



Parks & Landscape Services Section, Municipal Services Department

**Proposed Development of an All-Weather
Pitch at Coláiste Eoin/Íosagain
PC/PKS/01/18**

Appendix 4 - Appropriate Assessment Screening Report



PROVISION OF INFORMATION REGARDING APPROPRIATE ASSESSMENT SCREENING

**PROPOSED ALL-WEATHER PITCH
COLÁISTE EOIN/COLÁISTE ÍOSAGÁIN, BOOTERSTOWN, CO. DUBLIN**

Prepared for Dún Laoghaire-Rathdown County Council

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1 Introduction

The information in this report forms part of, and should be read in conjunction with the documentation for a proposed all-weather pitch (herein referred to as “the proposed development”) within the campus of Coláiste Eoin and Coláiste Íosagáin, Stillorgan Road, Booterstown, Co. Dublin (herein referred to as “the subject lands”).

This report, which contains information required for the competent authority (in this instance Dún Laoghaire-Rathdown County Council) to undertake a screening exercise for Appropriate Assessment (AA), was prepared by Scott Cawley Ltd. It provides information on and assesses the potential for the proposed development to significantly affect Natura 2000 sites (hereafter “European Sites”¹).

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.

It is the responsibility of the competent authority to make a decision as to whether or not the proposed development is likely to have significant effects on European Sites, either individually or in combination with other plans or projects. In accordance with the legislation and national guidance, the competent authority issues an AA Screening Determination which will set out their decision and the reasons for it.

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

2 Local Authority Policies

The subject lands fall within the area of the *Dún Laoghaire-Rathdown County Development Plan 2016-2022* (Dún Laoghaire-Rathdown County Council, 2016). The county development plan sets out policies and objectives in relation to land use and development within the County area.

¹ 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 candidate Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

3 Methodology

This report was 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.
- *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).
- *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.

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'².

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;

² 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:

"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."

- Describing the details of the project/plan proposals and other plans or projects that may cumulatively affect any European Sites;
- Describing the characteristics of relevant European Sites (Table 1); and,
- Assessing the likelihood of significant 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 desk study carried out on 21st March 2018 and a field survey undertaken on 21st March 2018 by Colm Clarke of Scott Cawley. The field survey involved a walkover of the subject lands to look for signs of wintering wetland birds, such as droppings, feathers and observations of live animals. Information relied upon included the following sources, which included maps, ecological and water quality data:

- Ordnance Survey Ireland mapping and aerial photography available from OSI online GeoHive mapping resource (Ordnance Survey Ireland, 2018);
- Data on protected species and European sites, available for download and interrogation from the National Parks and Wildlife Service maps and data page (NPWS, 2018);
- Spatial information relevant to the planning process including land zoning and planning applications from Department of Housing Planning, Community and Local Government web map portal (DoHPCLG, 2018);
- Data on waterbodies, available for download and interrogation from the Environmental Protection Agency web map service (EPA, 2018);
- Information on soils, geology and hydrogeology in the area available for download and interrogation from the Geological Survey Ireland online Spatial Resources service (GSI, 2018);
- 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); and,
- Natura impact statement relating to Registered Reference 3777/17 for planning permission from Dublin City Council. *Natura Impact Statement – Information for Stage 2 Appropriate Assessment: Proposed Development, St. Paul's College, Sybil Hill, Raheny, Dublin 5* (Scott Cawley, 2017).

4 Screening for Appropriate Assessment

4.1 Location and context of the Proposed Development to European Sites

Based on examination of the database of protected sites held by the NPWS, the subject lands do not overlap with and are not located directly adjacent to any European sites (NPWS, 2017). The lands are located off the Stillorgan Road (N11) south of St. Helen's and north of Booterstown Avenue. They are centred on Irish Grid Reference O 19708 29412. There are no surface water features such as streams, lakes or rivers within the lands. Surface waters from the lands drain via the public sewer system to Dublin Bay, which is located c. 1km to the east. European sites within Dublin Bay are therefore hydrologically linked to the proposed development, with the closest European sites being South Dublin Bay and River Tolka Estuary SPA (004024), c. 900m east, and South Dublin Bay SAC (000210), c. 1km east.

