amenity centre.

Furniture & Other Bulky Waste Items

Furniture and other bulky waste items (such as carpet, etc.) may occasionally be generated by the commercial tenants. The collection of bulky waste will be arranged, as required by the tenant. If residents wish to dispose of furniture, this can be brought a civic amenity centre.

Abandoned Bicycles

Bicycle parking areas are planned for the development. As happens in other developments, residents sometimes abandon faulty or unused bicycles, and it can be difficult to determine their ownership. Abandoned bicycles should be donated to charity if they arise or facilities management may arrange collection by a licensed waste contractor.

5.5 Waste Storage Area Design

The commercial and residential WSAs will be designed and fitted-out to meet the requirements of relevant design Standards, including:

- Be fitted with a non-slip floor surface;
- Provide ventilation to reduce the potential for generation of odours with a recommended 6-10 air changes per hour for a mechanical system for internal WSA;
- Provide suitable lighting – a minimum Lux rating of 400 is recommended;
- Be easily accessible for people with limited mobility;
- Be restricted to access by nominated personnel only;
- Be supplied with hot or cold water for disinfection and washing of bins;
- Be fitted with suitable power supply for power washers;
- Have a sloped floor to a central foul drain for bins washing run-off;
- Have appropriate signage placed above and on bins indicating correct use;
- Robust design of doors to bin area incorporating steel sheet covering where appropriate;
- Have access for potential control of vermin, if required; and
- Be fitted with CCTV for monitoring.

The facilities management company, the commercial tenants and residents will be required to maintain the bins and storage areas in good condition as required by the DCC Waste Bye-Laws.

5.6 Facility Management Responsibilities

It shall be the responsibility of the facilities manager to ensure that all waste generated is managed to ensure correct storage prior to collection by an appropriately permitted waste management company.

The facilities manager will provide the following items to all residents, commercial tenants and any facilities management team appointed*:*

- Provision of a Waste Management Plan document, prepared by the facilities manager, to all residents, commercial tenants and facilities management staff. It shall clearly state the methods of source waste segregation, storage, reuse and recycling initiatives that shall apply to the management of the development;
- Provision and maintenance of appropriate graphical signage to inform residents and the commercial tenants of their obligation to reduce waste, segregate waste and dispose of it in the correct bin;
- Preparation of an annual waste management report for all residents, the commercial tenants and staff to view;
- Designation of access routes to common waste storage areas to ensure safe access from the unit by mobility impaired persons;
- Provision of an appropriately qualified and experienced staff member, who will be responsible for all aspects of waste management at the development;

- Frequent inspection of waste storage areas and signing of a monitoring check list, which shall be displayed within the area; and
- Maintenance of a register, detailing the quantities and breakdown of wastes collected from the development and provision of supporting documentation by the waste collector to allow tracking of waste recycling rates.

5.7 Pest Management

A pest control operator will be appointed as required to manage pests onsite during the operational phase of this development. All waste generated within the development will be stored in closed waste receptacles both within the residential and commercial units and within the WSAs. Any waste receptacles will be carefully managed to prevent leaks, odours and pest problems.

The WSAs will have access for potential control of vermin, if required, be supplied with hot or cold water, drainage point and will be regularly inspected by facilities management to deter pests.

6. SUMMARY AND CONCLUSION

In summary, this OWMP presents a waste strategy that addresses all legal requirements, waste policies and best practice guidelines and demonstrates that the required storage areas have been incorporated into the design of the proposed development.

Implementation of this OWMP will ensure a high level of recycling, reuse and recovery at the development. All recyclable materials will be segregated at source to reduce waste contractor costs and ensure maximum diversion of materials from landfill, thus contributing to the targets set out in the *NWMPCE*.

