

### **PROVISION OF INFORMATION**

### FOR SCREENING FOR APPROPRIATE ASSESSMENT

## PROPOSED RECREATIONAL PROJECT IN MOUNT CARMEL PARK, FIRHOUSE ROAD, DUBLIN 24.

**South Dublin County Council** 

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#### 1 Introduction

This report, which contains information required for the competent authority (in this instance South Dublin County Council) to undertake a screening for Appropriate Assessment (AA), has been prepared by Scott Cawley Ltd. It provides information on and assesses the potential for a proposed Recreational Project in Mount Carmel Park, Dodder Valley to impact on Natura 2000 sites (hereafter referred to as European Sites)<sup>1</sup>.

It is necessary that the proposal has regard to Article 6 of the *Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora* (as amended) (hereafter "the Habitats Directive"). This is transposed in Ireland primarily by *the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011)* (hereafter the Birds and Habitats Regulations) and the Planning and Development (Amendment) Act, 2010 as amended.

An AA is required if likely significant effects on European sites arising from a proposed development cannot be ruled out at the screening stage, either alone or in combination with other plans or projects.

Following the preparation of this screening statement it was objectively concluded that there is <u>no</u> possibility of any significant effects on any European sites arising from the proposed development, <u>either alone or in combination with other plans or projects</u>. Therefore it is our view that an <u>Appropriate Assessment is not required in this instance</u>. The information in the tables below provide a summary of the information gathered for this screening exercise and the conclusions made.

## 2 Methodology

This Appropriate Assessment Screening Statement has been prepared with regard to the following guidance documents where relevant:

- Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities.
   (Department of Environment, Heritage and Local Government, 2010 revision).
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPW 1/10 & PSSP 2/10.
- Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission Environment Directorate-General, 2001); hereafter referred to as the EC Article 6 Guidance Document. The guidance within this document provides a non-mandatory methodology for carrying out assessments required under Article 6(3) and (4) of the Habitats Directive.
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (EC Environment Directorate-General, updated April 2015); hereafter referred to as MN2000.

<sup>1</sup> Natura 2000 sites are defined under the Habitats Directive (Article 3) as a European ecological network of special areas of conservation composed of sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II. The aim of the network is to aid the long-term survival of Europe's most valuable and threatened species and habitats. In Ireland these sites are designed as *European Sites*-defined under the Planning Acts and/or Birds and Habitats Regulations as (a) a candidate site of Community importance, (b) a site of Community importance, (c) a candidate special area of conservation, (d) a special area of conservation, (e) a candidate special protection area, or (f) a special protection area. They are commonly referred to in Ireland as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)

- Guidance Document on Article 6(4) of the 'Habitats Directive' 92/43/EEC. Clarification of the Concepts of Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence. Opinion of the European Commission (European Commission, January 2007).
- Guidelines for Good Practice Appropriate Assessment of Plans under Article 6(3) Habitats Directive. Findings of an international workshop on Appropriate Assessment in Oxford, December 2009.
- Communication from the Commission on the precautionary principle. European Commission (2000).

The above referenced guidance sets out a staged process for carrying out Appropriate Assessment. To determine if Appropriate Assessment is required, documented screening is required. Screening identifies the likely effects on European sites, if any, which would arise from a proposed plan or project, either alone or in combination with other plans and projects, and further considers whether these effects are likely to adversely affect the integrity of any European sites.

If the conclusions at the end of screening are that there is no likelihood of significant effects occurring on any European sites, as a result of the proposed plan or project, either alone or in combination with other plans and projects, then there would be no requirement to undertake Appropriate Assessment.

However, even if screening makes a finding of no significant effects, and therefore concludes that Appropriate Assessment is not required, these findings must be clearly documented in order to provide transparency of decision-making, and to ensure the application of the 'precautionary principle'<sup>2</sup>.

Screening for Appropriate Assessment involves the following:

- Determining whether a project or plan is directly connected with or necessary to the conservation management of any European sites<sup>3</sup>;
- Describing the details of the project/plan proposals and other plans or projects that may cumulatively affect any European sites (see section 3.2);
- Describing the characteristics of relevant European sites (Table 1); and
- Assessing the likelihood and significance of effects on relevant European sites (see Table 1).