South Dublin Bay and River Tolka Estuary SPA (004024) has been designated for a several marine and coastal habitats. South Dublin Bay and River Tolka Estuary SPA (004024) has been designated for a range of overwintering wetland bird species. Some of these bird species (*e.g.* light-bellied brent goose *Branta bernicla hrota*, oystercatcher *Haematopus ostralegus*, plover species) are known to visit amenity grassland sites outside of the SPA boundary the Dublin region for supplementary forage (NPWS, 2014; Benson, 2009). During surveys of the subject lands on 21st March 2018, two black-headed gulls³ *Larus ridibundus* were noted foraging in an area of amenity grassland. No other special conservation interest species or signs of them were noted within the subject lands during the date of survey.

A study to inform the Natura Impact Statement for a residential development in North Dublin undertaken by Scott Cawley in 2017 involved visits to the subject lands to record evidence of overwintering wetland bird species. Three surveys visits were undertaken within the campus of Coláiste Eoin/Coláiste Íosagáin in February and March 2018, and during this visit only black-headed gull were recorded (Scott Cawley, 2017).

4.2 Determining the Zone of Influence of the Proposal

The zone of influence is a distance within which the proposed works could potentially affect the conservation condition of qualifying interest habitats or species or special conservation interest species. There is no set recommended distance for which European sites are considered as being relevant (*i.e.* within the zone of influence 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 zone of influence. All European sites within 15km of the proposed works are listed in Table 2 below and shown on Figure 1.

European sites within Dublin Bay are considered to lie within the zone of influence of the proposed development, as the lands are connected to these sites via the surface water and foul water networks: surface water runoff from the subject lands will be released to the public sewer network which discharges to Dublin Bay; foul waters from the proposed development will be treated at Ringsend Wastewater Treatment Plant (WWTP) prior to release to Dublin Bay.

4.3 Details of the Proposal and other Plans that Could Cumulatively Affect European Sites

Full details of the proposal are outlined within the Part 8 report for the proposed development. In brief, the proposed development is for the construction of a synthetic all-weather pitch, including floodlighting, fencing, ball-stop netting, temporary changing facilities and ancillary works. The existing habitats within the subject lands are amenity grassland, which will be replaced by synthetic surfaces. The development includes the construction of an attenuation trench to the east of the proposed pitch.

³ Black-headed gull is a special conservation interest species for which South Dublin Bay and River Tolka Estuary SPA (004024) has been designated

Run-off from the proposed development during operation will be at a rate of between 2-4l/s⁴, depending on underlying soil moisture conditions.

The proposed development includes the installation of temporary changing facilities, with bathroom and shower facilities. The anticipated foul water loading from this is 30 P.E., based on information provided to Scott Cawley by DLRCC on 27th March 2018. Foul waters will be directed to the local foul water/combined sewer on the Stillorgan Road. Ultimately, foul waters from the proposed development will be treated at the Ringsend WWTP.

Several plans for the development of all-weather pitches or similar developments have been granted within the Dublin area within recent years. Examples include those listed in Table 1. In light of the location of the subject lands in the Dublin Area and the land zoning objectives for the vicinity, it is considered likely that numerous plans and projects will be granted permission or commence construction during the lifetime of the proposed development. There is potential for “*in-combination*” effects of proposed plans and projects within the Dún Laoghaire-Rathdown County Development Plan 2016-2022, and other local level land use plans which can influence water quality conditions in Dublin Bay.

Table 1: Planning applications for the development of all-weather pitch facilities.

Planning Ref	Grant Date	Applicant	Description of Development
D08A/0242/E	14/05/14	C.B.C., Monkstown Park, Dun Laoghaire, Co. Dublin	Various works including construction of tennis courts
2215/17	14/06/17	St. Michael's College, Ailesbury Road, Dublin 4	Resurfacing of an existing grass pitch to provide an all-weather pitch

4.4 Identification of Potential Impacts

The only source-receptor-pathways between the subject lands and European sites in Dublin Bay is via the surface water and foul water networks, which drain from the lands to Dublin Bay. The subject lands are not considered to be an important *ex situ* site for any special conservation interest species of European sites within the zone of influence of the proposed development. This conclusion has been reached from a site surveys undertaken in March 2018 and a desk study of records of overwintering bird species within the lands.

While there is potential for sediments and other pollutants to be mobilised to Dublin Bay during construction of the proposal, no significant effects are possible for the following reasons:

- Any pollution event is likely to be short in duration (*i.e.* confined to storm events during the construction phase of each stage of the proposed development); and,
- The proposed development includes the adoption of measures to reduce the rate of run-off from the lands during operation;

⁴ Based on information provided by Dún Laoghaire-Rathdown CoCo Parks Department on 22nd March 2018

- Based on review of water quality data for Dublin Bay available from the EPA mapviewer (EPA, 2018), Dublin Bay is currently listed as ‘Unpolluted’; and,
- In light of the distance of separation between the subject lands and European sites in Dublin Bay (c. 900m at a minimum) and the small scale of works involved in the construction phase of the project, sediments and other pollutants released to the surface water network will be absorbed and diluted to an extent that there will be no discernible effects to water quality in Dublin Bay.

