

13.2.3 Impact Assessment Methodology

Impacts significance and rating is as set out in the EIS guidance documents described in Chapter 1 ‘Introduction’.

13.3 Baseline Environment

The Proposed Project is located within the Local Authority of Dublin City Council (DCC)-South East Area.

In order to establish a baseline and review capacity in relation to construction wastes a review of published data and statistics was undertaken.

The most recent figures published by the Environmental Protection Agency relating to construction and demolition (C&D) waste are for the year 2011 with some limited hazardous construction and demolition waste data published relating to the year 2012. Approximately 3 million tonnes of this was soil and stones. In addition, just over 1 million tonnes of ‘other’ C&D waste was generated, and comprised metal, wood, glass etc.

From 2010 to 2011 there was a 10% decrease in the total quantity of construction waste collected in Ireland. C&D waste collection has decreased annually from a peak of almost 18 million tonnes in 2007. This decrease is reflective of the significant downturn which occurred in the construction industry at this time. In addition, the EPA reported that in 2012, excluding natural and stone waste, 97% by weight of C&D was prepared for reuse, recycling and other material recovery (including beneficial backfilling using waste as a substitute).

The quantity of C&D waste managed in Ireland is indicative of economic activity. At the peak of the economic and construction boom in 2007, approximately 17.8 million tonnes of C&D waste was collected for treatment. This fell to 3 million tonnes in 2011. Preliminary data for 2014 indicate increases in construction and demolition waste generation since 2011, most likely as a result of economic growth. 3.31 million tonnes of construction and demolition waste was generated in 2014 according to preliminary EPA data. The EPA notes in its Report “Ireland’s Environment –An Assessment 2016” that *“With a government policy focus on the provision of social housing, major road infrastructural projects and the new children’s hospital, C&D waste generated will increase again in the coming years.”*

The national policy document, Changing Our Ways (Department of the Environment and Local Government, 1998), sets a target of 85% recycling of C&D waste by 2013. More recently the 2008 EU Waste Framework Directive sets a target of 70% by weight for C&D wastes. As such, with a recovery rate of 97% in 2012, Ireland exceeded the targets by a considerable margin.

An indicative breakdown of the composition of construction and demolition waste is set out in **Table 13.1** below. These figures should be considered as a guide only- as construction and demolition waste can vary depending on the nature of the development and waste can vary significantly from one project to another, depending on the nature of the development and the waste management practises employed on-site.

13.5.2 Excavation Phase

An estimated 15,172 m³ material will be excavated in the course of the works. A summary of excavated material is included in **Table 13.2** below.

A significant proportion of the surplus excavation material from the project is likely to consist of soil and stones which may be accepted for recovery or recycling at waste licenced and permitted facilities. Case studies of authorised facilities which accept excavation soil and stones and construction waste in the region are described in **Appendix 13.2**. The Contractor may use these facilities or other similar authorised facilities for recovery or disposal of excavation soil and stones from the Proposed Project.

Table 13.2 - Estimated Quantity of Excavation, Material Reuse and Removal from Site resulting from the Proposed Project

Material	Estimated volume for excavation resulting from the Proposed Project requiring removal from site (m³)
<u>Road/pathway materials (made ground)</u>	
Generated by open excavations	7,586
Topsoil	
Generated by open excavations	7,586
Total volume	15,172
Estimated total weight (tonnes)	36, 512

All excavated material which cannot be reused within the proposed development will be removed from site.

Where contaminated soil is encountered this will be delivered to appropriately licenced waste facilities for recovery/ disposal as appropriate.

The predicted impacts of excavation waste prior to implementation of mitigation measures is expected to be moderate, negative and short-term.

13.5.3 Construction Phase

Construction works, site offices and temporary works facilities are likely to generate construction waste. Construction waste is defined as waste which arises from construction and renovation activities. Also included within the definition are surplus and damaged products and materials arising in the course of construction work or used temporarily during the course of on-site activities.



Street Sweeping

- Within the Dublin City Council area streets are organised into street sweeping categories. College Green is included in Category A which includes main city centre streets and high footfall areas. Category A streets are a priority of Dublin City Council and are swept daily. This level of sweeping is expected to be retained at the proposed plaza.
- An intensive street washing programme is implemented by Dublin City Council from April to October every year. This level of washing is expected to be retained at the proposed plaza.

The predicted impacts of operational waste prior to implementation of mitigation measures is expected to be imperceptible.

13.6 Mitigation Measures

13.6.1 Construction and Demolition Waste Management Plan

13.6.1.1 Introduction

A CDWMP plan will be required to be developed by the Main Contractor(s) following appointment and prior to commencing works on site. The CDWMP addresses waste generation and arrangements made for prevention, reuse, recycling disposal and collection of recyclables and wastes. The CDWMP will be prepared in line with the *DoEHLG Best Practise Guidelines on the Preparation of Waste Management Plans for Construction & Demolition Projects*.

13.6.1.2 Outline Construction and Demolition Waste Management Plan (CDWMP)

The following is an indicative list on the content of a CDWMP:

EPA (2015a). Revised Guidelines on the information to be contained in Environmental Impact Statements Draft. EPA, Johnstown Castle Estate, Wexford, Ireland.

EPA (2015b). Advice Notes for Preparing Environmental Impact Statements Draft. EPA, Johnstown Castle Estate, Wexford, Ireland.

FAS & Construction Industry Federation. 2002. Construction & Demolition Waste Management – A handbook for Contractors & Site Managers. FAS Environmental Unit, Upper Baggot Street, Dublin 4.

Dublin City Council (2016) Litter Management Plan 2016-2018. Dublin City Council, Dublin, Ireland.

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