The information that was collected to allow the competent authority to screen the proposal was based on a desktop study and site visit carried out on 15<sup>th</sup> August 2016. Information relied upon included the following information sources, which included maps, ecological and water quality data:

- Ordnance Survey of Ireland mapping and aerial photography available from www.osi.ie;
- Online data available on protected species as held by the National Biodiversity Data Centre (NBDC) from www.biodiversityireland.ie;

<sup>&</sup>lt;sup>2</sup> One of the primary foundations of the precautionary principle, and globally accepted definitions, results from the work of the Rio Declaration. Principle #15 declaration notes:

<sup>&</sup>quot;In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

<sup>&</sup>lt;sup>3</sup> In this instance the proposed development is not directly connected with or necessary to the conservation management of any European sites.

- Online data available on European sites as held by the National Parks and Wildlife Service (NPWS) from www.npws.ie;
- Information on land-use zoning from the online mapping of the Department of the Environment, Community and Local Government <a href="https://www.myplan.ie">www.myplan.ie</a>;
- Information on water quality in the area available from <a href="www.epa.ie">www.epa.ie</a>;
- Information on the Eastern River Basin District from www.wfdireland.ie;
- Information on soils, geology and hydrogeology in the area available from www.gsi.ie;
- Information on the location, nature and design of the proposed development supplied by the applicant's design team;
- Information on the status of EU protected habitats and species in Ireland (National Parks & Wildlife Service, 2013a & 2013b);
- Information on the Conservation Status of Birds in Ireland (Colhoun & Cummins, 2014).

## Other Key Information Sources:

- South Dublin County Development Plan 2016-2022 (SDCC, 2016)
- South Dublin County Heritage Plan 2010-2015 (SDCC, 2010)
- Eastern River Basin District, River Basin Management Plan 2009-2015 (ERBD, 2009)
- Ecological Impact Assessment for Proposed Development at Lands Adjacent to the Carmel of the Assumption Convent, Firhouse Road (Openfield, 2015);
- Bat Survey and Assessment of Impacts of Proposed River Dodder Pedestrian and Cycle Path (Dun Laoghaire Rathdown, 2013);
- Ecological Survey and Assessment of River Dodder Valley (Firhouse Weir to Rathfarnham Bridge), Co. Dublin (South Dublin County Council, 2012);
- Survey of Selected Bridges as Bat Habitats Along the Dodder (South Dublin County Council, 2015);
- Survey for Areas of High Nature Conservation Value in South Dublin County Council Parks: Grassland Areas (Faith Wilson and Joanne Denyer, 2015);
- Survey of Large Mammal Activity in Dodder Valley Park Otters and Badger (Faith Wilson, 2012a)
- Dodder Valley Bat Survey (Faith Wilson, 2012b)

Table 1 Overview of the	e Proposed Development and its Receiving Environment
Brief Site Description	The proposal is for the extension of built sports and recreational facilities and associated access paths and lighting within Mount Carmel Park, Dodder Valley, Firhouse, Dublin 24. The proposed Part 8 development is centred on Irish Grid Reference O 10728 27313. The subject lands are entirely within an area of public park which consist of grassland habitats (the Fossitt habitats 'GS2 Dry meadows and grassy verges', and 'GS1 Dry calcareous and neutral grassland'), riparian woodland, small sections of remnant hedgerows, treelines and scrub and hard surfaces (access paths). A network of pathways exists within the subject lands, and the proposed Dodder Greenway dissects the area. There are no buildings within the subject lands.
Features of the Surrounding Environment	The area surrounding the subject lands consist largely of semi-natural habitats within Mount Carmel Park. The River Dodder forms a boundary to the north, and is flanked by a narrow strip of alluvial woodland on both banks. This woodland is also present on islands within the river itself. Areas of grassland and hedgerow are located immediately east and west of the proposal. The banks of the Dodder are steep in places, dropping up to 5m from the areas of grassland to the river. Although the proposal is within Mt Carmel Park, the larger surroundings are overwhelmingly suburban, with the park forming a narrow corridor either side of the River Dodder. The southern boundary of the proposal runs alongside the Firhouse Road (R114) and several housing developments to the south.
	The desktop study and a field survey of the subject lands found that no European Annex I habitats for which European Sites within Table 2 have been designated, occur within or adjacent to the subject lands. The subject lands contained examples of the Fossitt Habitat 'GSI Dry calcareous and neutral grasslands', however this was determined not to correspond to the Annexed habitat 'Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210]' according to the criteria outlined The Irish Semi-Natural Grasslands Survey 2007-2012 (O'Neill et al., 2013).
	The desktop study found no records <sup>4</sup> of any species for which European Sites listed in Table 2 are designated within the subject lands. The following species (for which European sites listed in Table 2 were designated) have been recorded within 2km of the subject lands <sup>5</sup> :
	• Eurasian teal Anas crecca, two records, the closest from O115277 c. 400m east of the subject lands (2011);
	<ul> <li>Herring gull Larus argentatus, three records, the closest from O091272 c. 1.2km west of the subject lands (2015);</li> </ul>
	Black-headed gull <i>Larus ridibundus</i> , five records, the closest from O112277 c. 100m east of the subject lands (2010);

