

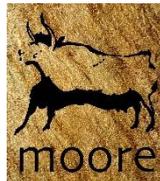
# Report for the purposes of Appropriate Assessment Screening

as required under Article 6(3) of the Habitats Directive  
(Council Directive 92/43/EEC)

## Parkgate Street SHD 2 Landmark Building

Prepared by: Moore Group – Environmental Services

14 June 2021



On behalf of  
Ruirside Developments Limited  
& An Bord Pleanála

<b>Project Proponent</b>	Ruirside Development Limited
<b>Project</b>	Parkgate Street SHD 2 Landmark Building
<b>Title</b>	Report for the purposes of Appropriate Assessment Screening Parkgate Street SHD 2 Landmark Building

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<b>Moore Archaeological and Environmental Services Limited</b>			

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## Abbreviations

AA	Appropriate Assessment
EEC	European Economic Community
EPA	Environmental Protection Agency
EU	European Union
GIS	Geographical Information System
IW	Irish Water
NHA	Natural Heritage Area
NIS	Natura Impact Statement
NPWS	National Parks and Wildlife Service
OSI	Ordnance Survey Ireland
pNHA	proposed Natural Heritage Area
SAC	Special Area of Conservation
SHD	Strategic Housing Development
SPA	Special Protection Area
WWTP	Waste Water Treatment Plant

# 1. Introduction

## 1.1. General Introduction

This report for the purposes of Appropriate Assessment (AA) screening has been prepared to support an application for planning permission for the Proposed Development. The report contains information required for the competent authority to undertake screening for AA on the potential for a proposed Landmark Building as part of a consented Strategic Housing Development at 42A Parkgate Street, Dublin 8 (hereafter referred to as the Proposed Development) to significantly affect European sites.

Screening is the process that addresses the first two tests of Article 6(3) of Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (as amended) (referred to as the Habitats Directive):

- I). whether a plan or project is directly connected to or necessary for the management of the site, and
- II). whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site in view of its conservation objectives.

Having regard to the provisions of the Planning and Development Act 2000 (section 177U and 177V), the purpose of a screening exercise under section 177U of the PDA 2000 is to assess, in view of best scientific knowledge, if the Proposed Development, individually or in combination with another plan or project is likely to have a significant effect on a European site.

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 a European site then it is necessary to carry out a stage 2 appropriate assessment.

When screening the project, there are two possible outcomes:

- the project poses no risk of a significant effect and as such requires no further assessment; and
- the project has potential to have a significant effect (or this is uncertain) and AA of the project is necessary.

This report has been prepared by Moore Group - Environmental Services to support an application for planning permission for the Proposed Development to allow An Bord Pleanála to carry out AA screening in relation to the Proposed Development. The report was compiled by Ger O'Donohoe (B.Sc. Applied Aquatic Sciences (GMIT, 1993) & M.Sc. Environmental Sciences (TCD, 1999)) who has 25 years' experience in environmental impact assessment and has completed numerous Appropriate Assessment Screening Reports and Natura Impact Statements on terrestrial and aquatic habitats for various development types.

## 1.2. Legislative Background - The Habitats and Birds Directives

It is necessary that the Proposed Development has regard to Article 6 of the Habitats Directive. This is transposed into Irish Law by the European Communities (Birds and Natural Habitats) Regulations, 2011 to 2015 (referred to as the Habitats Regulations). The Planning and Development Act 2000 (section 177U and 177V) govern the requirement to carry out appropriate assessment per Section 1.1 above.

The Habitats Directive is the main legislative instrument for the protection and conservation of biodiversity in the European Union (EU). Under the Habitats Directive, Member States are obliged to designate Special Areas of Conservation (SACs) which contain habitats or species considered important for protection and conservation in a EU context.

The Birds Directive (Council Directive 2009/147/EC on the Conservation of Wild Birds), transposed into Irish law by the Habitats Regulations 2011, is concerned with the long-term protection and management of all wild bird species and their habitats in the EU. Among other things, the Birds Directive requires that Special Protection Areas (SPAs) be established to protect migratory species and species which are rare, vulnerable, in danger of extinction, or otherwise require special attention.

SACs designated under the Habitats Directive and SPAs, designated under the Birds Directive, form a pan-European network of protected sites known as Natura 2000. The Habitats Directive sets out a unified system for the protection and management of SACs and SPAs. These sites are also referred to as European sites.

Articles 6(3) and 6(4) of the Habitats Directive set out the requirement for an assessment of proposed plans and projects likely to affect Natura 2000 sites.

Article 6(3) establishes the requirement to screen all plans and projects and to carry out a further assessment if required (Appropriate Assessment (AA)). Article 6(4) establishes requirements in cases of imperative reasons of overriding public interest:

**Article 6(3):** *“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subjected to an appropriate assessment of its implications for the site in view of the site’s conservation objectives. In light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”*

**Article 6(4):** *“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, Member States shall take all*

*compensatory measures necessary to ensure that the overall coherence of the Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to the beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”*

## 2. Methodology

The Commission’s methodological guidance (EC, 2002 & 2018, see Section 2.1 below) promotes a four-stage process to complete the AA and outlines the issues and tests at each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

Stages 1 and 2 deal with the main requirements for assessment under Article 6(3). Stage 3 may be part of Article 6(3) or may be a necessary precursor to Stage 4. Stage 4 is the main derogation step of Article 6(4).

**Stage 1 Screening:** This stage examines the likely effects of a project either alone or in combination with other projects upon a Natura 2000 site and considers whether it can be objectively concluded that these effects will not be significant. In order to screen out a project, it must 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 a European site.

**Stage 2 Appropriate Assessment:** In this stage, there is a consideration of the impact of the project with a view to ascertain whether there will be any adverse effect on the integrity of the Natura 2000 site either alone or in combination with other projects or plans, with respect to the site’s structure and function and its conservation objectives. Additionally, where there are predicted impacts, an assessment of the potential mitigation of those impacts is considered.

**Stage 3 Assessment of Alternative Solutions:** This stage examines alternative ways of implementing the project that, where possible, avoid any adverse impacts on the integrity of the Natura 2000 site.

**Stage 4 Assessment where no alternative solutions exist and where adverse impacts remain:** Where imperative reasons of overriding public interest (IROPI) exist, an assessment to consider whether compensatory measures will or will not effectively offset the damage to the sites will be necessary.

To ensure that the Proposed Development complies fully with the requirements of Article 6 of the Habitats Directive and all relevant Irish transposing legislation, Moore Group compiled this report to support an application for planning permission for the Proposed Development to allow An Bord Pleanála to carry out AA screening in relation to the Proposed Development to determine whether the Proposed Development, individually or in combination with another plan or project will have a significant effect on a Natura 2000 site.

## 2.1. Guidance

This report has been compiled in accordance with guidance contained in the following documents:

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities. (Department of Environment, Heritage and Local Government, 2010 rev.).
- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 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 Guidance Document.
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (EC Environment Directorate-General, 2000); hereafter referred to as MN2000.
- Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC (EC, 2018).
- OPR Practice Note PN01 Appropriate Assessment Screening for Development Management (OPR, 2021).

## 2.2. Data Sources

Sources of information that were used to collect data on the Natura 2000 network of sites, and the environment within which they are located, are listed below:

- The following mapping and Geographical Information Systems (GIS) data sources, as required:
  - National Parks & Wildlife (NPWS) protected site boundary data;
  - Ordnance Survey of Ireland (OSI) mapping and aerial photography;
  - OSI/Environmental Protection Agency (EPA) rivers and streams, and catchments;
  - Open Street Maps;
  - Digital Elevation Model over Europe (EU-DEM);
  - Google Earth and Bing aerial photography 1995-2021;
- Online data available on Natura 2000 sites as held by the National Parks and Wildlife Service (NPWS) from [www.npws.ie](http://www.npws.ie) including:
  - Natura 2000 - Standard Data Form;
  - Conservation Objectives;
  - Site Synopses;
- National Biodiversity Data Centre records;
  - Online database of rare, threatened and protected species;
  - Publicly accessible biodiversity datasets.
- Status of EU Protected Habitats in Ireland. (National Parks & Wildlife Service, 2019); and
- Relevant Development Plans;
  - Dublin City Development Plan 2016-2022

### 3. Description of the proposed development

In brief, permission is sought for Strategic Housing Development, with a life of 8 years, at 42AParkgate Street, Dublin 8, for development comprising:

A 30-storey residential building ('Block A') (c.14,364 sq m gfa), including residential, café/restaurant, replacement office use and ancillary accommodation and works, located in the eastern apex of the site subject of otherwise consented development under ABP-306569-20.