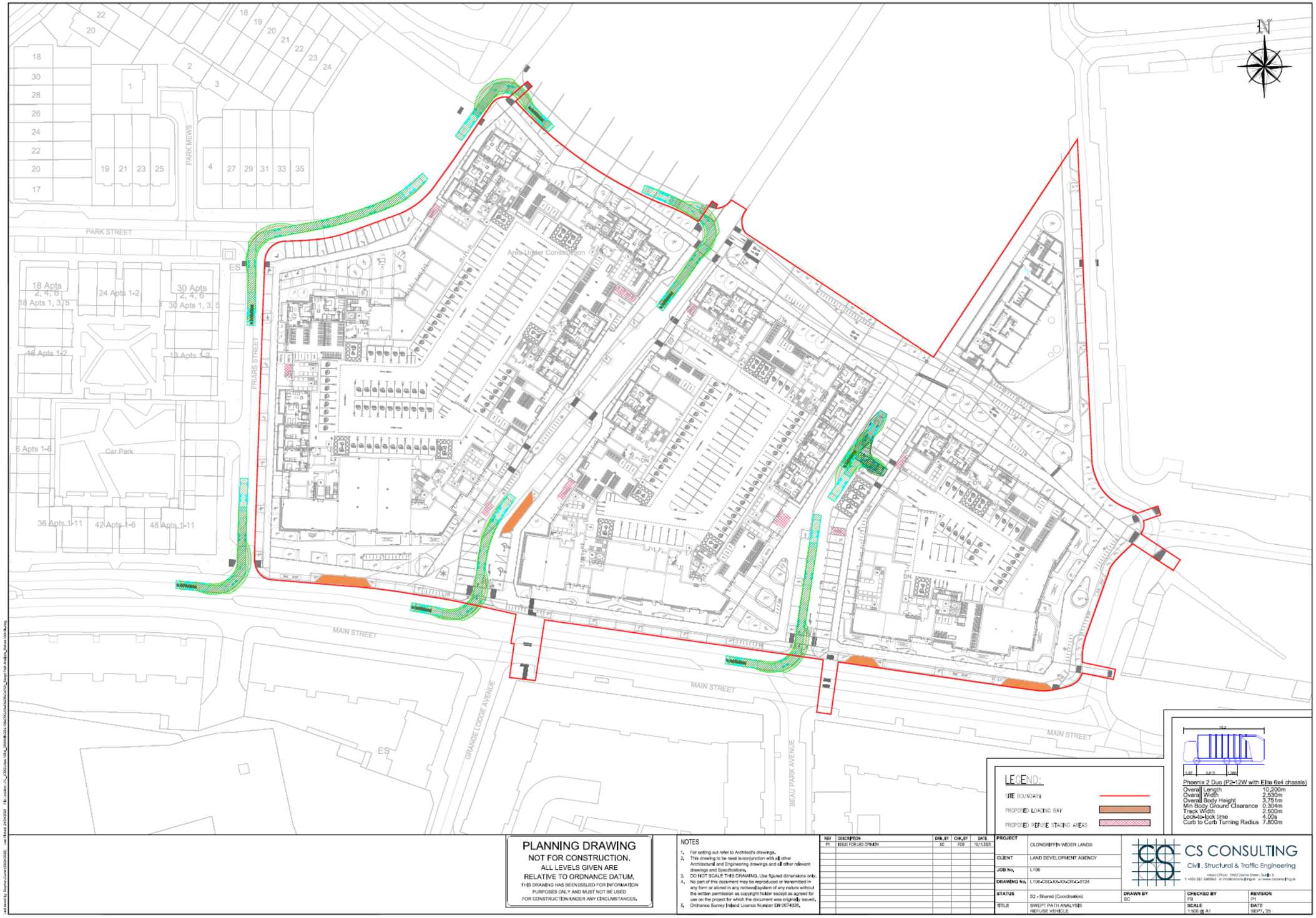
Adherence to this plan will also ensure that waste management at the development is carried out in accordance with the requirements of the *DCC Waste Bye-Laws.*

The waste strategy presented in this document will ensure sufficient storage capacity is provided for the estimated quantity of segregated waste. The designated areas for waste storage will provide sufficient room for the required receptacles in accordance with the details of this strategy.

7. REFERENCES

1. Waste Management Act 1996 as amended.
2. Environmental Protection Agency Act 1992 as amended.
2. Litter Pollution Act 1997 as amended;
4. Regional Waste Management Planning Offices, *The National Waste Management Plan for a Circular Economy 2024 - 2030 (2024).*
5. Dublin City Council (DCC) *Dublin City Council (Storage, Presentation and Segregation of Household and Commercial Waste) Bye-Laws (2018*)
6. Department of Environment and Local Government (DoELG) *Waste Management – Changing Our Ways, A Policy Statement* (1998)
7. Department of Environment, Heritage and Local Government (DoEHLG) *Preventing and Recycling Waste - Delivering Change* (2002)
8. DoELG, *Making Ireland's Development Sustainable – Review, Assessment and Future Action (World Summit on Sustainable Development)* (2002)
9. DoEHLG, *Taking Stock and Moving Forward* (2004)
10. Department of Communications, Climate Action and Environment (DCCAE), *Waste Action Plan for the Circular Economy - Ireland's National Waste Policy 2020-2025* (2020).
11. DCCAE, *Whole of Government Circular Economy Strategy 2022-2023 'Living More, Using Less'* (2021).
12. Department of Climate, Energy and the Environment (DCEE), *Whole of Government Circular Economy Strategy 2026-2028: Accelerating Action (2026).*
13. Department of Housing, Local Government and Heritage authored *Sustainable Residential Development and Compact Settlements - Guidelines for Planning Authorities (2024)*
14. The Environmental Protection Agency (EPA) 'National Waste (Database) Reports' which as of 2023 have been renamed "Circular Economy and Waste Statistics Highlight Reports (2025).
15. Waste Management (Landfill Levy) Regulations 2015 (as amended)
16. Circular Economy (Waste Recovery Levy) Regulations 2024
17. DCC*, Dublin City Development Plan 2022-2028 (2022).*
18. Planning and Development Act 2000 (S.I. No. 30 of 2000) as amended
19. European Waste Catalogue - Council Decision 94/3/EC (as per Council Directive 75/442/EC).
20. Hazardous Waste List - Council Decision 94/904/EC (as per Council Directive 91/689/EEC).
21. EPA, *European Waste Catalogue and Hazardous Waste List* (2002)
22. EPA, *Waste Classification – List of Waste & Determining if Waste is Hazardous or Non-Hazardous* (2018)
23. BS 5906:2005 Waste Management in Buildings – Code of Practice.
24. Department of Transport, Tourism and Sport and Department of Housing, Planning and Local Government, *Design Manual for Urban Roads and Streets* (2019)
25. Department of Housing Local Government and Heritage *(*DoHLGH), *Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities* (2025)