<sup>&</sup>lt;sup>4</sup> Note that this excludes NBDC records with a resolution greater than 1km<sup>2</sup>
<sup>5</sup> According to NBDC online data <u>www.biodiversityireland.ie</u> accessed 15<sup>th</sup> August 2016.

- Great cormorant Phalacrocorax carbo, two records, the closest from O113278 c. 230m south of the subject lands (2012);
- Common redshank Tringa tetanus, one record, the closest from O112286 c. 1km north of the subject lands (2011); and,
- European otter Lutra lutra, four records, the closest from O115278 c. 400m east of the subject lands (2012).

The subject lands are within the River Dodder subcatchment of the River Liffey and Dublin Bay catchment. The River Dodder forms a northern boundary with the subject lands, while the Ballycullen stream forms a boundary to the west. The confluence of the two rivers is immediately west of the subject lands. The River Dodder discharges to the River Liffey Estuary Upper at Poolbeg, approximately 13.6km downstream of the subject lands, and close to the where the Liffey discharges into Dublin Bay. The proposal does not include any plans for works within either of these watercourses. The area closest to either watercourse is for the proposed BMX track, which is approximately 50m north of the Ballycullen Stream.

There is a surface water monitoring station located upstream of the development at Oldbawn Bridge, approximately 1km southwest of the subject lands. Three surface water monitoring stations are located along the River Dodder between the subject lands and the River Liffey Estuary, the closest of which is at the Bridge on Springfield Avenue (Templeogue), approximately 2.8km northeast. River water quality (2004-2015) within the Dodder upstream of the development is recorded as being 'Good' at Oldbawn Bridge, while downstream of the development it is recorded as being 'Moderate'. The River Liffey Estuary Upper Transitional waterbody is recorded as being 'Unpolluted' (2010-2012), as is the Dublin Bay Coastal waterbody. Under the "Trophic Status Assessment Scheme" classification of the EPA, 'Unpolluted' means there have been no breaches of the EPA's threshold values for nutrient enrichment, accelerated plant growth, or disturbance of the level of dissolved oxygen normally present (EPA, 2015). All waterbodies downstream of the proposal have a Water Framework Directive (WFD) risk score of 'At risk of not achieving good status' and are likely to be at risk from pollutant runoff and additional foul waters.

The proposed development is within the 'Dublin' groundwater body and is classified as 'Poorly productive bedrock' and with groundwater vulnerability to human activities being mapped as 'Low'. The most recent EPA groundwater status for the site (2007-2012) is 'Good.' The bedrock formation on site is 'Dinantian Upper Impure Limestones'. It is also described as 'Locally Important Aquifer – Bedrock which is Moderately Productive only in Local Zones'.

#### Description of the Proposal

The proposal is for the construction of a BMX track, a football pitch, a running track and associated access facilities, namely access tracks with low-

<sup>&</sup>lt;sup>6</sup> According to the GSI Groundwater web mapping www.gsi.ie (Accessed 15/08/16)

level lighting leading from an existing car park area within Mount Carmel Park, Firhouse, Dublin 24.

In brief, the proposal includes a changing facility that will include toilet and shower facilities. In this instance, there is no additional loading anticipated within the River Liffey and Dublin Bay catchment as the development does not have the potential to result in higher population within the catchment. Foul effluent is likely originate from persons already dwelling within the catchment. Foul effluent generated from the proposed development will be discharged to an existing combined sewer located on Firhouse Road to the south. From there, it will be pumped to Ringsend Waste Water Treatment Plant (WWTP) for treatment prior to discharge to Dublin Bay. During construction and demolition, measures will be implemented to ensure debris does not enter the existing sewerage system.