The proposed new Block A building accommodates:

- 198no. 'Build To Rent' residential apartments (73no. studios, 97no. 1-bed, 27no. 2-bed & 1no. 3-bed) from 1<sup>st</sup> to 27<sup>th</sup> floors inclusive, including 53no. units with 'winter garden' balconies on the building's eastern elevation.
- Ancillary internal (c.384 sq m) and external (c.255 sq m) residents' private communal amenity areas and facilities, including ground floor reception/concierge area, lounge bars at mezzanine and 9<sup>th</sup> floors, roof gardens at 9<sup>th</sup> and 28<sup>th</sup> floors, and access to other residents' private communal amenity areas within the consented scheme ABP-306569-20.
- 1no. café/restaurant (c.223 sq m) at ground floor. Replacement office floor area (c.595.6 sq m total) accommodated between 1<sup>st</sup> and 8<sup>th</sup> floor levels of Block A.
- Ancillary residential bicycle storage (22no. spaces), refuse, circulation and plant, and non-residential back of house and circulation areas at ground and mezzanine floors.
- Building Maintenance Unit (BMU) at roof level.

Ancillary and associated site works and other structural and landscape works are proposed to tie the proposed new Block A building in with the consented development (ABP 306569-20). Proposed amendments to the consented scheme, include:

- At the interface of proposed Block A with the consented Block B2 office building:
  - a reduction by c.909 sq m total of office floor area over 6 floors within the consented Block B2 office building;
  - a reduction by c.35 sq m of external residential amenity and associated minor amendments to landscaping at roof level of consented Block B2; and,
  - localised changes to the northern Parkgate St façade of the consented Block B2 to include a shadow gap at its junction with proposed Block A.
- 16no. additional bicycle parking spaces accommodated within consented Block B1 undercroft area.
- Minor localised amendments to adjoining consented public realm area to tie in with proposed Block A at ground level.

- New telecommunications infrastructure at roof level of consented Block B1, including: 4no. 300mm microwave link dishes mounted on 2no. 2m high steel poles fixed to the consented lift shaft overrun, housed within GRP radio friendly shrouds, to mitigate potential for interference with existing telecommunication channels.

The site within which the proposed works sit, benefits from extant permission for residential-led mixed use strategic housing development under ABP 306569-20 (i.e. the consented development). Permission is not being re-sought for the consented development.

For avoidance of doubt, while the red line site boundary is drawn around the entire planning unit of ABP Ref. 306569-20, the development works for which permission is expressly sought are identified with a green dashed line, within the wider red line planning unit.

The overall site (c.0.82 ha) is principally bounded by Parkgate Street to the north, the River Liffey to the south, an existing electricity substation and the junction of Sean Heuston Bridge and Parkgate Street to the east, existing Parkgate Place office and residential development to the west. The application site includes areas of public footpath and roadway on Parkgate Street and a small landscaped area at the junction of Sean Heuston Bridge and Parkgate Street. There are Protected Structures on site.

The river wall will be braced against the proposed new Block A building in the same manner as consented under ABP-306569-20, in so far as it affects the river wall.

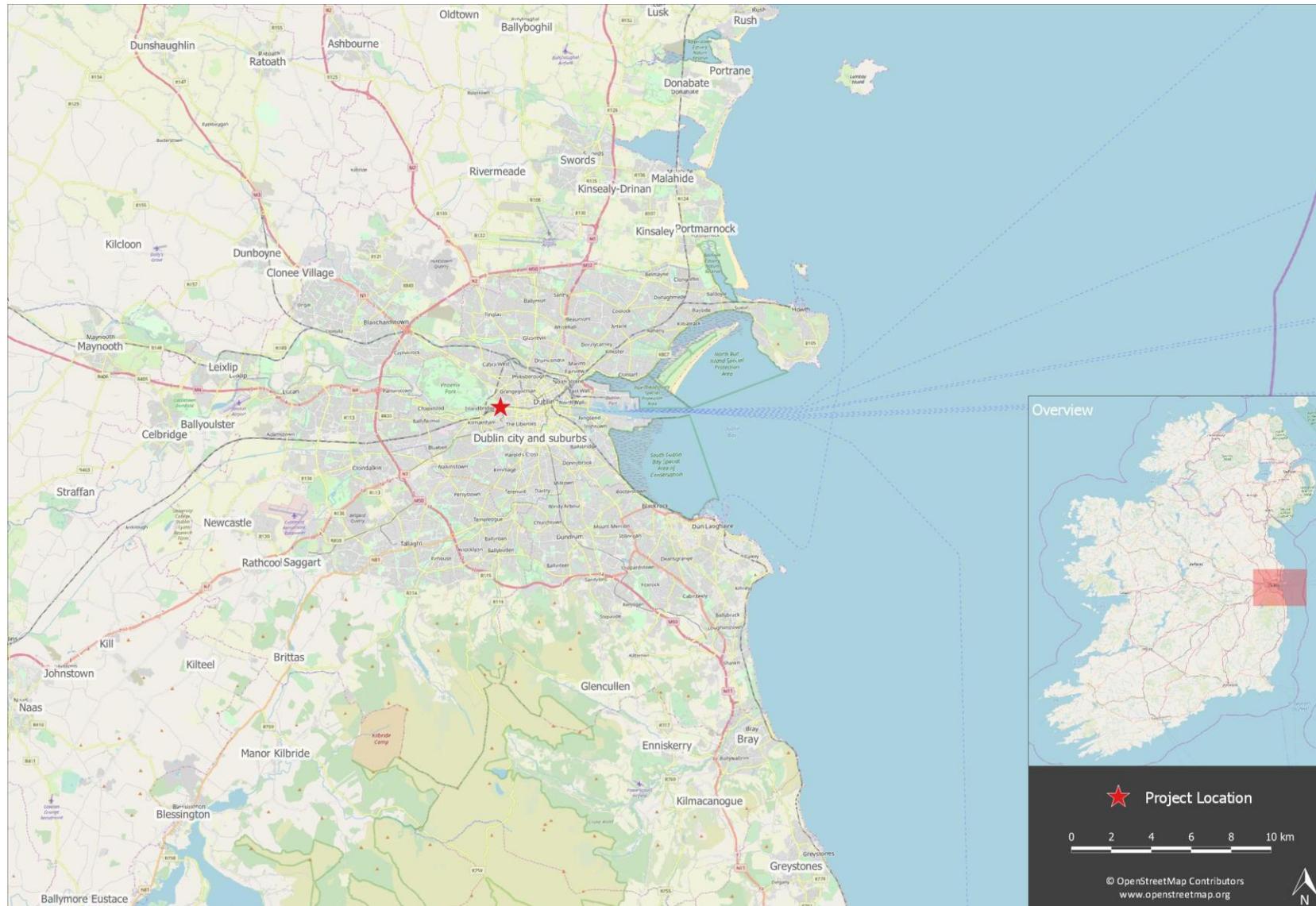


Figure 1. Showing the proposed development location in Dublin City.