The Greater Dublin Area including the subject lands and satellite towns in counties bordering Dublin, fall within the catchment of the Ringsend 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 the Lower River Liffey Estuary and Dublin Bay.

Foul water comprising sewage and industrial effluent (and some surface water run-off) from the Dublin area has historically, and will continue to be treated at Ringsend WWTP prior to discharge to Dublin Bay. Ringsend WWTP has historically operated at or above capacity, with a contributing residential population in the order of 1.1 million P.E. and a total load (including non-domestic load) of 1.7 million P.E. on average, with significant fluctuations from day to day in 2014. Loading has increased in recent years with the rise in population recorded in the Dublin local authorities between 2011 and 2016 of approximately 4-6%⁵. The latest information from Irish Water indicates that the plant has operated above its capacity of 1.64 million P.E., with a current operational loading of 1.9 million P.E.

In 2017 the plant was non-compliant with several parameters as set under the EPA discharge licence (Irish Water, 2017). Any existing or proposed projects discharging to the plant have the potential to act cumulatively to reduce water quality in Dublin Bay, affecting European sites therein. Despite Ringsend WWTP historically operating at or above capacity and the proposal adding to the loading of the plant, no significant effects from discharge arising from the proposed development are predicted due to the following:

- Notwithstanding the non-compliance of Ringsend WWTP with the ELVs set out in its discharge license, there is no evidence of negative effects on any European sites or their qualifying interests/special conservation interests in Dublin Bay;
- There was no proven link between WWTP discharges and nutrient enrichment of sediments in Dublin Bay based on analyses of dissolved and particulate Nitrogen signatures (Wilson and Jackson, 2011);
- Enriched water entering Dublin Bay has been shown to rapidly mix and become diluted such that the plume is often indistinguishable from the rest of bay water (O'Higgins and Wilson, 2005); and,
- Marine modelling for Ringsend WWTP indicates that discharged effluent is rapidly mixed and dispersed to low levels via tidal mixing within a short distance of the outfall pipe (Dowly & Bedri 2007).

⁵ According to preliminary 2016 Census figures available from the Central Statistics Office www.cso.ie (Accessed 26/10/2017)

Table 1: Analysis of European Sites within 15km (European Sites within 1km, 5km and 15km of the proposed development site are shown in Figure 1 below)

Site name and code	Distance from Proposed Development (approximate)	Reasons for designation ⁶ (*= Priority Habitat) (Sourced from NPWS online Conservation Objectives Generic Version 5.0 for SACs and 5.0 for SPAs, unless otherwise stated).	Relevant source-pathway-receptor links between proposed development and European Site? No sites are “Relevant” to the Proposed Development. (European Sites are “Relevant” where a relevant source-pathway-receptor link ⁷ exists).
Special Areas of Conservation			
South Dublin Bay SAC (000210)	c. 1km east	<p>Conservation Objectives: South Dublin Bay SAC 000210. Version 1. (NPWS, 2013).</p> <p>[1140] Mudflats and sandflats not covered by seawater at low tide</p> <p>[1210] Annual vegetation of drift lines</p> <p>[1310] <i>Salicornia</i> and other annuals colonising mud and sand</p> <p>[2110] Embryonic shifting dunes</p>	<p>The proposal is hydrologically connected to the European site via the surface and foul water networks. There is no possibility of significant effects on the European site in light of the following</p> <ul style="list-style-type: none"> Any pollution event is likely to be short in duration (<i>i.e.</i> confined to storm events during the construction phase of each stage of the proposed development); and, The proposed development includes the adoption of measures to reduce the rate of run-off from the lands during operation; Based on review of water quality data for Dublin Bay available from the EPA mapviewer (EPA, 2018), Dublin Bay is currently listed as ‘<i>Unpolluted</i>’;

⁶ “Qualifying Interests” for SACs and “Special Conservation Interests” for SPAs based on relevant Statutory Instruments for each SPA, and NPWS Conservation Objectives for SACs downloaded from www.npws.ie in July 2015.