At present, the subject lands are largely composed of grassland habitats with smaller areas of hedgerows, treelines and hard standing. The development will likely result in a minor increase in surface waters, as proposal for a BMX track and running track will result in an increased area of hard surfaces. Under the proposal, surface waters will be diverted to soakaways onsite prior to joining the local surface water network.

A full description of the proposed development is available within the Part 8 documentation.

Defining the Zone of Influence of the Proposed Works

The Zone of Influence (ZoI) is a distance within which the proposal could potentially affect the conservation condition of QI habitats or species. There is no set recommended distance for which European sites are considered as being relevant (*i.e.* within the ZoI of proposed works) for AA. Available guidance (NPWS, 2010) recommends that "the distance should be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects". As a general rule of thumb, it is often considered appropriate to examine all European sites within 15km as a starting point. In some instances where there are far reaching hydrological/hydrogeological connections, a whole river catchment or a groundwater aquifer may need to be included in determining the ZoI. All European sites within 15km of the proposed works are listed in Table 2 and illustrated on Figure 1. In this case, the distance of 15km exceeds the potential zone of influence of the proposal and any likelihood of significant effects in relation to European Sites beyond 15km can be ruled out. The zone of influence for the proposed works is not likely to reach more than 1km from the proposed area of works. The proposed develolpment is considered unlikely to be connected to QI features (tufa springs) within the Glensamole Valley given the scale of the proposal, the limited scope of ground excavations (and therefore potential to affect the water table – which could affect the hydrology of tufa springs), the lack of tufa springs within the vicinity of the works, and the significant freshwater buffer between the proposal and the closest downstream European Site, South Dublin Bay and River Tolka Estuary SPA.

Potential pressures on European Sites as a result of the proposed development

#### **Habitat loss pressures**

The subject lands do not physically overlap with any European sites. Site investigations undertaken on 1st June 2016 confirmed that they are

dominated by grassland including the Fossitt Habitats 'Dry meadows and grassy verges' and 'Dry calcareous and neutral grassland'. The former has the potential to correspond to the Annex I Habitat 'Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)' (6510), while the latter has the potential to correspond to 'Semi-natural dry grasslands and scrubland facies on calcareous substrates (*Festuco-Brometalia*)' (6210)(A QI habitat for which the Glenasmole Valley SAC has been designated). However in the case of Mount Carmel Park, the grasslands did not qualify as the Annex I habitat according to the assessment criteria of the *Irish Semi-Natural Grassland Survey* (O'Neill *et al.*, 2013). An area of riparian woodland along the northern part of the subject lands corresponds to the Annex I Priority Habitat 'Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-padion*, *Alnion incanae*, *Salicion albae*)' (91E0), however all works associated with the proposals are located outside of this habitat and none of the European Sites within the ZoI and the project has no potential to affect the conservation objectives of this habitat. The habitats within the subject lands are linked via connecting habitat to the Glenasmole Valley SAC, which lies upstream of the site.

There are records of otter, for which the Wicklow Mountains SAC has been designated, from within 400m of the subject lands. No otter holts were identified adjacent to the proposal during surveys undertaken to inform this report in June, July and August 2016. Two sprainting posts were identified in the Riparian Woodland within the subject lands, however otter were not recorded on trigger cameras placed at these sprainting posts between 11<sup>th</sup> and 19<sup>th</sup> Augustly 2016. Nonetheless, it is considered highly likely that otters utilise this section of the River Dodder, and the adjacent areas of woodland contain suitable habitat for otter holts. The areas of grassland, within which works are to be confined, are not considered to be of importance to this mainly aquatic species.

No other mobile fauna species for which European sites are designated are known to use the habitats within the subject lands. Therefore no significant impacts are predicted on habitats or species for which European Sites within the ZoI have been designated as a result of the project on its own.

#### Water quality Pressure on European sites in proximity to the site

Several intertidal habitats for which European Sites in Dublin Bay are designated are failing to meet favourable conservation status. For some of these, water pollution is considered to be a threat ranked as being of 'high importance' (NPWS, 2013a).

<sup>&</sup>lt;sup>7</sup> For example, "tidal mudflats and sandflats" was of "Inadequate" conservation status. This habitat was threatened by water pollution and was a reason for designation of North Dublin Bay SAC, and South Dublin Bay SAC. Under 'wetlands', the habitat was also a Special Conservation Interest of the South Dublin Bay and River Tolka Estuary SPA, and North Dublin Bay SPA.