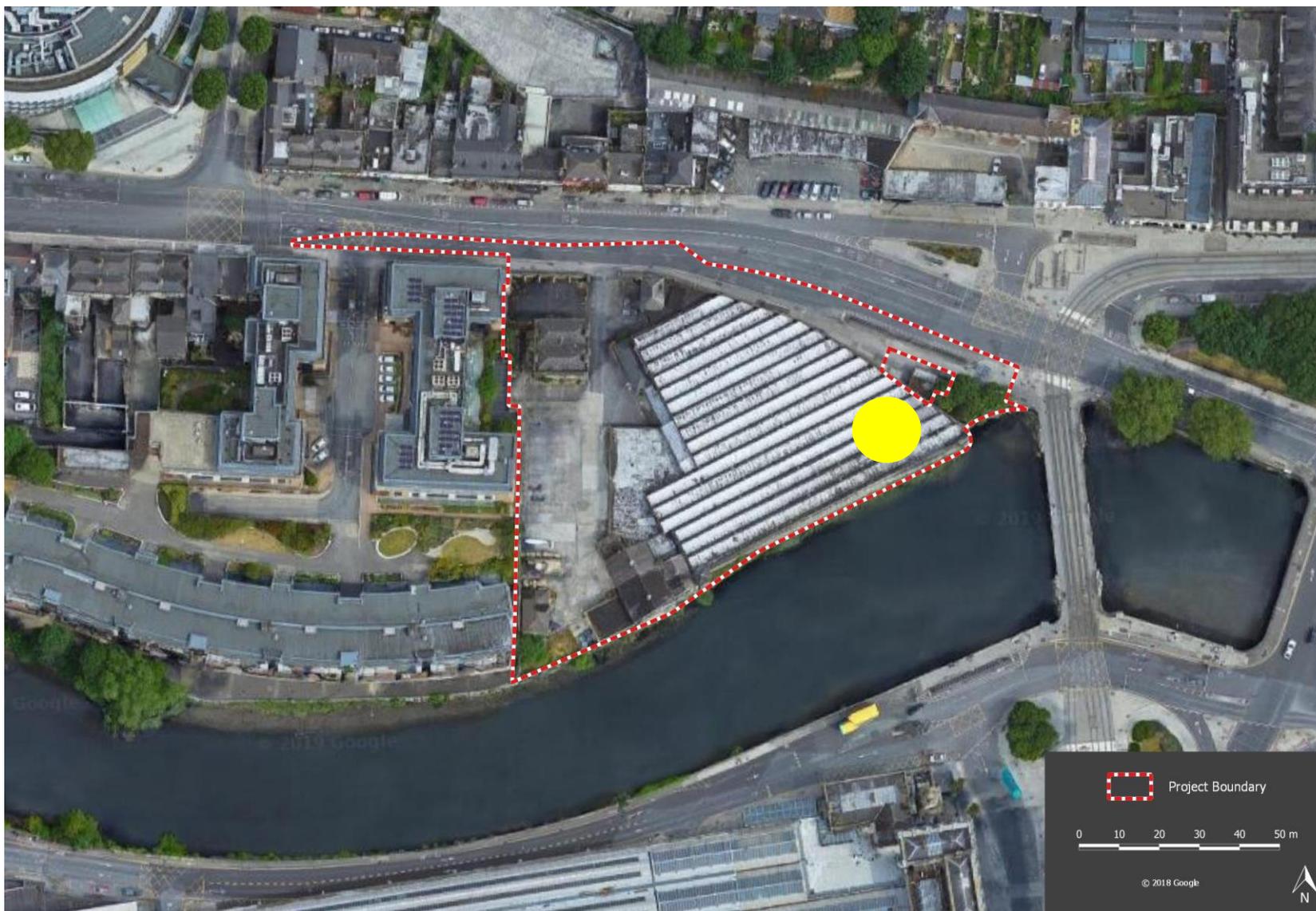


Figure 2. Showing the proposed development location on recent aerial photography.



Figure 3. Ground floor layout the proposed development showing the Tower Building area with a dashed green line.

## 4. Identification of Natura 2000 Sites

### 4.1. Description of Natura Sites Potentially Affected

The Department of Housing, Planning and Local Government (previously DoEHLG)'s Guidance on Appropriate Assessment (2009) recommends an assessment of European sites within a Zone of Influence (ZoI) of 15km. This distance is a guidance only and a zone of influence of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. This should be established on a case-by-case basis using the Source- Pathway-Receptor framework and not by arbitrary distances (such as 15 km).

The Zone of Influence may be determined by connectivity to the Proposed Development in terms of:

- Nature, scale, timing and duration of works and possible impacts, nature and size of excavations, storage of materials, flat/sloping sites;
- Distance and nature of pathways (dilution and dispersion; intervening 'buffer' lands, roads etc.); and
- Sensitivity and location of ecological features.

The potential for source pathway receptor connectivity is firstly identified and detailed information is then provided on sites with connectivity. European sites that are located within 15km of the Proposed Development are listed in Table 1 and presented in Figures 4 and 5, below. Spatial boundary data on the Natura 2000 network was extracted from the NPWS website ([www.npws.ie](http://www.npws.ie)) on the 1 June 2021.

The nearest European sites are those associated with Dublin Bay including the South Dublin Bay and River Tolka Estuary SPA (Site code 004024) which is located approximately 4.37 km to the east, South Dublin Bay SAC (Site code 000210) which is located approximately 5.41 km to the east, North Bull Island SPA (Site code 004006) which is located approximately 7.46 km to the east, and North Dublin Bay SAC (Site code 000206) which is located approximately 7.47 km to the east.

It should be noted that the primary pathway to European sites during the construction phase is hydrologically via the River Liffey and in this way the nearest sites are the South Dublin Bay and River Tolka Estuary SPA which is located over 6.8 river km downstream and the North Dublin Bay SAC and North Bull Island SPA which are located over 8.4 river km downstream. The South Dublin Bay SAC is located outside the South Bull wall and while hydrologically more disconnected from the River Liffey, it is included as it overlaps the South Dublin Bay and River Tolka Estuary SPA.

There will be indirect connectivity to Dublin Bay via the municipal system to Ringsend Wastewater Treatment Plant during the operational phase. However, it has been established in the description of the proposed

development that the sewage discharge will not impact on the overall water quality within Dublin Bay and therefore would not have an impact on the current Water Body Status.

The consideration of source-pathway-receptor connectivity is then presented in Table 2 below.

*Table 1 European Sites located within 15km or the potential Zone of Influence<sup>1</sup> of the Proposed Development.*

Site Code	Site name	Distance (km) <sup>2</sup>
000199	Baldoyle Bay SAC	11.96
000202	Howth Head SAC	13.22
000205	Malahide Estuary SAC	14.1
000206	North Dublin Bay SAC	7.47
000210	South Dublin Bay SAC	5.41
001209	Glenasmole Valley SAC	10.99
001398	Rye Water Valley/Carton SAC	13.14
002122	Wicklow Mountains SAC	12.02
003000	Rockabill to Dalkey Island SAC	13.48
004006	North Bull Island SPA	7.46
004016	Baldoyle Bay SPA	12.34
004024	South Dublin Bay and River Tolka Estuary SPA	4.37
004025	Malahide Estuary SPA	14.1
004040	Wicklow Mountains SPA	12.11

*Table 2 Consideration of connectivity with European Sites.*

European site name & Site code	Location Relative to the Proposed Development Site	Connectivity – Source-Pathway-Receptor	Considered further in Screening – Y/N
<p><b>Baldoyle Bay SAC (000199)</b></p> <p>4 Qualifying Interests</p> <p>NPWS (2012) Conservation Objectives: Baldoyle Bay SAC 000199. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	11.96km to the north-east of the Proposed Development	No There are no pathways or connectivity to the habitats of this site.	N
<p><b>Howth Head SAC (000202)</b></p> <p>[1230] Vegetated sea cliffs of the Atlantic and Baltic coasts</p> <p>[4030] European dry heaths</p>	13.22km to the north-east of the Proposed Development	No There are no pathways or connectivity to the habitats of this site.	N

<sup>1</sup> All European sites potentially connected irrespective of the nature or scale of the Proposed Development.

<sup>2</sup> Distances indicated are the closest geographical distance between the Proposed Development and the European site boundary, as made available by the NPWS. Connectivity along hydrological pathways may be significantly greater.

European site name & Site code	Location Relative to the Proposed Development Site	Connectivity – Source-Pathway-Receptor	Considered further in Screening – Y/N
NPWS (2016) Conservation Objectives: Howth Head SAC 000202. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs			
<p><b>Malahide Estuary SAC (000205)</b></p> <p>7 Qualifying Interests</p> <p>Including Priority Habitats – Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</p> <p>NPWS (2013) Conservation Objectives: Malahide Estuary SAC 000205. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	14.1km to the north-east of the Proposed Development	No There are no pathways or connectivity to the habitats or species of this site.	N
<p><b>North Dublin Bay SAC (000206)</b></p> <p>10 Qualifying Interests</p> <p>Including Priority Habitat – Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</p> <p>NPWS (2013) Conservation Objectives: North Dublin Bay SAC 000206. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	7.47km to the north-east of the Proposed Development	Yes There is a direct albeit distant pathway via the River Liffey and an indirect pathway via Ringsend WWTP.	Y
<p><b>South Dublin Bay SAC (000210)</b></p> <p>Mudflats and sandflats not covered by seawater at low tide [1140]</p> <p>NPWS (2013) Conservation Objectives: South Dublin Bay SAC 000210. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	5.41km to the south-east of the Proposed Development	Yes There is a direct albeit distant pathway via the River Liffey and an indirect pathway via Ringsend WWTP.	Y
<p><b>Rockabill to Dalkey Island SAC (003000)</b></p> <p>Reefs [1170]</p> <p>Harbour Porpoise (<i>Phocoena phocoena</i>) [1351]</p> <p>NPWS (2013) Conservation Objectives: Rockabill to Dalkey Island SAC 003000. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	13.48km to the east of the Proposed Development	No There hydrological pathway is at such a distance of removal with intervening dilution in the Irish Sea that significant effects are unlikely.	N
<p><b>Glenasmole Valley SAC (001209)</b></p> <p>3 Qualifying Interests</p>	10.99km to the south of the Proposed Development	No There are no pathways or connectivity to the habitats or species of this site.	N