APPENDIX A. ROAD SWEEP ANALYSIS FOR REFUSE TRUCK



Appendix 20.1 Statement of Design Acceptance

Gary Lindsay
CS Consulting Group
1st Floor
19-22 Dame Street
Dublin 2
D02E267

Uisce Éireann
Bosca OP 448
Oifig Sheachadta na
Cathrach Theas
Cathair Chorcaí

Uisce Éireann
PO Box 448
South City
Delivery Office
Cork City

www.water.ie

6 May 2026

Re: Design Submission for Site at, Clongriffin, Dublin 13, Dublin (the "Development") (the "Design Submission") / Connection Reference No: CDS25001826

Dear Gary Lindsay,

Many thanks for your recent Design Submission.

We have reviewed your proposal for the connection(s) at the Development. Based on the information provided, which included the documents outlined in Appendix A to this letter, Uisce Éireann has no objection to your proposals.

This letter does not constitute an offer, in whole or in part, to provide a connection to any Uisce Éireann infrastructure. Before you can connect to our network you must sign a connection agreement with Uisce Éireann. This can be applied for by completing the connection application form at www.water.ie/connections. Uisce Éireann's current charges for water and wastewater connections are set out in the Water Charges Plan as approved by the Commission for Regulation of Utilities (CRU)(Uisce_Éireann_Water_Charges_Plan_effective_01_Oct_2025.pdf).

You the Customer (including any designers/contractors or other related parties appointed by you) is entirely responsible for the design and construction of all water and/or wastewater infrastructure within the Development which is necessary to facilitate connection(s) from the boundary of the Development to Uisce Éireann's network(s) (the "**Self-Lay Works**"), as reflected in your Design Submission. Acceptance of the Design Submission by Uisce Éireann does not, in any way, render Uisce Éireann liable for any elements of the design and/or construction of the Self-Lay Works.

If you have any further questions, please contact your Uisce Éireann representative:
Name: Antonio Garzon Mielgo
Email: antonio.garzonmielgo@water.ie

Yours sincerely,

Dermot Phelan

Dermot Phelan
Connections and Developer Services

Stiúrthóirí / Directors: Jerry Grant (Cathaoirleach / Chairperson), Niall Gleeson (POF / CEO), Douglas Millican, Michael Nolan, Patricia King, Eileen Maher, Cathy Mannion, Michael Walsh, Rena O'Sullivan and Orlagh Nevin.
Oifig Chláraithe / Registered Office: Teach Colvill, 24-26 Sráid Thalbóid, Baile Átha Cliath 1, D01 NP86 / Colvill House, 24-26 Talbot Street, Dublin, Ireland D01NP86
Is cuideachta ghníomhaíochta ainmnithe atá faoi theorainn scaireanna é Uisce Éireann / Uisce Éireann is a designated activity company, limited by shares. Cláraithe in Éirinn Uimh.: 530363 / Registered in Ireland No.: 530363.

UE / LH / OP448 / 0725

Appendix A

Document Title & Revision

- L106-CSC-UE-SODA-0002 - Proposed Drainage Layout Rev P1
- L106-CSC-UE-SODA-0003 - Proposed Watermain Layout Rev P1
- L106-CSC-UE-SODA-0009 - Proposed Foul Water Long Sections Rev P1