Pressures on European sites in Dublin Bay from surface waters

There is potential for "in-combination" effects of proposed plans and projects within the South Dublin County Development Plan 2016-2022, Dublin City Development Plan 2011-2017, Dún Laoghaire-Rathdown County Development Plan 2016-2022, Fingal Development Plan 2011-2017, and other County-level land use plans which can influence conditions in Dublin Bay via rivers and other surface water features.

Based on latest figures from the EPA<sup>8</sup>, Dublin Bay is of 'Unpolluted' water quality status and the pollutant content of future surface water discharges to the Bay is considered likely to be decreased in the long-term. This is because it is an objective of the Greater Dublin Strategic Drainage Study, and all development plans within the catchment of Ringsend WWTP to include Sustainable Urban Drainage Systems (SuDS) in new development. Together these objectives are considered likely to reduce pressures on designated marine and intertidal species and habitats in Dublin Bay.

There are a large number of Combined Sewer Outfalls (CSO's) from the public network in Dublin City which ultimately discharge to Dublin Bay. These could potentially carry pollution from existing and proposed developments into Dublin Bay. Works will be undertaken in accordance to best practice for working close to waterways as outlined in *Guidelines on protection of fisheries during construction works in and adjacent to waters* (IFI, 2016). There is a possibility that contaminants generated during construction works may be drained or flow overland into the River Dodder or into the storm water network during storms or heavy rainfall events. Given the commitment to follow best practice when working adjacent to watercourses, the presence of semi-natural vegetation between the proposed areas of works and the nearest watercourse, the significant downstream distance to European Sites and the assimilative capacity of the River Liffey and Dublin Bay as a whole; it is considered that the risk of a contamination event occurring during construction that would negatively affect water quality in the River Liffey and Dublin Bay is extremely low. Any substantial run-off from the site will only occur over a short period of time (i.e. <6 months during construction), are likely to be infrequent i.e. limited to storm flows in the system, and are likely to result in imperceptible concentrations of contaminants reaching European Sites in Dublin Bay following adsorption and mixing in the River Liffey and/or the local drainage network. The impact of the proposed development on European sites during construction is considered to be imperceptible.

Pressures on European sites in Dublin Bay from effluent

<sup>8</sup> Coastal Surface Water Quality data (2010-2012) accessed from the EPA Envision Mapviewer gis.epa.ie/Envision (Accessed 15/08/2016)

The Greater Dublin Area including the subject lands and satellite towns in counties bordering Dublin, fall within the catchment of the Ringsend Waste Water Treatment Plant (WWTP). During operation, foul effluent generated from the proposed development will be carried by the public sewerage network to the Ringsend WWTP for treatment prior to discharge to Dublin Bay. There will be no net increase in foul water loading as a result of the development and therefore there is no potential for impacts from foul waters.

Other existing or proposed plans or projects nearby which may lead to cumulative effects on European Sites

There is potential for "in-combination" effects of proposed plans and projects within the South Dublin County Development Plan 2016-2022, Dublin City Development Plan 2011-2017, Dún Laoghaire-Rathdown County Development Plan 2016-2022, Fingal Development Plan 2011-2017, and other County-level land use plans which can influence conditions in Dublin Bay via rivers and other surface water features. Amongst these projects is the Dodder Greenway Scheme, part of which passes through the subject lands and includes the widening of pathways and introduction of artificial lighting. Should construction of the greenway proceed at the same time as the proposed development, there is an increased risk of pollutants and silts generated during construction to enter the River Dodder or the local surface water network. Nonetheless, the likelihood of this affecting the conservation objectives of downstream European Sites is considered to be low for the following reasons:

- The presence of semi-natural vegetation between the proposed areas of works and the nearest watercourse;
- The significant downstream distance to European Sites and the assimilative capacity of the River Liffey and Dublin Bay as a whole means that it is considered that the risk of a contamination event occurring during construction that would negatively affect water quality in the River Liffey and Dublin Bay is extremely low; and,
- Any substantial run-off from the site will only occur over a short period of time (i.e. during construction), is likely to be infrequent i.e.
  limited to storm flows in the system, and is likely to result in imperceptible concentrations of contaminants reaching European Sites in
  Dublin Bay following adsorption and mixing in the River Liffey and/or the local drainage network.