European site name & Site code	Location Relative to the Proposed Development Site	Connectivity – Source-Pathway-Receptor	Considered further in Screening – Y/N
<p>Including Priority Habitat - Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (*important orchid sites) [6210]</p> <p>NPWS (2021) Conservation objectives for Glenasmole Valley SAC [001209]. Generic Version 8.0. Department of Housing, Local Government and Heritage.</p>			
<p><b>Rye Water Valley/Carlton SAC (001398)</b></p> <p>3 Qualifying Interests</p> <p>Including Priority Habitats – [7220] Petrifying springs with tufa formation (Cratoneurion)</p> <p>NPWS (2021) Conservation objectives for Rye Water Valley/Carlton SAC [001398]. Generic Version 8.0. Department of Housing, Local Government and Heritage</p>	13.14km to the west of the Proposed Development	No There are no pathways or connectivity to the habitats or species of this site.	N
<p><b>Wicklow Mountains SAC (002122)</b></p> <p>14 Qualifying Interests</p> <p>Including Priority Habitats – [6230] Species-rich <i>Nardus</i> grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe); [7130] Blanket bogs (* if active bog)</p> <p>NPWS (2017) Conservation Objectives: Wicklow Mountains SAC 002122. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.</p>	12.02km to the south of the Proposed Development	No There are no pathways or connectivity to the habitats or species of this site.	
<p><b>Baldoyle Bay SPA (004016)</b></p> <p>7 SCI's</p> <p>NPWS (2013) Conservation Objectives: Baldoyle Bay SPA 004016. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	12.34km to the north-east of the Proposed Development	No Due to distance and the lack of any relevant ex-situ factors of significance to these species or habitat.	N
<p><b>South Dublin and River Tolka Estuary SPA (004024)</b></p> <p>14 SCI's</p> <p>NPWS (2015) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	4.37km to the south-east of the Proposed Development	Yes There is a direct albeit distant pathway via the River Liffey and an indirect pathway via Ringsend WWTP.	Y
<p><b>North Bull Island SPA (004025)</b></p> <p>18 SCI's</p>	7.46km to the north-east of the Proposed Development	Yes There is a direct albeit distant pathway via the	Y

European site name & Site code	Location Relative to the Proposed Development Site	Connectivity – Source-Pathway-Receptor	Considered further in Screening – Y/N
NPWS (2015) Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.		River Liffey and an indirect pathway via Ringsend WWTP.	
<p><b>Wicklow Mountains SPA (004040)</b></p> <p>[A098] Merlin (<i>Falco columbarius</i>)</p> <p>[A103] Peregrine (<i>Falco peregrinus</i>)</p> <p>NPWS (2021) Conservation objectives for Wicklow Mountains SPA [004040]. Generic Version 8.0. Department of Housing, Local Government and Heritage</p>	12.11km to the south of the Proposed Development	No Due to distance and the lack of any relevant ex-situ factors of significance to these species or habitat.	N
<p><b>Malahide Estuary SPA</b></p> <p>15 SCI's</p> <p>NPWS (2013) Conservation Objectives: Malahide Estuary SPA 004025. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.</p>	14.1km to the north-east of the Proposed Development	No Due to distance and the lack of any relevant ex-situ factors of significance to these species or habitat.	N

The following European Sites are brought forward for further analysis:

- North Dublin Bay SAC 000206
- South Dublin Bay SAC 000210
- North Bull Island SPA 004006
- South Dublin Bay and River Tolka Estuary SPA 004024

Details of the qualifying interests of the South Dublin Bay and River Tolka Estuary SPA (Site code 004024), South Dublin Bay SAC (Site code 000210), North Dublin Bay SAC (Site code 000206) and North Bull Island SPA (Site code 004006) are listed in Tables 3 and 4 below, and Site Synopses are available from the NPWS website ([www.npws.ie](http://www.npws.ie)).

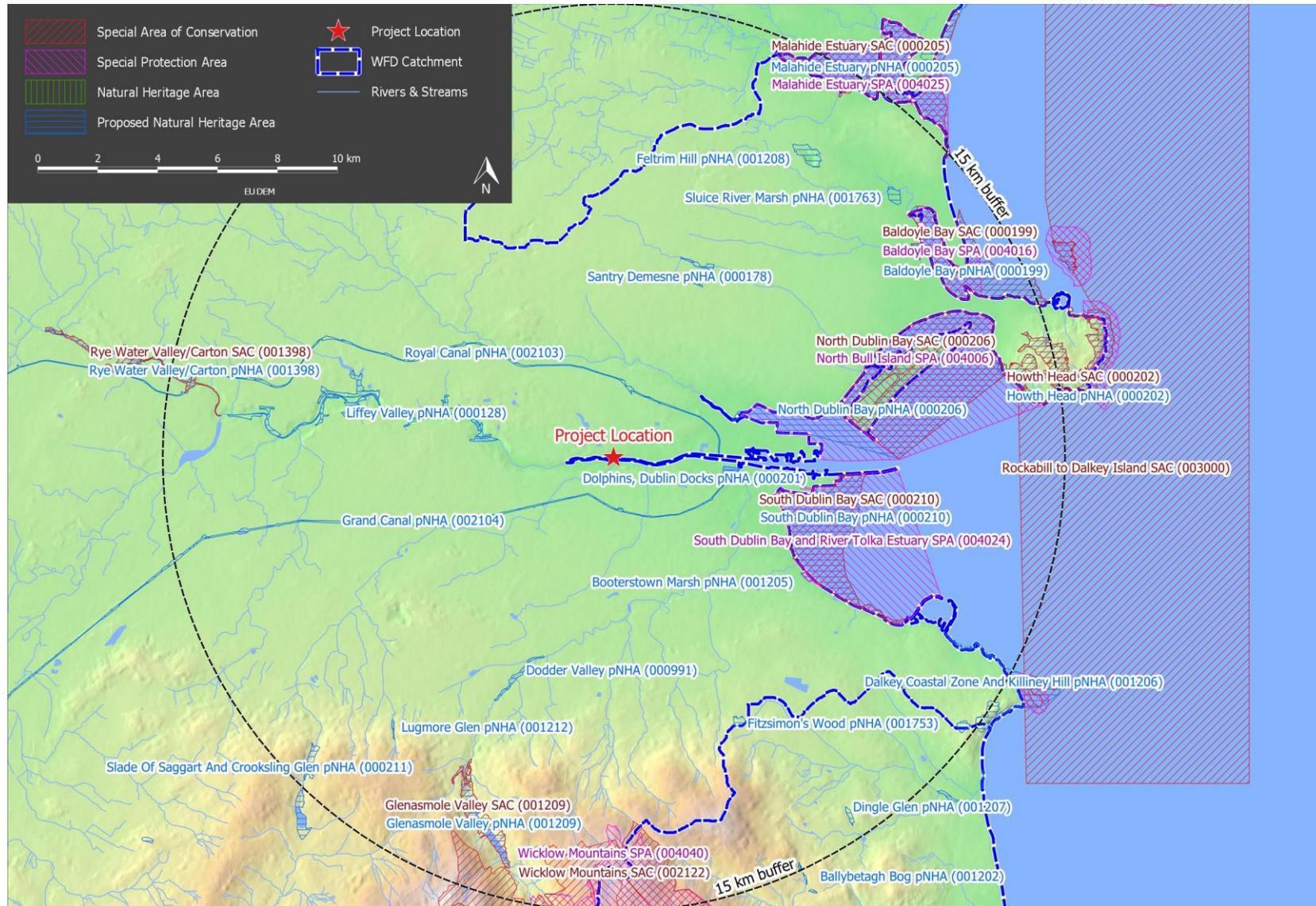


Figure 4. Showing European sites and NHAs/pNHAs within 15 km of the proposed development.