⁷ For significant effects to arise, there must be a risk enabled by having a 'source' (*e.g.* construction works at a proposed development site), a 'receptor' (*e.g.* a SAC), and a pathway between the source and the receptor (*e.g.* a watercourse connecting a proposed development site to a SAC). The identification of a pathway does not automatically mean significant effects will arise. The likelihood for significant effects will depend upon the characteristics of the source (*e.g.* duration of construction works), the characteristics of the pathway (*e.g.* water quality status of watercourse receiving run-off from construction) and the characteristics of the receptor (*e.g.* the ecology including conservation status of the SAC reason for designation). When expert judgment determines, that significant effects are likely to arise, both the pathway, and the European Site are considered “Relevant”, and an Appropriate Assessment is triggered

Table 1: Analysis of European Sites within 15km (European Sites within 1km, 5km and 15km of the proposed development site are shown in Figure 1 below)

			<ul style="list-style-type: none"> • In light of the distance of separation between the subject lands and European sites in Dublin Bay (c. 900m at a minimum) and the small scale of works involved in the construction phase of the project, sediments and other pollutants released to the surface water network will be absorbed and diluted to an extent that there will be no discernible effects to water quality in Dublin Bay; • Notwithstanding the non-compliance of Ringsend WWTP with the ELVs set out in its discharge license, there is no evidence of negative effects on any European sites or their qualifying interests/special conservation interests in Dublin Bay; • There was no proven link between WWTP discharges and nutrient enrichment of sediments in Dublin Bay based on analyses of dissolved and particulate Nitrogen signatures (Wilson and Jackson, 2011); • Enriched water entering Dublin Bay has been shown to rapidly mix and become diluted such that the plume is often indistinguishable from the rest of bay water (O'Higgins and Wilson, 2005); and, • Marine modelling for Ringsend WWTP indicates that discharged effluent is rapidly mixed and dispersed to low levels via tidal mixing within a short distance of the outfall pipe (Dowly & Bedri 2007).
North Dublin Bay SAC (000206)	c. 6.8km north	Conservation Objectives: North Dublin Bay SAC 000206. Version 1 (NPWS, 2013).	As per South Dublin Bay SAC (above).

Table 1: Analysis of European Sites within 15km (European Sites within 1km, 5km and 15km of the proposed development site are shown in Figure 1 below)

		<p>[1140] Mudflats and sandflats not covered by seawater at low tide</p> <p>[1210] Annual vegetation of drift lines</p> <p>[1310] <i>Salicornia</i> and other annuals colonising mud and sand</p> <p>[1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)</p> <p>[1395] Petalwort <i>Petalophyllum ralfsii</i></p> <p>[1410] Mediterranean salt meadows (<i>Juncetalia maritimi</i>)</p> <p>[2110] Embryonic shifting dunes</p> <p>[2120] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)</p> <p>[2130] Fixed coastal dunes with herbaceous vegetation (grey dunes)</p> <p>[2190] Humid dune slacks</p>	
Rockabill to Dalkey Island SAC (003000)	c. 7.5km east	<p>Conservation Objectives: Rockabill to Dalkey Island SAC 003000. Version 1 (NPWS, 2013)</p> <p>[1170] Reefs</p> <p>[1351] Harbour porpoise <i>Phocoena phocoena</i></p>	No, as there is a large distance of separation and marine water buffer between the outfall of surface and foul waters from the proposed development and the European site (c. 6.8km from the discharge point at Ringsend WWTP) over which any sediments and pollutants would be absorbed and diluted to non-discernible levels.
Wicklow Mountains SAC (002122)	c. 8.8km south	<p>Conservation Objectives: Wicklow Mountains SAC 002122. Version 1 (NPWS, 2017b)</p> <p>[1355] Otter <i>Lutra lutra</i></p>	No due to the large distance of separation and the lack of any pathway between the proposed development and the European site: The European site is designated for terrestrial habitats which are not physically linked to the subject lands. The subject lands do not form

Table 1: Analysis of European Sites within 15km (European Sites within 1km, 5km and 15km of the proposed development site are shown in Figure 1 below)