It is therefore our professional opinion that there will be no likelihood of significant effects on any European sites during the construction or operation of the proposed development, in combination with other plans or projects.



Site name and code	Conservation Objective <sup>9</sup>	Do any potential source-pathway-receptor links exist between the proposed development and the ecologically designated site?
Special Areas of Conservation	ı (SAC)	
Glenasmole Valley SAC [001209] c. 2.3km south	Annex I Habitats:  • [6210] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco Brometalia)(* important orchid sites)  • [6410] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae)  • [7220] * Petrifying springs with tufa formation (Cratoneurion)	No, due to significant distance and absence of any hydrological connection between the sites. Although the subject lands contain 'Dry Calcareous and Neutral Grassland', this was found not to correspond to the Annexed habitat 6210 for which the European Site has been designated.
Wicklow Mountains SAC [002122] c. 4.7km south	<ul> <li>Annex I Habitats:</li> <li>[3130] Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea</li> <li>[3160] Natural dystrophic lakes and ponds</li> <li>[4010] Northern Atlantic wet heaths with Erica tetralix</li> <li>[4030] European dry heaths</li> <li>[4060] Alpine and Boreal heaths</li> <li>[6230] Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and sub-mountain areas, in Continental Europe)</li> <li>[7130] Blanket bogs (* if active only)</li> <li>[8110] Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)</li> </ul>	No, due to significant distance and absence of any hydrological connection between the sites. Although the QI species otter is considered likely to utilise part of the subject lands, the proposal is not considered to have any potential to affect the conservation status of this Annex II species.

<sup>&</sup>lt;sup>9</sup> Unless otherwise stated, Conservation Objectives refer to Generic Versions



Table 2 European Sites within 15km of the Proposed Development (information downloaded from www.npws.ie in March 2016)			
Site name and code	Conservation Objective <sup>9</sup>	Do any potential source-pathway-receptor links exist between the proposed development and the ecologically designated site?	
	• [8210] Calcareous rocky slopes with chasmophytic vegetation		
	• [8220] Siliceous rocky slopes with chasmophytic vegetation		
	• [91A0] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles		
	Annex II Species:		
	• [1355] Otter Lutra lutra		
South Dublin Bay SAC [000210] c. 10.2km east	Conservation Objectives Version 1.0 (22/08/13)  Annex I Habitats:	Whilst there is a linkage between the proposed development and the European site (by way of the River Dodder), no significant effects are predicted.	
	[1140] Mudflats and sandflats not covered by seawater at low tide	1. Surface waters generated during construction that do not infiltrate through groundwater carry silt, oils, or other chemicals into the local surface water network which discharges to the River Liffey and Dublin Bay. However, there will be no significant effects on the reasons for designation of the European site in view of the relevant conservation objectives. This judgement was informed by:	
		- The significant downstream distance between the subject lands and the River Dodder confluence with the River Liffey Estuary;	
		The existing buffer of semi-natural vegetation between the area of proposed works and any watercourse;	
		The temporary nature of any discharges related to construction of the site;	
		The known potential for waters in Dublin Bay to rapidly mix and assimilate pollutants (Wilson & Jackson, 2011).	
		2. a) There is no evidence of a link between effluent discharge and macro algae growth (i.e. eutrophication) in Dublin Bay (Wilson & Jackson, 2011 cited in CDM, 2012);	
		b) the receiving waters at the Ringsend outfall are of unpolluted status according to the most recent statics from the EPA;	
		c) Marine modeling for Ringsend WWTP indicates that discharged effluent is rapidly	