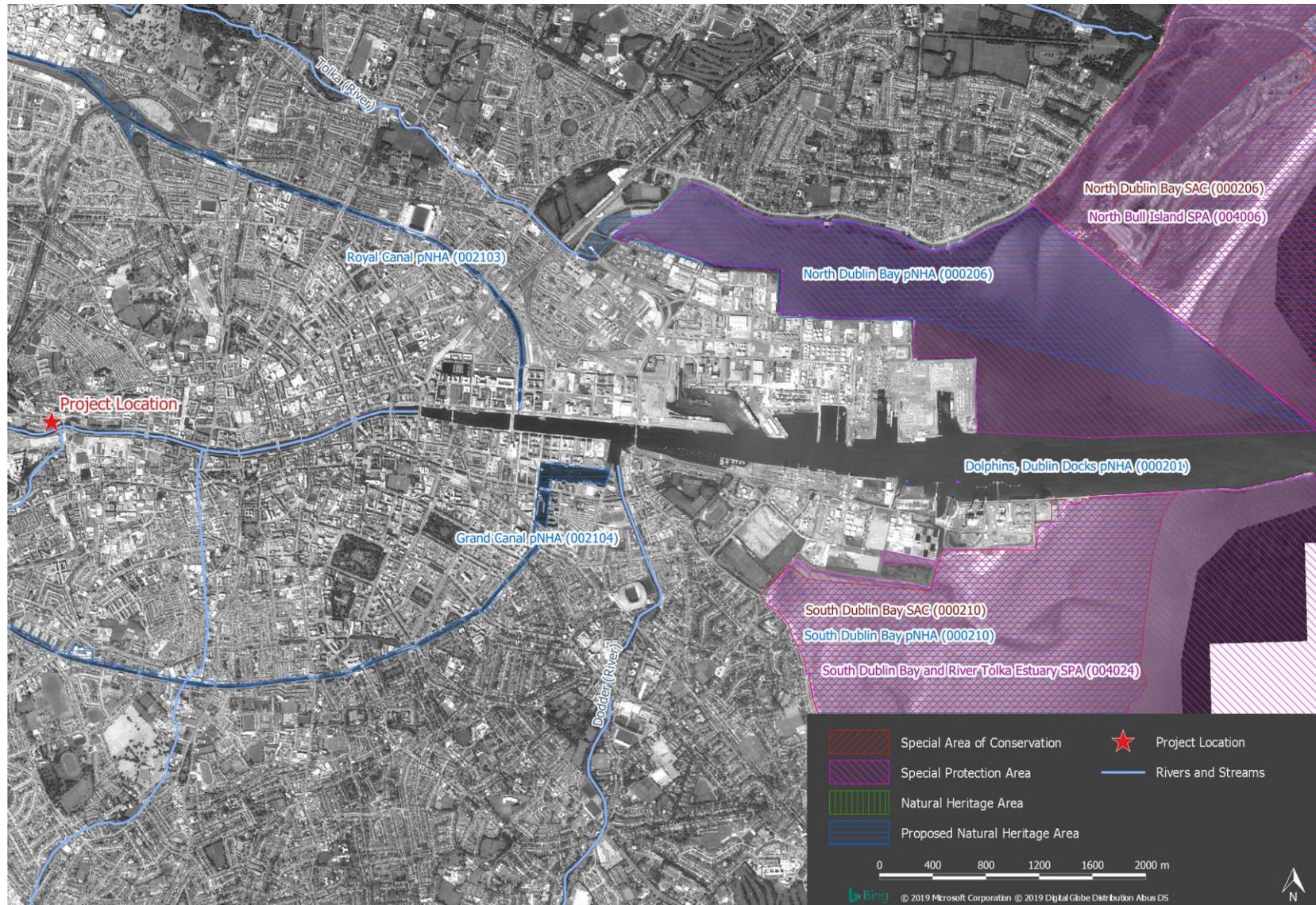


Figure 5. Detailed view of European sites and NHAs/pNHAs in the vicinity of the proposed development.

Table 3 SACs located within the potential zone of impact of the Project (\*indicates priority habitat).

Site Code		Site Name	Qualifying Interests
000206		North Dublin Bay SAC	<p><b>Habitats:</b></p> <p>[1140] Mudflats and sandflats not covered by seawater at low tide</p> <p>[1210] Annual vegetation of drift lines</p> <p>[1310] Salicornia and other annuals colonising mud and sand</p> <p>[1330] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</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> <p><b>Species:</b></p> <p>[1395] Petalwort <i>Petalophyllum ralfsii</i></p>
000210		South Dublin Bay SAC	<p><b>Habitats:</b></p> <p>[1140] Mudflats and sandflats not covered by seawater at low tide</p>

This report is cognisant of the following notes outlined in the Conservation Objectives:

**North Dublin Bay SAC** - Please note that this SAC overlaps with North Bull Island SPA (004006) and adjoins Howth Head SAC (000203) and South Dublin Bay and River Tolka Estuary SPA (004024). The conservation objectives for this site should be used in conjunction with those for the overlapping and adjacent sites as appropriate.

**South Dublin Bay SAC** - Please note that this SAC overlaps with South Dublin Bay and River Tolka Estuary SPA (004024). See map 2. The conservation objectives for this site should be used in conjunction with those for the overlapping site as appropriate.

Table 4 SPAs located within the potential zone of impact of the Project.

Site Code	Site Name	Qualifying Interests
004006	North Bull Island SPA	<p><b>Habitats:</b></p> <p>[A999] Wetlands</p> <p><b>Species:</b></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> <p>[A143] Knot <i>Calidris canutus</i></p> <p>[A144] Sanderling <i>Calidris alba</i></p> <p>[A149] Dunlin <i>Calidris alpina alpina</i></p>

Site Code	Site Name	Qualifying Interests
		[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>Chroicocephalus ridibundus</i>
004024	South Dublin Bay and River Tolka Estuary SPA	<b>Habitats:</b> [A999] Wetlands <b>Species:</b> [A046] Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A130] Oystercatcher ( <i>Haematopus ostralegus</i> ) [A137] Ringed Plover <i>Charadrius hiaticula</i> [A141] Grey Plover ( <i>Pluvialis squatarola</i> ) [A143] Knot ( <i>Calidris canutus</i> ) [A144] Sanderling <i>Calidris alba</i> [A149] Dunlin ( <i>Calidris alpina</i> ) [A157] Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A162] Redshank ( <i>Tringa totanus</i> ) [A179] Black-headed Gull <i>Chroicocephalus ridibundus</i> [A192] Roseate Tern <i>Sterna dougallii</i> [A193] Common Tern <i>Sterna hirundo</i> [A194] Arctic Tern <i>Sterna paradisaea</i>

This report is cognisant of the following notes outlined in the Conservation Objectives:

**North Bull Island SPA** - Please note that this SPA overlaps with North Dublin Bay SAC (000206) and Rockabill to Dalkey Island SAC (003000). It adjoins Howth Head SAC (000202) and South Dublin Bay and River Tolka Estuary SPA (004024). See map 2. The conservation objectives for this site should be used in conjunction with those for overlapping and adjacent sites as appropriate.

**South Dublin Bay and River Tolka Estuary SPA** - Please note that this SPA overlaps with South Dublin Bay SAC (000210). It adjoins North Bull Island SPA (004006) and North Dublin Bay SAC (000206). See map 2. The conservation objectives for this site should be used in conjunction with those for overlapping and adjacent sites as appropriate.

#### 4.2. Conservation Objectives of the Natura 2000 Sites

It may be noted that the most up to date Conservation Objectives documents available from the NPWS website have been included for each of the European Sites in Table 2 above. GIS metadata was reviewed and updated in June 2021.

#### 4.2.1. North Dublin Bay SAC (000206) – Vers. 1, 6th November 2013

The following Conservation Objective is set out for the North Dublin Bay SAC. Specific attributes, measures and targets are presented in the relevant Conservation Objectives documents and will be addressed in more detail if required after potential impacts have been determined.

##### 1140 Mudflats and sandflats not covered by seawater at low tide

To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes
Community extent	Hectares	Maintain the extent of the <i>Mytilus edulis</i> - dominated community, subject to natural processes
Community structure: <i>Mytilus edulis</i> density	Individuals/m <sup>2</sup>	Conserve the high quality of the <i>Mytilus edulis</i> -dominated community, subject to natural processes
Community distribution	Hectares	Conserve the following community types in a natural condition: Fine sand to sandy mud with <i>Pygospio elegans</i> and <i>Crangon crangon</i> community complex; Fine sand with <i>Spio martinensis</i> community complex.