Additional Comments

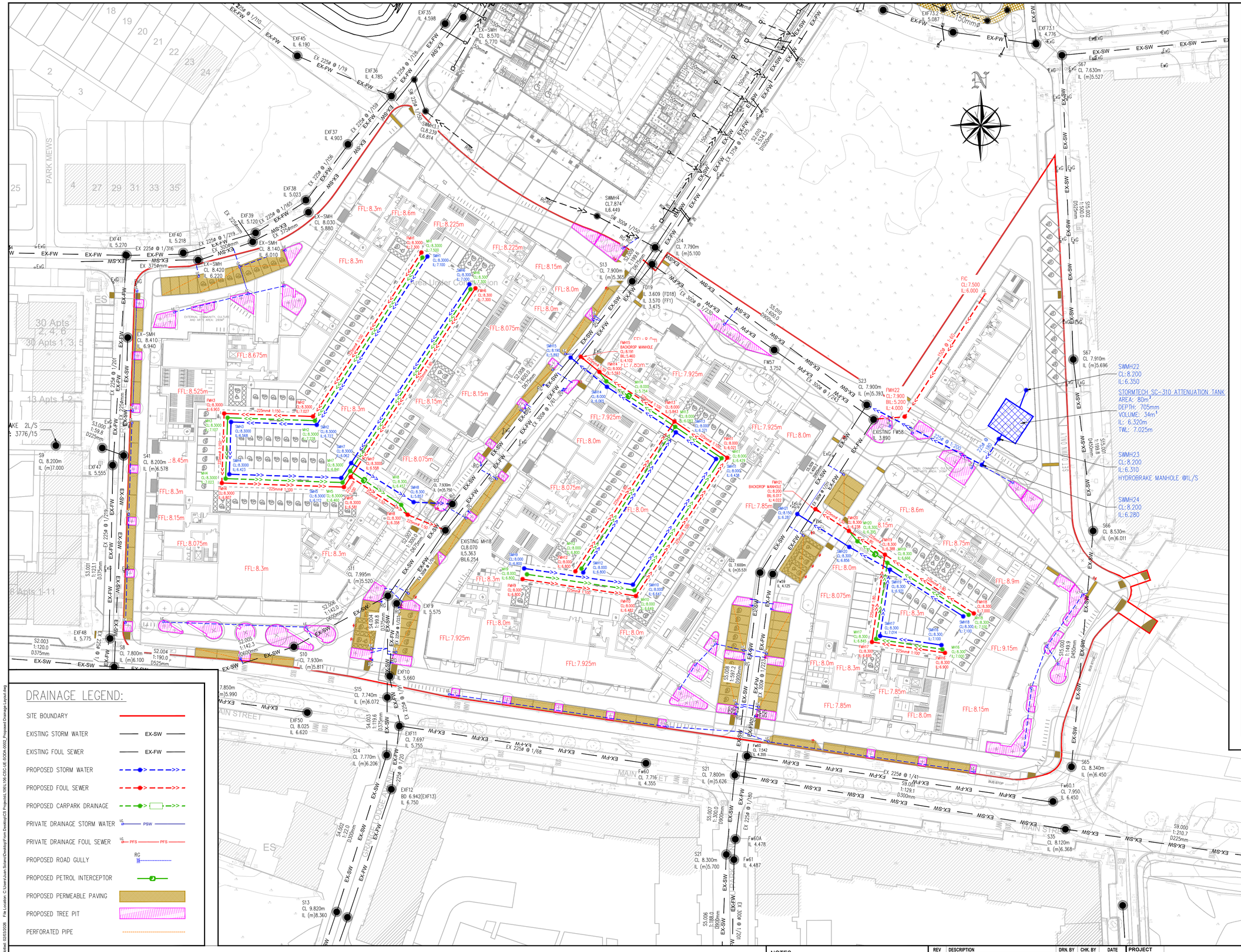
The design submission will be subject to further technical review at connection application stage.

Uisce Éireann cannot guarantee that its Network in any location will have the capacity to deliver a particular flow rate and associated residual pressure to meet the requirements of the relevant Fire Authority, see Section 1.17 of Water Code of Practice.

The proposed basement car park shall be designed to prevent surface water from the Site and surrounding areas from entering the car park. Details of these arrangements shall be provided at the connection application stage.

*For further information, visit **www.water.ie/connections***

Notwithstanding any matters listed above, the Customer (including any appointed designers/contractors, etc.) is entirely responsible for the design and construction of the Self-Lay Works. Acceptance of the Design Submission by Uisce Éireann will not, in any way, render Uisce Éireann liable for any elements of the design and/or construction of the Self-Lay Works.



DRAINAGE LEGEND:

- SITE BOUNDARY
- EXISTING STORM WATER — EX-SW
- EXISTING FOUL SEWER — EX-FW
- PROPOSED STORM WATER
- PROPOSED FOUL SEWER
- PROPOSED CARPARK DRAINAGE
- PRIVATE DRAINAGE STORM WATER — PSW
- PRIVATE DRAINAGE FOUL SEWER — PFS
- PROPOSED ROAD GULLY — RG
- PROPOSED PETROL INTERCEPTOR
- PROPOSED PERMEABLE PAVING
- PROPOSED TREE PIT
- PERFORATED PIPE

NOTES:

1. ALL LEVELS ARE TO MALIN HEAD ORDNANCE DATUM.
2. ALL WORKS IN CONFINED SPACES SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH THE PROVISIONS ON "SAFE WORK" "IN CONFINED SPACES" CODE OF PRACTICE FOR WORKING IN CONFINED SPACES, PUBLISHED BY THE HEALTH & SAFETY AUTHORITY.
3. ALL SITE DEVELOPMENT WORKS SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH THE CONSTRUCTION DRAWINGS.
4. ALL DRAINAGE WORKS SHALL BE CARRIED OUT IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY, TII PUBLICATIONS SERIES 500, THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS AND THE UISCE EIREANN CODE OF PRACTICE AND STANDARD DETAILS.
5. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTATION, INCLUDING DRAWINGS AND SPECIFICATIONS.
6. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR LOCATING, PROTECTING AND MAINTAINING ALL EXISTING SERVICES WITHIN THE SITE BOUNDARY AND IN THE AREAS AFFECTED BY THE WORKS. THE ENGINEER HAS PROVIDED INFORMATION ON KNOWN SERVICES BUT GIVES NO GUARANTEE THAT THIS INFORMATION PROVIDED BY THE THIRD PARTIES, IS CORRECT OR THAT THESE ARE THE ONLY SERVICES ON THE SITE.
7. SUITABLE SHORT LENGTHS OF PIPE OR ROCKER PIPES SHALL BE INSTALLED TO PROVIDE A FLEXIBLE JOINT WITHIN 1000MM OF THE OUTER FACE OF THE MANHOLE ON ALL SEWERS AND BRANCHES.
8. WHERE ROCK IS MET IN TRENCHES IT SHALL BE EXCAVATED AND TRIMMED TO 300MM BELOW THE UNDERSIDE OF PIPELINE.
9. GRANULAR MATERIAL 5mm – 20mm NOMINAL SIZE GRADED AGGREGATE (TO COMPLY WITH TABLE 1 OF B5) TO BE USED FOR BEDDING, HAUNCHING AND SURROUND TO PIPES WHERE SPECIFIED.
10. CONCRETE MIX C16/20 TO BE USED FOR BEDDING, HAUNCHING AND SURROUND WHERE SPECIFIED.
11. WHERE RIGID PIPES WITH FLEXIBLE JOINTS ARE USED WITH CONCRETE BEDS FOR DRAINS AND WATERMAINS, VERTICAL MOVEMENT JOINTS SHALL BE PROVIDED IN THE BEDS AT MAX INTERVALS OF 5.0M AND ALIGNED WITH FACE OF PIPE SOCKET. JOINTS TO BE MINIMUM 12m WIDE AND FILLED WITH FLEXCELL OR SIMILAR APPROVED MATERIAL.
12. SURFACE WATER AND FOUL DRAINS SHALL BE SURROUNDED BY 150 THICKNESS OF C16/20 CONCRETE IF COVER TO PIPE IS LESS THAN: –
    - –1.2m IN ROADS AND DRIVEWAYS
    - –0.9m IN OPEN SPACES AND PATHS NOT NEAR CARRIAGEWAYS.
13. FOUL MANHOLES LOCATED IN GRASSED AREAS TO BE SURROUNDED BY A CONCRETE PLINTH 200mm ALL ROUND AND 100mm DEEP FORMED WITH C20/25 20mm CONCRETE.
14. ALL PIPE RUNS SHALL BE LAID IN STRAIGHT LINES BOTH VERTICALLY AND HORIZONTALLY TO THE SPECIFIED GRADIENTS BETWEEN MANHOLES. NO DEVIATIONS OR BENDS SHALL BE PERMITTED.
15. REFER TO "THE GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS" FOR DETAILS OF SURFACE WATER MANHOLE STANDARDS AND UISCE EIREANN CODE OF PRACTICE AND STANDARD DETAILS FOR DETAILS OF FOUL MANHOLE STANDARDS..
16. THE CONTRACTOR SHALL CARRY OUT A CCTV SURVEY REPORT OF THE COMPLETED STORM & FOUL NETWORK TO THE SATISFACTION OF THE LOCAL AUTHORITY AND REPORT TO BE ISSUED ON PRACTICAL COMPLETION.
17. THE LOCAL AUTHORITY MUST BE NOTIFIED AT LEAST 10 WORKING DAYS IN ADVANCE OF COMMENCEMENT OF WORKS.
18. PRIOR TO COMMENCEMENT OF CONSTRUCTION OUTFALL LEVELS FOR THE FOUL AND SURFACE WATER MANHOLES SHALL BE VERIFIED ON SITE.
19. PROPOSED FOUL SEWERS WILL BE EITHER CONCRETE, THERMOSTATIC STRUCTURED WALLED PIPES OR UNPLASTICISED PVC IN ACCORDANCE WITH SECTION 3.13 OF THE UISCE EIREANN WASTEWATER CODE OF PRACTICE. PROPOSED STORM DRAINS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF FINGAL CO. CO.
20. TYPICAL SERVICE LAYOUT DISTANCES (HORIZONTAL AND VERTICAL) AS PER UISCE EIREANN DETAIL STD–WW–05
21. THE EXTERNAL FACE OF PROPOSED MANHOLE CHAMBERS IN PUBLIC ROADS WILL BE A MINIMUM OF 0.5m FROM THE PROPOSED PUBLIC ROAD KERB LINE IN ACCORDANCE WITH SECTION 1.23 OF THE UISCE EIREANN WASTEWATER CODE OF PRACTICE
22. APPROPRIATE MEASURES ADHERING TO SECTION 3.21 OF THE UISCE EIREANN WASTEWATER CODE OF PRACTICE WILL BE PROVIDED TO DRAINAGE INFRASTRUCTURE IN CLOSE PROXIMITY TO PLANTING TO PREVENT ANY DAMAGE TO INFRASTRUCTURE VIA ROOT INGRESS OR NEGATIVE IMPACTS TO PLANTING SUCH AS DAMAGE OF TREE ROOTS. RESTRICTION ON PLANTING ADJACENT TO WASTEWATER INFRASTRUCTURE AS PER DETAIL STD–WW–06 AND STD–WW–06A.