Site name and code	Conservation Objective <sup>9</sup>	Do any potential source-pathway-receptor links exist between the	
Site name and tode	Conservation objective	proposed development and the ecologically designated site?	
		mixed and dispersed to low levels via tidal mixing within a short distance of the outfall pipe (Dowly & Bedri 2007); and	
		d) NPWS standard data form for North Dublin Bay SAC states that there had been no apparent impacts to the associated flora and fauna from polluted water <sup>10</sup> .	
North Dublin Bay SAC [000206]	Conservation Objectives Version 1.0 (06/11/13)	See entry for South Dublin Bay SAC	
c. 14km east	Annex I Habitats:		
	• [1140] Mudflats and sandflats not covered by seawater at low tide		
	• [1210] Annual vegetation of drift lines		
	• [1310] Salicornia and other annuals colonizing mud and sand		
	• [1330] Atlantic salt meadows ( <i>Glauco-Puccinellietalia</i> maritimae)		
	• [1395] Petalophyllum ralfsii		
	• [1410] Mediterranean salt meadows (Juncetalia maritimi)		
	• [2110] Embryonic shifting dunes		
	• [2120] Shifting dunes along the shoreline with <i>Ammophila</i> arenaria ("white dunes")		
	• [2130] * Fixed coastal dunes with herbaceous vegetation ("grey dunes")		
	[2190] Humid dune slacks		
Ryewater Valley/Carton SAC	Annex I Habitats:	No, due to significant distance and absence of any hydrological	
[001398]	• *[7220] Petrifying springs with tufa formation (Cratoneurion)	connection between the sites	
c. 13.1km northwest			

 $<sup>^{10}</sup>$  It must be noted that these NPWS comments date to the creation of the Natura 2000 Standard Data Form in 1999



Table 2 European Sites within 15km of the Proposed Development (information downloaded from www.npws.ie in March 2016)			
Site name and code	Conservation Objective <sup>9</sup>	Do any potential source-pathway-receptor links exist between the proposed development and the ecologically designated site?	
	Annex II Species:  • [1014] Narrow-mouthed whorl snail <i>Vertigo angustior</i> • [1016] Desmoulin's whorl snail <i>Vertigo moulinsiana</i>		
Special Protection Areas (SPA)			
Wicklow Mountains SPA [004040] c. 6km south	<ul> <li>Special Conservation Interest Species:</li> <li>Merlin Falco columbarius [A098] [breeding]</li> <li>Peregrine Falco peregrinus [A103] [breeding]</li> </ul>	The proposed development site is not known to be of importance for any of the species listed as Special Conservation Interests. The proposal is not considered to affect the conservation objectives of either special interest species for which the European Site has been designated.	
South Dublin Bay and River Tolka Estuary SPA [004024] c. 10.2km east	<ul> <li>Special Conservation Interest Species:</li> <li>Light-bellied Brent Goose (Branta bernicla hrota) [A046] [wintering]</li> <li>Oystercatcher Haematopus ostralegus [A130] [wintering]</li> <li>Ringed Plover Charadrius hiaticula [A137] [wintering]</li> <li>Grey Plover Pluvialis squatarola [A140] [wintering]</li> <li>Knot Calidris canutus [A143] [wintering]</li> <li>Sanderling Calidris alba [A144] [wintering]</li> <li>Dunlin Calidris alpina [A149] [wintering]</li> <li>Bar-tailed Godwit Limosa lapponica [A157] [wintering]</li> <li>Redshank Tringa totanus [A162] [wintering]</li> <li>Black-headed Gull Croicocephalus ridibundus [A179] [wintering]</li> </ul>	See entry for Wicklow Mountains SPA.	



Site name and code	Conservation Objective <sup>9</sup>	Do any potential source-pathway-receptor links exist between the proposed development and the ecologically designated site?
	Roseate Tern Sterna dougallii [A192] [passage]	
	• Common Tern Sterna hirundo [A193] [breeding]	
	• Arctic Tern Sterna paradisaea [A194] [passage]	
	Wetlands & Waterbirds [A999]	
North Bull Island SPA [004006]	Special Conservation Interest Species:	See entry for Wicklow Mountains SPA.
c. 14km northeast	• Light-bellied Brent Goose <i>Branta bernicla hrota</i> [A046] [wintering]	
	Shelduck <i>Tadorna tadorna</i> [A048] [wintering]	
	Teal Anas crecca [A052] [wintering]	
	Pintail Anas acuta [A054] [wintering]	
	Shoveler Anas clypeata [A056] [wintering]	
	Oystercatcher <i>Haematopus ostralegus</i> [A130] [wintering]	
	Golden Plover Pluvialis apricaria [A140] [wintering]	
	Grey Plover Pluvialis squatarola [A141][wintering]	
	Knot Calidris canutus [A143] [wintering]	
	Sanderling Calidris alba [A144] [wintering]	
	Dunlin Calidris alpina [A149] [wintering]	
	Black-tailed Godwit <i>Limosa limosa</i> [A156] [wintering]	
	Bar-tailed Godwit <i>Limosa lapponica</i> [A157] [wintering]	
	Curlew Numenius arquata [A160] [wintering]	
	Redshank <i>Tringa totanus</i> [A162] [wintering]	
	Turnstone Arenaria interpres [A169] [wintering]	
	Black-headed Gull <i>Croicocephalus ridibundus</i> [A179] [wintering]	
	Wetlands & Waterbirds [A999]	