##### 1210 Annual vegetation of drift lines

To restore the favourable conservation condition of Annual vegetation of drift lines in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area increasing, subject to natural processes, including erosion and succession. Total area mapped: South Bull - 0.11ha.
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain the presence of species-poor communities with typical species: sea rocket ( <i>Cakile maritima</i> ), sea sandwort ( <i>Honckenya peploides</i> ), prickly saltwort ( <i>Salsola kali</i> ) and oraches ( <i>Atriplex spp.</i> )
Vegetation structure: negative indicator species	Hectares	Negative indicator species (including non-natives) to represent less than 5% cover

**1310 *Salicornia* and other annuals colonising mud and sand**

To restore the favourable conservation condition of *Salicornia* and other annuals colonizing mud and sand in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: North Bull Island - 29.10ha.
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes
Physical structure: sediment supply	Presence/ absence of physical barriers	Maintain, or where necessary restore, natural circulation of sediments and organic matter, without any physical obstructions
Physical structure: creeks and pans	Occurrence	Maintain creek and pan structure, subject to natural processes, including erosion and succession
Physical structure: flooding regime	Hectares flooded; frequency	Maintain natural tidal regime
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward
Vegetation structure: vegetation cover	Percentage cover at a representative sample of monitoring stops	Maintain more than 90% of area outside creeks vegetated
Vegetation composition: typical species and sub-communities	Percentage cover	Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)
Vegetation structure: negative indicator species - <i>Spartina anglica</i>	Hectares	No significant expansion of common cordgrass ( <i>Spartina anglica</i> ). No new sites for this species and an annual spread of less than 1%

**1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)**

To restore the favourable conservation condition of Atlantic salt meadows (*GlaucoPuccinellietalia maritimae*) in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: North Bull Island - 81.84ha.
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes
Physical structure: sediment supply	Presence/ absence of physical barriers	Maintain natural circulation of sediments and organic matter, without any physical obstructions
Physical structure: creeks and pans	Occurrence	Maintain creek and pan structure, subject to natural processes, including erosion and succession

Attribute	Measure	Target
Physical structure: flooding regime	Hectares flooded; frequency	Maintain natural tidal regime
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward
Vegetation structure: vegetation cover	Percentage cover at a representative sample of monitoring stops	Maintain more than 90% of area outside creeks vegetated
Vegetation composition: typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of subcommunities with typical species listed in SMP (McCorry and Ryle, 2009)
Vegetation structure: negative indicator species - <i>Spartina anglica</i>	Hectares	No significant expansion of common cordgrass ( <i>Spartina anglica</i> ), with an annual spread of less than 1%

#### 1410 Mediterranean salt meadows (*Juncetalia maritimi*)

To maintain the favourable conservation condition of Mediterranean salt meadows (*Juncetalia maritimi*) in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: North Bull Island - 7.98ha.
Habitat distribution	Occurrence	No decline or change in habitat distribution, subject to natural processes.
Physical structure: sediment supply	Presence/ absence of physical barriers	Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions
Physical structure: creeks and pans	Occurrence	Maintain creek and pan structure, subject to natural processes, including erosion and succession
Physical structure: flooding regime	Hectares flooded; frequency	Maintain natural tidal regime
Vegetation structure: zonation	Occurrence	Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward
Vegetation structure: vegetation cover	Percentage cover at a representative sample of monitoring stops	Maintain more than 90% of area outside creeks vegetated
Vegetation composition: typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of sub-communities with characteristic species listed in SMP (McCorry and Ryle, 2009)
Vegetation structure: negative indicator species - <i>Spartina anglica</i>	Hectares	No significant expansion of common cordgrass ( <i>Spartina anglica</i> ), with an annual spread of less than 1%

### 2110 Embryonic shifting dunes

To restore the favourable conservation condition of Embryonic shifting dunes in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession. For sub-sites mapped: North Bull - 2.64ha; South Bull - 3.43ha.
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes.
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions
Vegetation structure: zonation	Occurrence	Maintain range of coastal habitats, including transitional zones, subject to natural processes including erosion and succession
Vegetation composition: plant health of foredune grasses	Percentage cover	More than 95% of sand couch ( <i>Elytrigia juncea</i> ) and/or lyme-grass ( <i>Leymus arenarius</i> ) should be healthy (i.e. green plant parts above ground and flowering heads present)
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain the presence of species-poor communities with typical species: sand couch ( <i>Elytrigia juncea</i> ) and/or lyme-grass ( <i>Leymus arenarius</i> )
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-natives) to represent less than 5% cover

### 2120 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes)

To restore the favourable conservation condition of Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes') in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes including erosion and succession. North Bull - 2.20ha; South Bull - 0.97ha.
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes.
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions
Vegetation structure: zonation	Occurrence	Maintain range of coastal habitats, including transitional zones, subject to natural processes including erosion and succession
Vegetation composition: plant health of dune grasses	Percentage cover	95% of marram grass ( <i>Ammophila arenaria</i> ) and/or lyme-grass ( <i>Leymus arenarius</i> ) should be healthy (i.e. green plant parts above ground and flowering heads present)

Attribute	Measure	Target
Vegetation composition: typical species and sub-communities	Percentage cover at a representative number of monitoring stops	Maintain the presence of species-poor communities dominated by marram grass ( <i>Ammophila arenaria</i> ) and/or lymegrass ( <i>Leymus arenarius</i> )
Vegetation composition: negative indicator species	Percentage cover	Negative indicator species (including non-natives) to represent less than 5% cover

### 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)

To restore the favourable conservation condition of Fixed coastal dunes with herbaceous vegetation ('grey dunes') in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area stable or increasing, subject to natural processes including erosion and succession. For subsites mapped: North Bull - 40.29ha; South Bull - 64.56ha.
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation structure: bare ground	Percentage cover	Bare ground should not exceed 10% of fixed dune habitat, subject to natural processes
Vegetation structure: sward height	Centimetres	Maintain structural variation within sward
Vegetation composition: typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of sub-communities with typical species listed in Delaney et al. (2013)
Vegetation composition: negative indicator species (including <i>Hippophae rhamnoides</i> )	Percentage Cover	Negative indicator species (including non-natives) to represent less than 5% cover
Vegetation composition: scrub/trees	Percentage Cover	No more than 5% cover or under control

### 2190 Humid dune slacks

To restore the favourable conservation condition of Humid dune slacks in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat area	Hectares	Area increasing, subject to natural processes including erosion and succession. For sub-sites mapped: North Bull - 2.96ha; South Bull - 9.15ha.
Habitat distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes
Physical structure: functionality and sediment supply	Presence/ absence of physical barriers	Maintain the natural circulation of sediment and organic matter, without any physical obstructions
Physical structure: hydrological and flooding regime	Water table levels; groundwater fluctuations (metres)	Maintain natural hydrological regime
Vegetation structure: zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation structure: bare ground	Percentage cover	Bare ground should not exceed 5% of dune slack habitat, with the exception of pioneer slacks which can have up to 20% bare ground
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward
Vegetation composition: typical species and sub-communities	Percentage cover at a representative sample of monitoring stops	Maintain range of sub-communities with typical species listed in Delaney et al. (2013)
Vegetation composition: cover of <i>Salix repens</i>	Percentage cover; centimetres	Maintain less than 40% cover of creeping willow ( <i>Salix repens</i> )
Vegetation composition: negative indicator species	Percentage Cover	Negative indicator species (including non-natives) to represent less than 5% cover
Vegetation composition: scrub/trees	Percentage Cover	No more than 5% cover or under control

### 1395 Petalwort *Petalophyllum ralfsii*

To maintain the favourable conservation condition of Petalwort in North Dublin Bay SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Distribution of populations	Number and geographical spread of populations	No decline.
Population size	Number of individuals	No decline. Population at Bull Island estimated at a maximum of 5,824 thalli. Actual population is more likely to be 5% of this, or c. 300 thalli
Area of suitable habitat	Hectares	No decline. Area of suitable habitat at Bull Island is estimated at c. 0.04ha.

Attribute	Measure	Target
Hydrological conditions: soil moisture	Occurrence	Maintain hydrological conditions so that substrate is kept moist and damp throughout the year, but not subject to prolonged inundation by flooding in winter
Vegetation structure: height and cover	Centimetres and percentage	Maintain open, low vegetation with a high percentage of bryophytes (small acrocarps and liverwort turf) and bare ground

#### 4.2.2. South Dublin Bay SAC (000210) – Vers. 1, 22nd August 2013

The following Conservation Objective is set out for the South Dublin Bay SAC. Specific attributes, measures and targets are presented in the relevant Conservation Objectives documents and will be addressed in more detail if required after potential impacts have been determined.

##### **1140 Mudflats and sandflats not covered by seawater at low tide**

To maintain the favourable conservation condition of Mudflats and sandflats not covered by seawater at low tide in South Dublin Bay SAC, which is defined by the following list of attributes and targets.

Attribute	Measure	Target
Habitat area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes
Community extent	Hectares	Maintain the extent of the <i>Zostera</i> -dominated community, subject to natural processes
Community structure: <i>Mytilus edulis</i> density	Individuals/m <sup>2</sup>	Conserve the high quality of the <i>Zostera</i> -dominated community, subject to natural processes
Community distribution	Hectares	Conserve the following community types in a natural condition: Fine sands with <i>Angulus tenuis</i> community complex.

