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CONSTRUCTION / DEMOLITION WASTE MANAGEMENT PLAN FOR DOLPHINS BARN STREET

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CONTENTS:

1.0 Introduction…… 3

2.0 Description of Project…… 3

3.0 Proposals for Minimisation, Reuse and Recycling of C&D Waste……. 4

4.0 Excavation Procedures…….. 5

5.0 Assignment of Responsibilities…… 6

6.0 Training…….. 6

7.0 Waste Auditing…….. 7

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1.0 Introduction

Construction Waste Management Plan (CWMP) provides information on how the management of waste produced by the site may be carried out and also how it should be in accordance with all current legal and industry standards including;

- Waste Management Act 1996 and amendments and subordinate regulations;
- Best Practice Guidelines on the preparation of waste management plans for construction and demolition projects, Department of the Environment and local Government 2006;
- Litter Pollution Act 1997 and amendments and subordinate regulations;
- The Planning & Development Act 2000 and amendments and subordinate regulations;
- The Environmental Protection Act 1992 and amendments and subordinate regulations;
- The Kildare County Council Development Plan 2023-2029
- Eastern-Midlands Region Waste Management Plan 2015-2021;
- Air Quality Monitoring and Noise Control Unit's Good Practice Guide for Construction and Demolition;
- Construction and Demolition waste management - A hand book for contractors and site managers, FAS and the Construction Industry Federation 2002;

2.0 Description of Project

The Iveagh Trust intend to apply to Dublin City Council for permission for a Large-Scale Residential Development on a site of c.0.358 ha at 43- 50 Dolphins Barn Street, Dublin 8.

The site is bound by Dolphin's Barn Street to the east, No. 51 Dolphin's Barn Street to the northeast, No. 7 Poole Terrace to the south and boundaries of rear gardens of the residential properties located on Reuben Street and Emerald Square to the west and north of the application site respectively. The proposed development consists of the following:

- The demolition of all existing buildings on site (comprising the former factory building to the rear of the site and buildings which front onto Dolphin's Barn Street (No's 43-50)), which have a total gross floor area of c.3,243.5 sqm.

- The construction of a 1-9 storey Large Scale Residential Development (LRD) comprising 119 no. apartments (70 no. 1 bed units and 49 no. 2 bed units) and a community hub space at ground floor level totalling c.523.5 sqm.

- All apartments are provided with balconies/terraces, which are located on the eastern, western, southern and northern elevations of the building.

- The proposal includes external communal open space areas (c.707 sqm) at ground floor level, and provision of PV panels at roof level.

- The proposal provides a total of 15 no. car parking spaces (12 no. for residents, 2 no. for the community hub, including 1 no. accessible parking space, and 1 no. car sharing space). 172 no. cycle parking spaces are provided for residents, and 60 no. cycle parking spaces are provided for visitors to the residential element of the development. 2 no. long stay cycle parking spaces, and 6 no. short stay cycle parking spaces are provided associated with the community hub element of the development.

- The proposal includes for alterations and upgrade of the site boundary walls / treatment.

- The proposal includes 1 no. shared pedestrian/ vehicular entrance point from Dolphin's Barn Street, alterations to the public footpath/street along Dolphins Barn Street, the provision of 2 no. ESB sub-station's, plant and storage rooms, a comms room, a LV switch room, a life safety room, bin stores and all associated and ancillary works.

- The associated site and infrastructural works include provision for water services; foul and surface water drainage and connections; attenuation proposals; permeable paving; all landscaping works including hard and soft landscaping; blue/green roofs; boundary treatment; internal roads and footpaths; electrical services; and all associated site development works above and below ground.

- The application may be inspected online on the following website set up by the applicant: www.dolphinsbarnstreetlrd.ie

It is anticipated that the works will consist of the following non exhaustive activities:

- Securing site with installation of hoarding
- Setting up site facilities
- Review of services location and carrying out works to protect retained services
- Demolitions
- Piling
- Installation of services
- Construction of structure
- Demobilisation