Table 2 European Sites within 15km of the Proposed Development (information downloaded from www.npws.ie in March 2016)			
Site name and code	Conservation Objective <sup>9</sup>	Do any potential source-pathway-receptor links exist between the proposed development and the ecologically designated site?	
Poulaphouca Reservoir SPA [004063] c. 14.7km southwest	<ul> <li>Special Conservation Interest Species:</li> <li>Greylag Goose Anser anser [A043] [wintering]</li> <li>Lesser black-backed gull Larus fuscus [A138] [wintering]</li> </ul>	See entry for Wicklow Mountains SPA.	

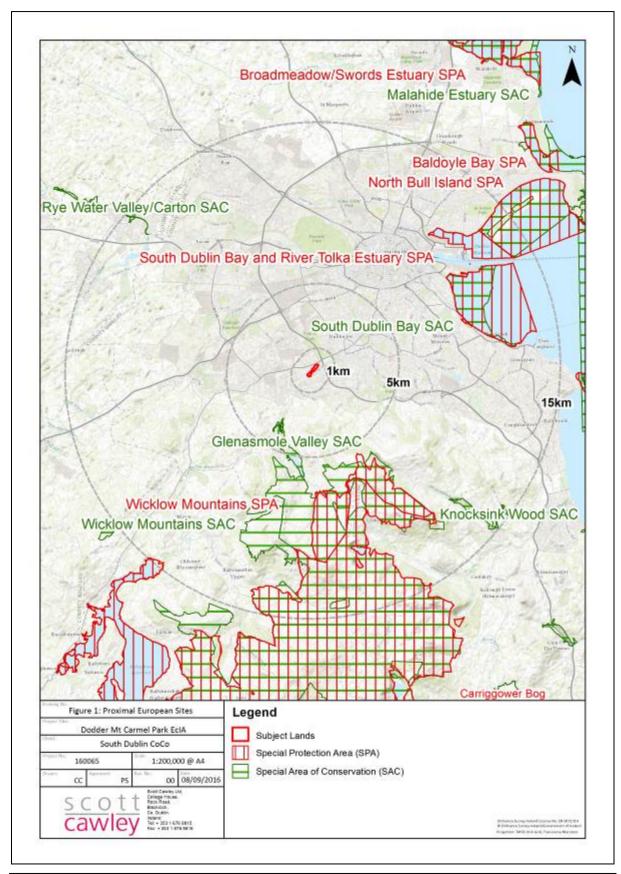


Figure 1: European Sites within 1, 5 and 15km of the Proposed Development

### 3 Conclusions of Screening Assessment Process

Following an examination, analysis and evaluation of the relevant information, including in particular, the nature of the proposed works and their potential relationship with European sites, as well as considering other plans and projects, and applying the precautionary principle, it is the professional opinion of the authors of this report that it is possible to rule out likely significant effects on all European sites.

The AA screening process has identified that a number of European Sites in Dublin Bay which lie within the potential zone of influence of surface and foul effluent discharges from the proposed development. However for the reasons outlined below no European Sites are deemed to be at risk of likely significant effects from construction or operation of the proposed development.

The existing local surface water drainage network which drains to Dublin Bay via the River Dodder and Ballycullen Stream, and the discharge of treated effluent from the foul drainage network are potential pathways between the proposed development and Dublin Bay. No significant adverse effects are predicted due to the following:

- The temporary nature of any discharges related to construction of the site;
- The adherence to best practice guidelines for working in and adjacent to watercourses;
- The distance between the site and Dublin Bay and potential for pollution to be diluted in the drainage network;
- The use of SuDs on site during operation; and,
- The proposal will not result in increased loading to Ringsend WWTP.

For these reasons, it is the professional opinion of the authors of this report that the application for planning permission for the proposed development does not require an Appropriate Assessment.

However, the authors of this report acknowledge that it is for South Dublin County Council, as the competent authority, to carry out a screening for AA and to reach one of the following determinations:

- a) AA of the proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European sites;
- b) AA of the proposed development is not required if it can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on any European sites.

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