#### 4.2.3. North Bull Island SPA (004006) – Vers 1, 9th March 2015

The following Conservation Objectives are set out for the North Bull Island SPA. Specific attributes, measures and targets are presented in the relevant Conservation Objectives documents and will be addressed in more detail if required after potential impacts have been determined.

##### **Generic Conservation Objectives**

In the absence of specific conservation objectives, the following generic conservation objectives can be applied to each qualifying species listed. Species with specific conservation objectives are listed below.

To maintain the favourable conservation condition of [each qualifying species] in North Bull Island SPA, which is defined by the following list of attributes and targets:

**[Qualifying Bird Species]**

Attribute	Measure	Target
Population trend	Percentage change	Long term population trend stable or increasing
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by [each qualifying species], other than that occurring from natural patterns of variation

**Specific Conservation Objectives****A99 Wetlands**

To maintain the favourable conservation condition of the wetland habitat in North Bull Island SPA as a resource for the regularly occurring migratory water birds that utilise it. This is defined by the following attribute and target:

Attribute	Measure	Target
Habitat area	Hectares	The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 1,713 hectares, other than that occurring from natural patterns of variation.

**4.2.4. South Dublin Bay and River Tolka Estuary SPA (004024) – Vers. 1, 9th March 2015**

The following Conservation Objectives are set out for the South Dublin Bay and River Tolka Estuary SPA. Specific attributes, measures and targets are presented in the relevant Conservation Objectives documents and will be addressed in more detail if required after potential impacts have been determined.

Specific Conservation Objectives and Target Notes are set by the NPWS (Vers 1; 9<sup>th</sup> March 2015) for the South Dublin Bay and River Tolka Estuary SPA (004025) as follows.

**Generic Conservation Objectives**

In the absence of specific conservation objectives, the following generic conservation objectives can be applied to each qualifying species listed. Species with specific conservation objectives are listed below.

To maintain the favourable conservation condition of [each qualifying species] in South Dublin Bay and River Tolka Estuary SPA, which is defined by the following list of attributes and targets:

**[Qualifying Bird Species]**

Attribute	Measure	Target
Population trend	Percentage change	Long term population trend stable or increasing
Distribution	Range, timing and intensity of use of areas	No significant decrease in the range, timing or intensity of use of areas by redshank, other than that occurring from natural patterns of variation

**Specific Conservation Objectives****A141 Grey Plover *Pluvialis squatarola***

Grey Plover is proposed for removal from the list of Special Conservation Interests for South Dublin Bay and River Tolka Estuary SPA. As a result, a site-specific conservation objective has not been set for this species.

**A192 Roseate Tern *Sterna dougallii***

To maintain the favourable conservation condition of Roseate Tern in South Dublin Bay and River Tolka Estuary SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Passage population: individuals	Number	No significant decline
Distribution: roosting areas	Number; location; area (hectares)	No significant decline
Prey biomass available	Kilogrammes	No significant decline
Barriers to connectivity	Number; location; shape; area (hectares)	No significant decline
Disturbance at roosting site	Level of impact	Human activities should occur at levels that do not adversely affect the numbers of roseate tern among the post-breeding aggregation of terns

**A193 Common Tern *Sterna hirundo***

To maintain the favourable conservation condition of Common Tern in South Dublin Bay and River Tolka Estuary SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Breeding population abundance: Apparently occupied nests (AONs)	Number	No significant decline
Productivity rate: fledged young per breeding pair	Mean number	No significant decline
Passage population: individuals	Number	No significant decline
Distribution: breeding colonies	Number; location; area (Hectares)	No significant decline

Attribute	Measure	Target
Distribution: roosting areas	Number; location; area (Hectares)	No significant decline
Prey biomass available	Kilogrammes	No significant decline
Barriers to connectivity	Number; location; shape; area (hectares)	No significant increase
Disturbance at breeding site	Level of impact	Human activities should occur at levels that do not adversely affect the breeding common tern population
Disturbance at roosting site	Level of impact	Human activities should occur at levels that do not adversely affect the numbers of common tern among the post-breeding aggregation of terns

### **A194 Arctic Tern *Sterna paradisaea***

To maintain the favourable conservation condition of Arctic Tern in South Dublin Bay and River Tolka Estuary SPA, which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Passage population	Number of individuals	No significant decline
Distribution: roosting areas	Number; location; area (Hectares)	No significant decline
Prey biomass available	Kilogrammes	No significant decline
Barriers to connectivity	Number; location; shape; area (hectares)	No significant increase
Disturbance at roosting site	Level of impact	Human activities should occur at levels that do not adversely affect the numbers of Arctic tern among the post-breeding aggregation of terns

### **A99 Wetlands**

To maintain the favourable conservation condition of the Wetland habitat in South Dublin Bay and River Tolka Estuary SPA as a resource for the regularly-occurring migratory waterbirds that utilise it. This is defined by the following attribute and target:

Attribute	Measure	Target
Habitat area	Hectares	The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,192 hectares, other than that occurring from natural patterns of variation.

## 4.3. Assessment Criteria

### 4.3.1. Examples of Direct, Indirect or Secondary Impacts

In order to identify those sites that could be potentially affected, it is necessary to describe the Natura 2000 site in the context of why it has been designated i.e. in terms of its Qualifying Interests and the environmental and ecological conditions that maintain the condition of these features. The underpinning conditions that are required to maintain the 'health' of these features are listed in Table 5 below.

*Table 5 Qualifying Interests and Key environmental conditions supporting site integrity.*

Qualifying Interests	Key environmental conditions supporting site integrity	Current Threats to Qualifying Interests
Annual vegetation of drift lines	Marine and groundwater dependent. Sensitivity to hydrological change. Changes in salinity and tidal regime. Overgrazing, erosion and accretion.	Grazing, Sand and gravel extraction –removal of beach materials, Walking, horse riding and non-motorised vehicles, Outdoor sports and leisure activities –  Motorised vehicles, Other leisure and tourism impacts (beach cleaning), Trampling, overuse, Sea defence or coastal protection works
Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> )	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Overgrazing, erosion and accretion.	Overgrazing; erosion; invasive species, particularly common cordgrass ( <i>Spartina anglica</i> ); infilling and reclamation.
Embryonic Shifting dunes	Marine and groundwater dependent. Substrate is highly unstable, availability of nutrients is low and there is an absence of organic soil and humus. The habitat is subject to salt spray and occasional tidal inundation. Exposure increases the risk of water loss.	Walking, horseriding and non-motorised vehicles, Motorised vehicles, Trampling, overuse, Sea defence or coastal protection works, Erosion, Other natural processes (depletion of sediment source)
Fixed coastal dunes with herbaceous vegetation (grey dunes) *	Marine and groundwater dependent. Once a complete sward is established and sand mobility has effectively ceased, dunes are said to be stable or 'fixed' and are referred to as 'fixed dunes'. A combination of geomorphologic, edaphic, climatic and anthropogenic factors determine the composition of the fixed dune vegetation that develops at a particular site.	Mowing/cutting, Agricultural improvement, Fertilisation, Grazing, Abandonment of pastoral systems, Overgrazing by sheep, Overgrazing by cattle, Overgrazing by hares, rabbits, small mammals, Undergrazing, Restructuring agricultural holding, Stock feeding, Burning, Sand and gravel extraction, Urbanised areas, human habitation, urbanization, Dispersed habitation, Disposal of household waste, Other urbanisation, industrial or similar activities, Paths, tracks, cycling routes, Routes, autoroutes, course, Sports pitch, Camping and caravans, Walking, horseriding and non-motorised vehicles, Motorised vehicles, , Trampling, overuse, pollution or human activities, Sea defence or coastal protection works, Erosion, Invasion by a species, Competition
Humid dune slacks	Marine and groundwater dependent. Sensitivity to hydrological change. Changes in salinity and tidal regime.	The principal threats to the wetland habitats are water abstraction and drainage, a lack of natural dynamics leading to few 'embryo' slacks, under-grazing and scrub development.