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NOTES

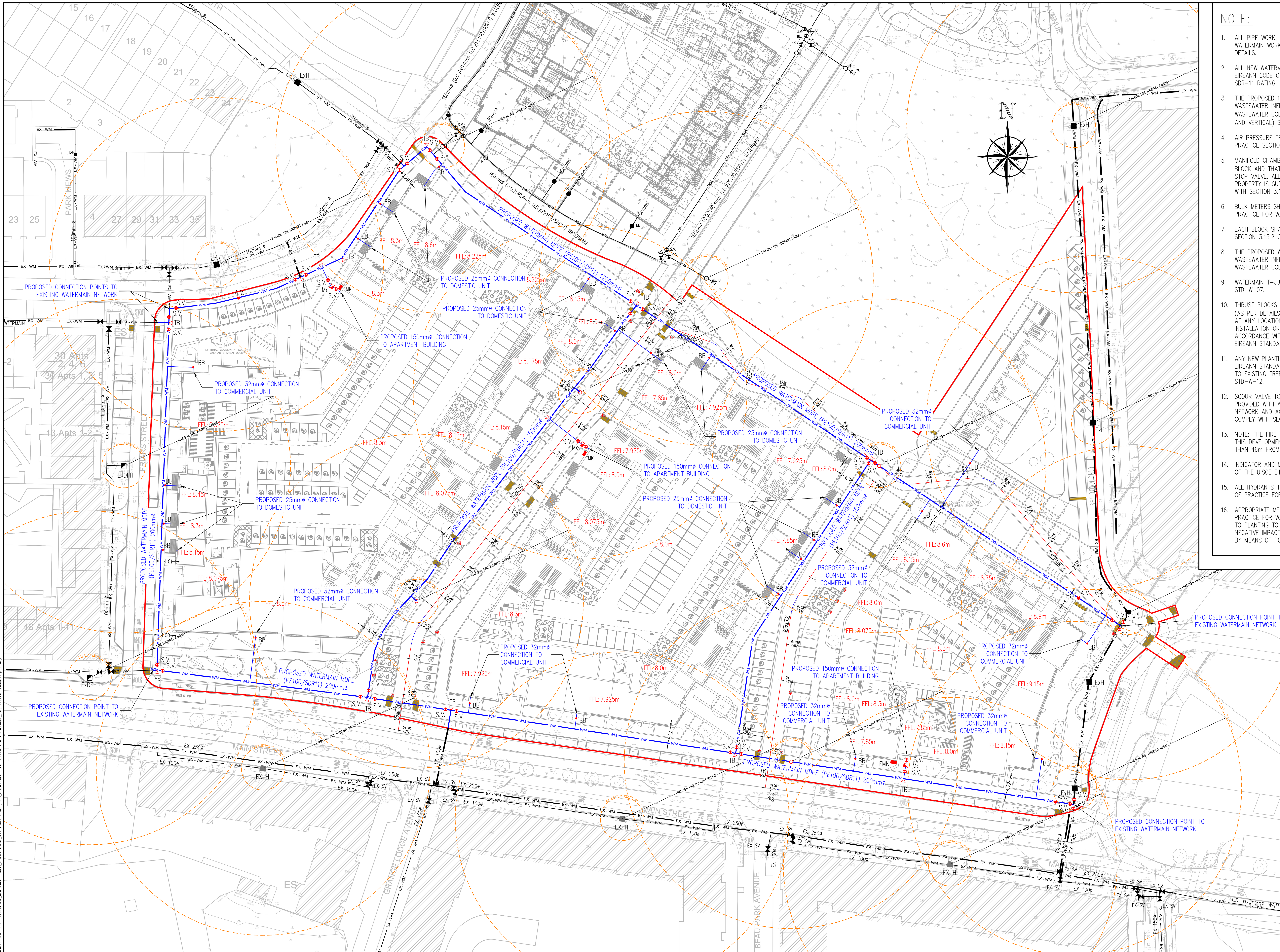
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P1	Issued to Uisce Eireann	JS	NA	20.02.2026

PROJECT	CLONGRIFFIN WIDER LANDS		
CLIENT	LAND DEVELOPMENT AGENCY		
JOB No.	L106		
DRAWING No.	L106-CSC-UE-SODA-0002		
STATUS	STATUS S2 - Suitable for Information	DRAWN BY: JS	CHECKED BY: NA
TITLE	Proposed Drainage Layout	SCALE: 1:500 @ A1	REVISION: P1
			DATE: FEB 2026

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NOTE:

1. ALL PIPE WORK, VALVES, CHAMBERS, NETWORK ARRANGEMENTS AND ALL ASSOCIATED WATERMAIN WORKS TO COMPLY WITH THE UISCE EIREANN INFRASTRUCTURE STANDARD DETAILS.
2. ALL NEW WATERMAIN MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 3.9 OF THE UISCE EIREANN CODE OF PRACTICE. MDPE PIPES SHALL BE OF A TYPE PE–100 AND HAVE AN SDR–11 RATING. THEY SHALL CONFORM TO IS EN 12201: PART 1, PART 2 AND PART 3.
3. THE PROPOSED 150mm WATERMAINS WILL BE LOCATED A MINIMUM OF 300mm FROM THE WASTEWATER INFRASTRUCTURE IN ACCORDANCE WITH SECTION 3.5.18 OF THE UISCE EIREANN WASTEWATER CODE OF PRACTICE AND TYPICAL SERVICE LAYOUT DISTANCES (HORIZONTAL AND VERTICAL) SHALL BE AS PER UISCE EIREANN STANDARD DETAIL STD–W–11.
4. AIR PRESSURE TESTS TO ALL WORKS TO BE TAKEN IN CHARGE TO UISCE EIREANN CODE OF PRACTICE SECTION 4.10.
5. MANIFOLD CHAMBERS WILL BE USED TO PROVIDE A COMMUNAL BOX FOR THE APARTMENT BLOCK AND THAT EACH DWELLING UNIT WILL HAVE IT'S OWN SUPPLY PIPE AND METER AND STOP VALVE. ALL METERS IN THE MANIFOLD SHALL BE TAGGED TO INDICATE WHICH PROPERTY IS SUPPLIED AND ANY UNUSED OUTLETS WILL BE BLANKED OFF IN ACCORDANCE WITH SECTION 3.15.3 OF THE UISCE EIREANN WASTEWATER CODE OF PRACTICE.
6. BULK METERS SHALL COMPLY WITH SECTION 3.15.4 OF THE UISCE EIREANNS CODE OF PRACTICE FOR WATER INFRASTRUCTURE.
7. EACH BLOCK SHALL HAVE AN INDIVIDUAL CONNECTION WITH BOUNDARY BOX AS PER SECTION 3.15.2 OF THE UISCE EIREANNS CODE OF PRACTICE FOR WATER INFRASTRUCTURE.
8. THE PROPOSED WATERMAINS WILL BE LOCATED A MINIMUM OF 300mm FROM THE WASTEWATER INFRASTRUCTURE IN ACCORDANCE WITH SECTION 3.5.18 OF THE UISCE EIREANN WASTEWATER CODE OF PRACTICE.
9. WATERMAIN T–JUNCTIONS SHALL BE AT 90 DEGREE ANGLES AS PER UISCE EIREANN DETAIL STD–W–07.
10. THRUST BLOCKS TO BE PROVIDED AT DEAD ENDS, BENDS, TEE JUNCTIONS, VALVE CHAMBERS (AS PER DETAILS) OR ANY ABRUPT CHANGE IN VERTICAL OR HORIZONTAL DIRECTION AND AT ANY LOCATION WHERE WATER PRESSURE IS LIKELY TO DISTORT THE PIPE LINE INSTALLATION OR CAUSE DISPROPORTIONATE MOVEMENT. THRUST BLOCKS TO BE IN ACCORDANCE WITH SECTION 4.9 OF THE UISCE EIREANN CODE OF PRACTICE AND UISCE EIREANN STANDARD DETAIL STD–W–28.
11. ANY NEW PLANTING OF TREES, SHRUBS ETC. TO BE IN STRICT ACCORDANCE WITH THE UISCE EIREANN STANDARD DETAIL STD–W–12A. ANY PROPOSED WATERMAIN LOCATED IN PROXIMITY TO EXISTING TREES SHALL BE IN ACCORDANCE WITH STANDARD UISCE EIREANN DETAIL STD–W–12.
12. SCOUR VALVE TO BE LOCATED AT SITE LOW POINT. THE SCOUR CHAMBER IS TO BE PROVIDED WITH A NON–RETURN VALVE TO PREVENT BACK FLOW TO THE WATER SUPPLY NETWORK AND AGREED WITH THE LOCAL AUTHORITY. SCOUR VALVE AND CHAMBER TO COMPLY WITH SECTION 3.16.4 AND 3.21 OF THE UISCE EIREANN CODE OF PRACTICE.
13. NOTE: THE FIRE SAFETY CERTIFICATE HAS NOT BEEN COMPLETED YET, BUT AS PART OF THIS DEVELOPMENT, IT IS CONFIRMED THAT HYDRANTS SHALL NOT BE LOCATED ANY MORE THAN 46m FROM ANY PART OF THE DEVELOPMENT UNITS.
14. INDICATOR AND MARKER POSTS TO BE PROVIDED AT ALL CHAMBERS AS PER SECTION 3.23 OF THE UISCE EIREANN CODE OF PRACTICE FOR WATER
15. ALL HYDRANTS TO BE IN COMPLIANCE WITH SECTION 3.5.25 OF THE UISCE EIREANN CODE OF PRACTICE FOR WATER
16. APPROPRIATE MEASURES ADHERING TO SECTION 3.26 OF THE UISCE EIREANN CODE OF PRACTICE FOR WATER WILL BE PROVIDED TO WATER INFRASTRUCTURE IN CLOSE PROXIMITY TO PLANTING TO PREVENT ANY DAMAGE TO INFRASTRUCTURE VIA ROOT INGRESS OR NEGATIVE IMPACTS TO PLANTING SUCH AS DAMAGE OF TREE ROOTS. THIS WILL BE ACHIEVED BY MEANS OF POLYETHYLENE PIPES WITH WELDED JOINTS AND ROOT PROTECTION BARRIERS.