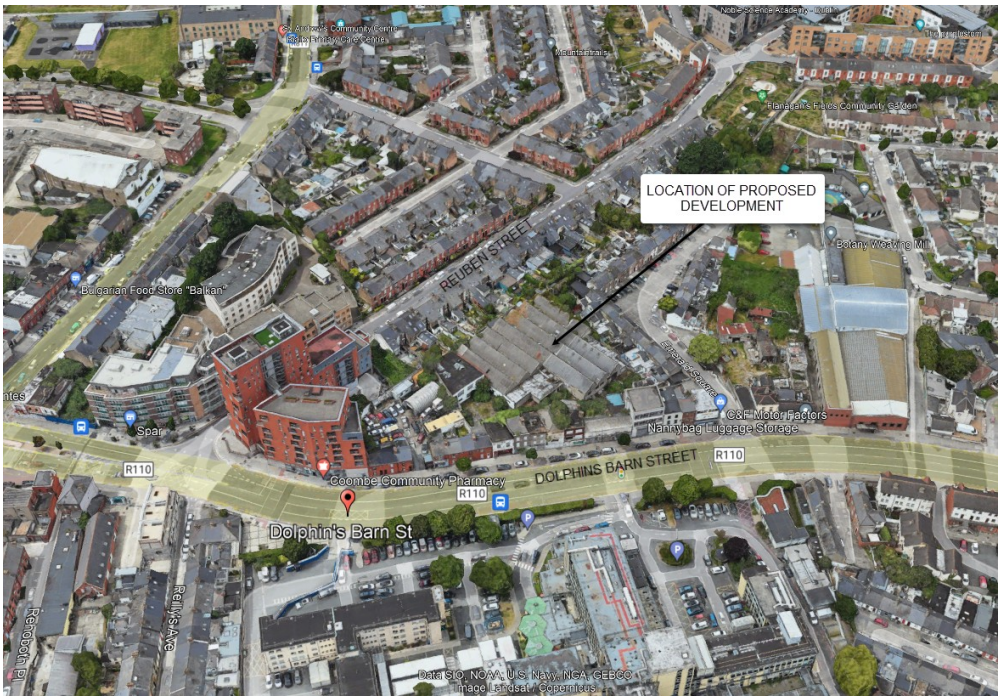


Figure 01 – Site Location

3.0 Proposals for Minimisation, Reuse and Recycling of C&D Waste

Waste generated on site must be identified and segregated accordingly. Any reusable materials should be set aside in a designated area of the site for transport to a licensed recycling facility. All non-reusable material should be segregated and disposed into specific skips located on a designated area of the site.

In the course of the Project, it is estimated that the following quantities of C&D Wastes/material surpluses will arise:

C&D Waste Material	Quantity (tonnes)
Made ground (hazardous)	To be confirmed if any
Made Ground	TBC by Contractor
Masonry / Brick	TBC by Contractor
Concrete	TBC by Contractor
Wood	TBC by Contractor
Steel	TBC by Contractor
Other Hazardous Materials	To be confirmed if any
Waste Materials eg. windows, cast iron pipes, roof tiles	TBC by Contractor

Table 1: Estimated C&D Waste Arisings on Site

C&D Waste will arise on the Project mainly from demolition of the buildings and excavation of made ground for the foundations.

Excavated made ground will be carefully stored in segregated piles on the site and subsequent removed from site to a licenced facility.
All spoil will be removed from site by an approved contractor.

Macadam waste will be crushed for subsequent separation and disposal at a remote facility.

Packaging will be source segregated for recycling.

Hazardous wastes, if present, will be identified by specialist, removed and kept separate from other C&D Waste materials in order to avoid further contamination. Other C&D Waste materials will be collected in receptacles with mixed C&D Waste materials, for subsequent separation and disposal at a remote facility.

C&D waste-derived aggregates are considered suitable for certain on-site construction applications. However, C&D Waste arising from the project, will not be used within the works:

It is anticipated that waste materials will have to be moved off site. It is the intention to engage specialist waste service Contractors, who will possess the requisite authorisations, for the collection and movement of waste off-site, and to bring the material to a facility which currently holds a Waste Permit.
Accordingly, it will be necessary to arrange the following waste authorisations specifically for the Project:

Authorisation Type	Specific Need for Project (Yes/No?)
Waste Licence	-
Waste Permit	-
Waste Collection Permit	-
Transfrontier Shipment Notification	-
Movement of Hazardous Waste Form	-

Table 2: Specific Waste Authorisations Necessary for the Scheme

4.0 Excavation Procedures

Waste Arising's from Excavations
The proposed construction will require the excavation of made ground for the new foundations and trenches for services. Excavated material will generally require disposal off-site to a licensed facility. The excavated material should be carefully stored and segregated at a designated staging area prior to the removal off site.