		<p>[3110] Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>)</p> <p>[3130] Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i></p> <p>[3160] Natural dystrophic lakes and ponds</p> <p>[4010] Northern Atlantic wet heaths with <i>Erica tetralix</i></p> <p>[4030] European dry heaths</p> <p>[4060] Alpine and Boreal heaths</p> <p>[6130] Calaminarian grasslands of the <i>Violetalia calaminariae</i></p> <p>[6230] Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)</p> <p>[7130] Blanket bogs (* if active bog)</p> <p>[8110] Siliceous scree of the montane to snow levels (<i>Androsacetalia alpinae</i> and <i>Galeopsietalia ladani</i>)</p> <p>[8210] Calcareous rocky slopes with chasmophytic vegetation</p> <p>[8220] Siliceous rocky slopes with chasmophytic vegetation</p> <p>[91A0] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles</p>	<p>an <i>ex situ</i> site for any of the qualifying interest of the European site as the lands do not contain any suitable habitat for any of the qualifying interests.</p>
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Table 1: Analysis of European Sites within 15km (European Sites within 1km, 5km and 15km of the proposed development site are shown in Figure 1 below)

Knocksink Wood SAC (000725)	c. 9.9km south	[7220] Petrifying springs with tufa formation (Cratoneurion)* [91E0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)*	No as there is no source-receptor pathway link between the proposed development and the European site: the European site is designated for groundwater dependent qualifying interests which are a large distance upstream of the proposed development. The proposed development does not form an <i>ex situ</i> site for any of the qualifying interest of the European site.
Howth Head SAC (000202)	c. 10.3km north	Conservation Objectives: Howth Head SAC 000202. Version 1. (NPWS, 2016). [1230] Vegetated sea cliffs of the Atlantic and Baltic coasts [4030] European dry heaths	No due to the large distance of separation and the lack of any pathway between the proposed development and the European site: The European site is designated for terrestrial habitats which are not physically linked to the subject lands. The subject lands do not form an <i>ex situ</i> site for any of the qualifying interest of the European site.
Ballyman Glen SAC (000713)	c. 10.6km south	[7220] Petrifying springs with tufa formation (Cratoneurion)* [7230] Alkaline fens	No as there is no source-receptor pathway link between the proposed development and the European site: the European site is designated for groundwater dependent qualifying interests which are a large distance upstream of the proposed development. The proposed development does not form an <i>ex situ</i> site for any of the qualifying interest of the European site.
Baldoyle Bay SAC (000199)	c. 11.6km north	Conservation Objectives: Baldoyle Bay SAC 000199. Version 1 (NPWS, 2012). [1140] Mudflats and sandflats not covered by seawater at low tide [1310] <i>Salicornia</i> and other annuals colonising mud and sand [1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)	No as there is a large distance of separation (a substantial marine water buffer) between the subject lands and the European site over which any potential pollutants would be adsorbed and diluted to an extent that they would not be perceptible. The subject lands do not form an <i>ex situ</i> site for any of the qualifying interest of the European site.

Table 1: Analysis of European Sites within 15km (European Sites within 1km, 5km and 15km of the proposed development site are shown in Figure 1 below)

		[1410] Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	
Glenasmole Valley SAC (001209)	c. 11.8km southwest	[6210] Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6410] <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [7220] Petrifying springs with tufa formation (<i>Cratoneurion</i>)	No as there is no source-receptor pathway link between the proposed development and the European site: the European site is designated for groundwater dependent qualifying interests which are a large distance upstream of the proposed development. The proposed development does not form an <i>ex situ</i> site for any of the qualifying interest of the European site.
Bray Head SAC (000714)	c. 14km south	Conservation Objectives: Bray Head SAC 000714. Version 1 (NPWS, 2017). [1230] Vegetated sea cliffs of the Atlantic and Baltic coasts [4030] European dry heaths	No due to the large distance of separation and the lack of any pathway between the proposed development and the European site: The European site is designated for terrestrial habitats which are not physically linked to the subject lands. The subject lands do not form an <i>ex situ</i> site for any of the qualifying interest of the European site.
Ireland's Eye SAC (002193)	c. 14.4km northeast	Conservation Objectives: Ireland's Eye SAC 002193. Version 1 (NPWS, 2017). [1220] Perennial vegetation of stony banks [1230] Vegetated sea cliffs of the Atlantic and Baltic coasts	No due to the large distance of separation and the lack of any pathway between the proposed development and the European site: The European site is designated for terrestrial habitats which are not physically linked to the subject lands. The subject lands do not form an <i>ex situ</i> site for any of the qualifying interest of the European site.
Special Protection Areas			
South Dublin Bay and River Tolka Estuary SPA (004024)	c. 900m east	Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1 (NPWS, 2015). [A046] Light-bellied Brent Goose <i>Branta bernicla hrota</i>	The proposal is hydrologically connected to the European site via the surface and foul water networks. There is no possibility of significant effects on the European site in light of the following