WATERMAIN LEGEND:

SITE BOUNDARY	
EXISTING WATERMAIN	EX - WM
PROPOSED WATERMAIN	WM
PROPOSED SLUICE VALVE	S.V.
PROPOSED AIR VALVE	A.V.
PROPOSED HYDRANT	H.
PROPOSED BOUNDARY BOX (APARTMENT BLOCK METER)	Me
FLOW METER KIOSK	FMK
PROPOSED BULK METER	BB
THRUST BLOCK AS PER IRISH WATER STANDARD DETAIL STD–W–28	TB

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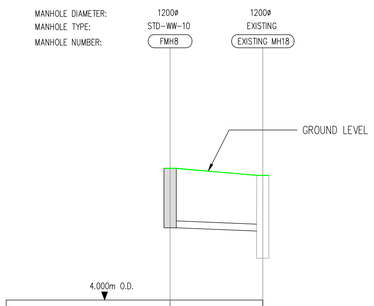
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DRAWING No.	L106-CSC-UE-SODA-0003
STATUS	STATUS S2 - Suitable for Information
DRAWN BY	JS
CHECKED BY	NA
REVISION	P1
TITLE	Proposed Watermain Layout
SCALE	1:500 @ A1
DATE	FEB 2026

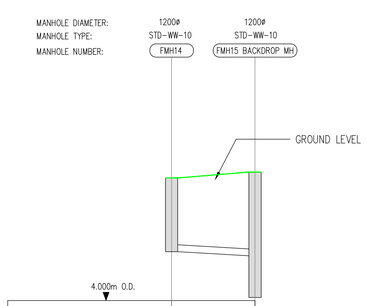
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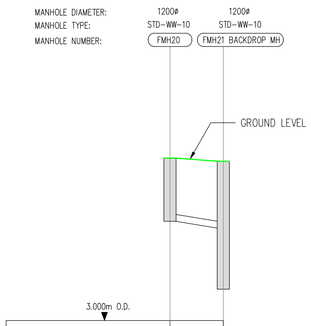
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SLOPE (1:X)	50	
COVER LEVEL (m)	8.300	8.070
INVERT LEVEL (m)	6.358	5.264 5.163
LENGTH (m)	15.12m	

FOUL SEWER FROM FMH8 TO EX MH18.
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



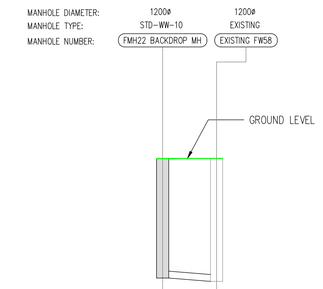
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SLOPE (1:X)	50	
COVER LEVEL (m)	8.000	8.191
INVERT LEVEL (m)	5.593	5.460 4.102
LENGTH (m)	13.62m	

FOUL SEWER FROM FMH14 TO FMH15.
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



DIA (mm)	225	
SLOPE (1:X)	50	
COVER LEVEL (m)	8.300	8.200
INVERT LEVEL (m)	6.238	6.017 4.022
LENGTH (m)	8.70m	

FOUL SEWER FROM FMH20 TO FMH21.
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100



DIA (mm)	225	
SLOPE (1:X)	50	
COVER LEVEL (m)	7.900	7.900
INVERT LEVEL (m)	5.200 4.000	3.890
LENGTH (m)	8.80m	

FOUL SEWER FROM FMH22 TO EX FW58.
HORIZONTAL SCALE 1:500
VERTICAL SCALE 1:100

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CLIENT	LAND DEVELOPMENT AGENCY
JOB No.	L106
DRAWING No.	L106-CSC-UE-SODA-0009
STATUS	STATUS S2 - Suitable for Information
TITLE	Proposed Foul Water Long Sections

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JS	NA	P1
SCALE		**DATE**
AS SHOWN @ A1		FEB 2026

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5.0 Site Strategy - Phase 2

5.5 Waste Storage & Collection

Waste Storage:

All waste storage areas are located at the ground level of each zone - with a storage area either dedicated to or shared per core.

The Storage areas are accessible from the street with a designated staging area.

Four bin types are required – Recycling, general, organic and glass.

Waste storage areas and designs have been reviewed and developed i conjunction with AWN.



Legend

- Waste storage (Residents & Non Residential Uses)
- Bin Staging Area
- Bin Storage Entrances (Residents & Non Residential Uses)



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