The works shall be undertaken in a manner in which to maximise the potential for recycling, including source segregation where appropriate. Activities shall be carried out in the following sequence:

Works Activity Sequence	General Description
Disconnection of Services/Vermin Control	e.g. Shutoff of E.S.B.
Inventory of Hazardous Wastes	e.g. Coal tar etc.
Source Segregation of Material Fractions	Separation into Designated Material Fractions
Transport of Material from Site to Treatment Facilities	e.g. C/D Waste Recycling Facility
Transport of Material from Site to Controlled Disposal Sites	e.g. Inertised Hazardous Landfill Site
Site Preparation/Restoration	e.g. Hardstanding, Landscaping

Table 3: Sequence of Excavation Works

One truck can take approximately 4 - 5 loads per day dependant on how far the recycling facility is located. During the peak period of construction the truck movements may increase slightly but the inverse is also true i.e. the truck movements will be reduced over

certain periods. The duration of the peak period will depend on how the appointed contractor resources the project.

5.0 Assignment of Responsibilities

A Site Manager shall be designated as the C&D Waste Manager and have overall responsibility for the implementation of the Project Waste Management Plan. The C&D Waste Manager will be assigned the authority to instruct all site personnel to comply with the specific provisions of the Plan. At the operational level, a Site Engineer from the main contractor and Foreman from each sub-contractor on the site shall be assigned the direct responsibility to ensure that the discrete operations stated in the Waste Management Plan are performed on an on-going basis.

6.0 Training

Copies of the Waste Management Plan will be made available to all relevant personnel on site. All site personnel and sub-contractors will be instructed about the objectives of the Waste Management Plan and informed of the responsibilities which fall upon them as a consequence of its provisions. Where source segregation, selective demolition and material reuse techniques apply, each member of staff will be given instructions on how to comply with the Waste Management Plan. Posters will be designed to reinforce the key messages within the Waste Management Plan and will be displayed prominently for the benefit of site staff.

The C&D Waste Manager shall arrange for full details of all arisings, movements and treatment of construction and demolition waste to be recorded during the construction stage of the Project. Each consignment of C & D Waste taken from the site will be subject to documentation, which will conform to Table 4 and ensure full traceability of the material to its final destination.

Detail	Particulars
Name of Project of Origin	Maynooth University
Material being Transported	e.g. Made Ground
Quantity of Material	e.g. 10 tonnes
Date of Material Movement	e.g. 28.11.2024
Name of Carrier	e.g. Authorised Carriers Ltd.

Table 4: Details to be Included within Transportation Dockets

Details of the inputs of materials to the Construction site and the outputs of wastage arising from the Project will be investigated and recorded in a Waste Audit, which will identify the amount, nature and composition of the waste generated on the site. The Waste Audit will examine the manner in which the waste is produced and will provide a commentary highlighting how management policies and practices may inherently contribute to the production of construction and demolition waste. The measured waste quantities will be

used to quantify the costs of management and disposal in a Waste Audit Report, which will also record lessons learned from these experiences which can be applied to future projects. The total cost of C&D Waste management will be measured and will take account of the purchase cost of materials (including imported soil), handling costs, storage costs, transportation costs, disposal costs etc.

Costs will be calculated for the management of a range of C&D waste materials, using the format shown in Table 5 below:

Material	Estimated Quantities &Cost (tonnes & Euro)
Soil	
Quantity of Waste Soil (tonnes)	
Purchase Cost i.e. Import Cost (€)	
Material Handling Costs (€)	
Material Storage Costs (€)	
Material Transportation Costs (€)	
Revenue from Material Sales (€)	
Material Disposal Cost (€)	
Material Treatment Cost (€)	
Total Waste Soil Management Cost (€)	
Unit Waste Soil Management Costs (€)	

Table 5: Standard Record Form for Costs of C&D Waste Management (Sample relates to Soil – separate record form should be compiled in respect of each waste material)

Final details of quantities and types of C&D Waste arising from the Project will be forwarded to local authority.

7.0 Waste Auditing

The appointed Contractor should implement an auditing process to ensure the quality, effectiveness and efficiency of the environmental management system.