Table 1: Analysis of European Sites within 15km (European Sites within 1km, 5km and 15km of the proposed development site are shown in Figure 1 below)

		<p>[A130] Oystercatcher <i>Haematopus ostralegus</i></p> <p>[A137] Ringed Plover <i>Charadrius hiaticula</i></p> <p>[A141] Grey Plover <i>Pluvialis squatarola</i></p> <p>[A143] Knot <i>Calidris canutus</i></p> <p>[A144] Sanderling <i>Calidris alba</i></p> <p>[A149] Dunlin <i>Calidris alpina</i></p> <p>[A157] Bar-tailed Godwit <i>Limosa lapponica</i></p> <p>[A162] Redshank <i>Tringa totanus</i></p> <p>[A179] Black-headed Gull <i>Croicocephalus ridibundus</i></p> <p>[A192] Roseate Tern <i>Sterna dougallii</i></p> <p>[A193] Common Tern <i>Sterna hirundo</i></p> <p>[A194] Arctic Tern <i>Sterna paradisaea</i></p> <p>[A999] Wetland and Waterbirds</p>	<ul style="list-style-type: none"> • The lands are not considered to be an important <i>ex situ</i> site for special conservation interest species of the European sites. This is based on a bird survey undertaken in March 2018 to determine the use of the lands by overwintering bird species, and records of bird surveys of the lands from February and March 2017; • Any pollution event is likely to be short in duration (<i>i.e.</i> confined to storm events during the construction phase of each stage of the proposed development); and, • The proposed development includes the adoption of measures to reduce the rate of run-off from the lands during operation; • Based on review of water quality data for Dublin Bay available from the EPA mapviewer (EPA, 2018), Dublin Bay is currently listed as 'Unpolluted'; • In light of the distance of separation between the subject lands and European sites in Dublin Bay (c. 900m at a minimum) and the small scale of works involved in the construction phase of the project, sediments and other pollutants released to the surface water network will be absorbed and diluted to an extent that there will be no discernible effects to water quality in Dublin Bay; • Notwithstanding the non-compliance of Ringsend WWTP with the ELVs set out in its discharge license, there is no evidence of negative effects on any European sites or their
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Table 1: Analysis of European Sites within 15km (European Sites within 1km, 5km and 15km of the proposed development site are shown in Figure 1 below)

			<p>qualifying interests/special conservation interests in Dublin Bay;</p> <ul style="list-style-type: none"> • There was no proven link between WWTP discharges and nutrient enrichment of sediments in Dublin Bay based on analyses of dissolved and particulate Nitrogen signatures (Wilson and Jackson, 2011); • Enriched water entering Dublin Bay has been shown to rapidly mix and become diluted such that the plume is often indistinguishable from the rest of bay water (O'Higgins and Wilson, 2005); and, • Marine modelling for Ringsend WWTP indicates that discharged effluent is rapidly mixed and dispersed to low levels via tidal mixing within a short distance of the outfall pipe (Dowly & Bedri 2007).
North Bull Island SPA (004006)	c. 5.9km north	<p>Conservation Objectives: North Bull Island SPA 004006. Version 1 (NPWS, 2015).</p> <p>[A046] Light-bellied Brent Goose <i>Branta bernicla hrota</i></p> <p>[A048] Shelduck <i>Tadorna tadorna</i></p> <p>[A052] Teal <i>Anas crecca</i></p> <p>[A054] Pintail <i>Anas acuta</i></p> <p>[A056] Shoveler <i>Anas clypeata</i></p> <p>[A130] Oystercatcher <i>Haematopus ostralegus</i></p> <p>[A140] Golden Plover <i>Pluvialis apricaria</i></p> <p>[A141] Grey Plover <i>Pluvialis squatarola</i></p>	As per South Dublin Bay and River Tolka Estuary SPA, above.

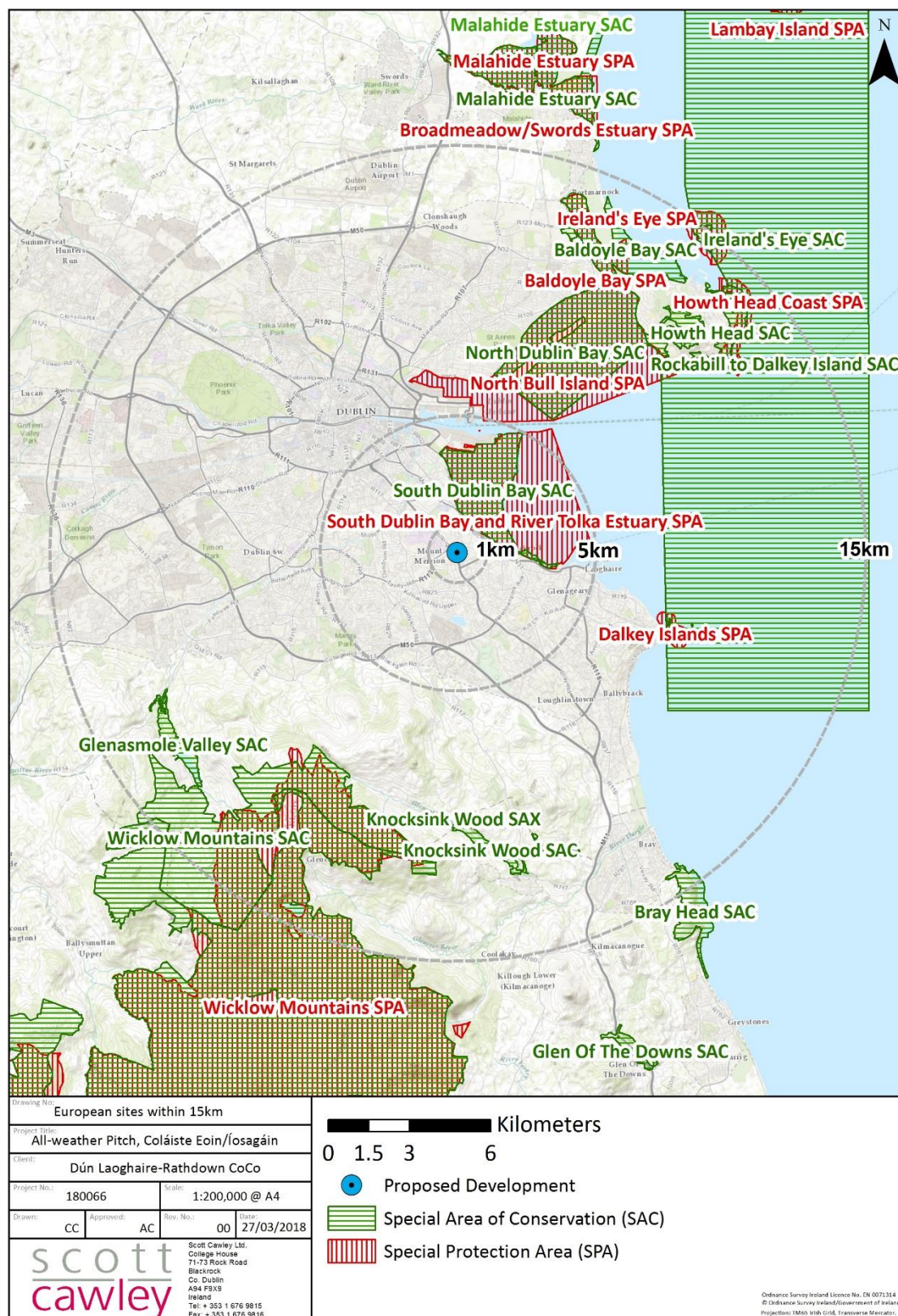
Table 1: Analysis of European Sites within 15km (European Sites within 1km, 5km and 15km of the proposed development site are shown in Figure 1 below)

		[A143] Knot <i>Calidris canutus</i> [A144] Sanderling <i>Calidris alba</i> [A149] Dunlin <i>Calidris alpina</i> [A156] Black-tailed Godwit <i>Limosa limosa</i> [A157] Bar-tailed Godwit <i>Limosa lapponica</i> [A160] Curlew <i>Numenius arquata</i> [A162] Redshank <i>Tringa totanus</i> [A169] Turnstone <i>Arenaria interpres</i> [A179] Black-headed Gull <i>Croicocephalus ridibundus</i> [A999] Wetlands & Waterbirds	
Dalkey Islands SPA (004172)	c. .6km southeast	[A192] Roseate Tern <i>Sterna dougallii</i> [A193] Common Tern <i>Sterna hirundo</i> [A194] Arctic Tern <i>Sterna paradisaea</i>	No as there is no source-receptor pathway link between the proposed development and the European site. The lands do not contain suitable foraging or roosting habitat for any of the special conservation interest species, which are associated with marine habitats.
Wicklow Mountains SPA (004040)	c. 12km west	[A098] Merlin <i>Falco columbarius</i> [A103] Peregrine <i>Falco peregrinus</i>	No as there is no source-receptor pathway link between the proposed development and the European site. The proposed development does not form an <i>ex situ</i> site for any of the special conservation interests of the European site.
Baldoyle Bay SPA (4016)	c. 10.4km north	Conservation Objectives: Baldoyle Bay SPA 004016. Version 1 (NPWS, 2013). [A046] Light-bellied Brent Goose <i>Branta bernicla hrota</i> [A048] Shelduck <i>Tadorna tadorna</i> [A137] Ringed Plover <i>Charadrius hiaticula</i>	No, as there is a large distance of separation and marine water buffer between the outfall of surface and foul waters from the proposed development and the European site over which any sediments and pollutants would be absorbed and diluted to non-discernible levels.

Table 1: Analysis of European Sites within 15km (European Sites within 1km, 5km and 15km of the proposed development site are shown in Figure 1 below)

		[A140] Golden Plover <i>Pluvialis apricaria</i> [A141] Grey Plover <i>Pluvialis squatarola</i> [A157] Bar-tailed Godwit <i>Limosa lapponica</i> [A999] Wetlands & Wetlands	
Howth Head Coast SPA (004113)	c. 11.6km northeast	[A188] Kittiwake <i>Rissa tridactyla</i>	No as there is no source-receptor pathway link between the proposed development and the European site. The subject lands are small in area, subject to frequent disturbance/use by humans and their pets, and vegetated with a high proportion of tree and shrub cover. For these reasons they are considered to be of low suitability for nesting or roosting kittiwake. The proposed development does not form an <i>ex situ</i> site for any of the special conservation interests of the European site.
Ireland's Eye SPA (4117)	c. 14km northeast	[A017] Cormorant <i>Phalacrocorax carbo</i> [A184] Herring Gull <i>Larus argentatus</i> [A188] Kittiwake <i>Rissa tridactyla</i> [A199] Guillemot <i>Uria aalge</i> [A200] Razorbill <i>Alca torda</i>	No as there is no source-receptor pathway link between the proposed development and the European site. The proposed development does not form an <i>ex situ</i> site for any of the special conservation interests of the European site, which are associated with marine habitats.

Figure 1: All European Sites within 15km of the proposed development



5 Conclusions of the Screening Assessment

Following an examination, analysis and evaluation of the relevant information, including in particular, the nature of the proposal 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 judgement has been reached for the reasons outlined below:

The AA Screening process has identified that there is a potential source-receptor-pathway between the proposed development and European sites in Dublin Bay via the surface water and foul water networks. Nonetheless, there is no possibility of significant effects on European sites arising from the proposed development either alone or in-combination with other plans and projects due to the following:

- Any pollution event arising from the construction phase of the proposed development is likely to be short in duration (i.e. confined to storm events during the construction phase of each stage of the proposed development);
- The proposed development includes the adoption of measures to reduce the rate of run-off from the lands during operation;
- Based on review of water quality data for Dublin Bay available from the EPA mapviewer (EPA, 2018), Dublin Bay is currently listed as 'Unpolluted';
- In light of the distance of separation between the subject lands and European sites in Dublin Bay (c. 900m at a minimum) and the small scale of works involved in the construction phase of the project, sediments and other pollutants released to the surface water network will be absorbed and diluted to an extent that there will be no discernible effects to water quality in Dublin Bay;
- Notwithstanding the non-compliance of Ringsend WWTP with the ELVs set out in its discharge license, there is no evidence of negative effects on any European sites or their qualifying interests/special conservation interests in Dublin Bay;
- There was no proven link between WWTP discharges and nutrient enrichment of sediments in Dublin Bay based on analyses of dissolved and particulate Nitrogen signatures (Wilson and Jackson, 2011);
- Enriched water entering Dublin Bay has been shown to rapidly mix and become diluted such that the plume is often indistinguishable from the rest of bay water (O'Higgins and Wilson, 2005); and,
- Marine modelling for Ringsend WWTP indicates that discharged effluent is rapidly mixed and dispersed to low levels via tidal mixing within a short distance of the outfall pipe (Dowly & Bedri 2007). For these reasons, it is the professional opinion of the authors of this report that the proposal does not require an Appropriate Assessment.

However, the authors of this report acknowledge that it is for Dún Laoghaire-Rathdown 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 have a significant effect on any European sites;

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- 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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