Qualifying Interests	Key environmental conditions supporting site integrity	Current Threats to Qualifying Interests
Mediterranean salt meadows ( <i>Juncetalia maritimi</i> )	Marine and groundwater dependent. Sensitivity to hydrological change. Changes in salinity and tidal regime. Overgrazing, erosion and accretion	Overgrazing; erosion; invasive species, particularly common cordgrass ( <i>Spartina anglica</i> ); infilling and reclamation.
Mudflats and sandflats not covered by seawater at low tide	Surface and marine water dependent. Low sensitivity to hydrological changes. Aquaculture, fishing and pollution.	Aquaculture, fishing, dumping of wastes and water pollution.
Petalwort ( <i>Petalophyllum ralfsii</i> )	Lime-rich sandy habitat. Overgrazing. Water supply for damp conditions.	Grazing Imbalance, Physical Disturbance, Pollution, Desiccation, trampling from stock and recreation, changes in land use.
Salicornia and other annuals colonizing mud and sand	Marine and groundwater dependent. Medium sensitivity to hydrological change. Changes in salinity and tidal regime. Infilling, reclamation, invasive species.	Invasive Species; erosion and accretion.
Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)	Marine habitat subject to accretion (sand accumulation) and ablation (sand removal). Plants highly specialised and can cope with some degree of salinity (in the form of salt spray and occasional periods of inundation), an unstable substrate and limited levels of nutrients and moisture.	Grazing, Sand and gravel extraction, Removal of beach materials, Paths, tracks, cycling routes, Walking, horseriding and non-motorised vehicles, Motorised vehicles, Trampling, overuse, Sea defence or coastal protection works, Erosion, Other natural processes (depletion of sediment source)
Wetlands & Waterbirds	Highly sensitive to hydrological changes and loss of wetland habitat. Sensitive to disturbance.	A number of pressures have been identified by Crowe (2005). These pressures include: the modification of wetland sites, particularly for industry or housing and increased levels of disturbance, largely related to recreational activity. Eutrophication at a number of wetland sites as a result of nutrient inputs from a range of polluting activities were also identified as a potential pressure. However, this latter pressure is now being alleviated through stricter control of activities associated with water discharge/runoff etc. Climate change was also noted as a significant factor underlying changes in trends of wintering waterbirds in Ireland.

#### 4.3.2. Ecological Network Supporting Natura 2000 Sites

An analysis of the proposed Natural Heritage Areas and designated Natural Heritage Areas in terms of their role in supporting the species using Natura 2000 sites was undertaken. It was assumed that these supporting roles mainly related to mobile fauna such as mammals and birds which may use pNHAs and NHAs as “stepping stones” between Natura 2000 sites.

Article 10 of the Habitats Directive and the Habitats Regulations 2011 place a high degree of importance on such non-Natura 2000 areas as features that connect the Natura 2000 network. Features such as ponds, woodlands and important hedgerows were taken into account during the rest of the AA process.

Many of the sites discussed above are also designated as proposed Natural Heritage Areas and, for the purposes of this screening report, are dealt with under their higher conservation status designations as European sites.

There are no other sites of conservation concern that would be affected by the proposed development.

## 5. Identification of Potential Impacts & Assessment of Significance

The Proposed Development is not directly connected with or necessary for the management of the sites considered in the assessment and therefore potential impacts must be identified and considered.

### 5.1. Potential Impacts

This section uses the information collected on the sensitivity of each European site considered and describes any likely significant effects of the Proposed Development. The assessment of effects assumes the absence of any controls, conditions or mitigation measures, including mitigation measures that have been incorporated into the design of the project.

No direct impacts on the Dublin Bay European sites are predicted, and there will be no habitat loss or fragmentation as a result of the proposed development, given the distance from the European sites in Dublin Bay.

Potential direct impacts on SPA bird species can also be ruled out, given the nature of the proposed development within an existing urban zone, with existing levels of human activity, e.g., movement of vehicles and background noise, as well as the distance of the site from Dublin Bay.

Having considered direct impacts and ruling them out, indirect impacts are then considered.

There is a pathway from the site of the proposed development to Dublin Bay through both surface water runoff to the River Liffey during the construction phase, and wastewater discharge, which flows via the foul sewer on Parkgate Street to Ringsend wastewater treatment plant, ultimately discharging to Dublin Bay during the operational phase.

#### **Construction Phase**

In the absence of pollution control measures, there is the potential for suspended solids, from dewatering activities, demolition or excavation, to enter the adjacent River Liffey during the construction phase of the proposed development. Similarly, in the absence of pollution control measures, there is the potential for other polluting substances such as cement or hydrocarbons to enter the River Liffey during the construction phase of

the proposed development. As outlined above, there is an indirect hydrological pathway to Dublin Bay, via the River Liffey.

Elevated suspended solids may be harmful to salmonids resulting in reduced oxygenation of surface waters due to settlement and the formation of deposits on the riverbed which in turn can give rise to septic and offensive conditions. Elevated suspended solids can clog salmonid gills and potentially cause mortality.

Leakage, un-mitigated run-off or chemical spills can result in fish mortality and could affect feeding habitats for bird species that rely on the sand and mudflats downstream in Dublin Bay for food sources.

Wet concrete and cement are very alkaline and corrosive and can cause serious pollution to watercourses.

### **Operational Phase**

The proposed development, once operational, will have an estimated maximum hydraulic loading of 227m<sup>3</sup> per day of foul effluent generated on completion of the development. This equates to an average flow of 2.63 litres/second (over a 24-hour period). The discharge of untreated effluent to Dublin Bay has the potential to affect the overall water quality and the current Water Body Status (as defined within the Water Framework Directive). The sewage discharge will be licensed by Irish Water, collected in the public sewer and treated at Irish Water's WWTP at Ringsend prior to treated discharge to Dublin Bay. This WWTP is required to operate under an EPA licence (D0034-01) and to meet environmental legislative requirements. Even without treatment at the Ringsend WWTP, the peak effluent discharge, calculated for the proposed development, would equate to 0.023% of the licensed discharge (peak hydraulic capacity) at Ringsend WWTP and would not impact on the overall water quality within Dublin Bay and therefore would not have an impact on the current Water Body Status (as defined within the Water Framework Directive).

## **5.2. Assessment of Potential In-Combination Effects**

Cumulative impacts or effects are changes in the environment that result from numerous human-induced, small-scale alterations. Cumulative impacts can be thought of as occurring through two main pathways: first, through persistent additions or losses of the same materials or resource, and second, through the compounding effects as a result of the coming together of two or more effects.

In addition to the proposed development, other relevant plans and projects in the area must also be considered at this stage. This step aims to identify at this early stage any possible significant in-combination effects of the proposed development with other such plans and projects on European sites.

### **5.2.1. Consideration of Plans**

The following Plans were considered in terms of potential in-combination effects.

### **Dublin City Development Plan 2016 – 2022 Policies**

The local authority for the proposed development at Parkgate Street is Dublin City Council (DCC). Plans and developments within Dublin City County must comply with the policies and objectives of the Dublin City Development Plan 2016 – 2022 (DCC, 2016), which in turn references the National Biodiversity Plan 2017-2021. (DAHG, 2017), and the Dublin City Biodiversity Action Plan 2015-2020 (DCC, 2015).

The following policies from the Dublin City Development Plan 2016 – 2022 (DCC, 2016) are relevant to the proposed development as several designated sites are within the downstream receiving environment, and due to the potential for the site to host protected species, and/or invasive species.

- GI23: “To protect flora, fauna and habitats, which have been identified by Articles 10 and 12 of Habitats Directive, Birds Directive, Wildlife Acts 1976–2012, the Flora (Protection) Order 2015 S.I No. 356 of 2015, European Communities (Birds and Natural Habitats) Regulations 2011 to 2015.”
- GI24: “To conserve and manage all Natural Heritage Areas, Special Areas of Conservation and Special Protection Areas designated, or proposed to be designated, by the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.”
- GIO24: “To develop Biosecurity Codes of Practice to deal with invasive species and ensure compliance with EU (Birds and Natural Habitats) Regulations 2011 and EU Regulations 2014 on the prevention and management of the introduction and spread of invasive alien species.”

#### 5.2.2. Consideration of Projects

For the purposes of this report, all planning applications recorded on the National Planning Applications Database (DoHPLG) and which were either Granted or Not Yet Decided within a 1km radius of the planning boundary were identified.

Planning applications within 1km of the planning boundary were identified as they were determined to constitute new development of a commercial, industrial, agricultural or residential nature which may have the potential to exacerbate environmental effects and thus be of significance to the cumulative assessment. Please note that the following types of applications have been excluded from the final listing in Table 5 below:

- Minor change of use applications;
- Residential applications of less than 10 no. units;
- Minor amendments to permitted applications;
- Retention applications;
- Minor signage applications;
- ESB infrastructure (i.e. substations, switch rooms and towers); and
- Minor utilities works including lighting and junction upgrades.

Of the applications to Dublin City Council listed, those referring to building extensions and/or changes of use have been eliminated and the focus moved to those applications for residential development that could have in combination effects in terms of wastewater, see Table 6 below.

*Table 6 Consideration of in-combination impacts.*

Pl. Ref.	Project Description	Comments
2744/14	<p>The development will consist of the demolition of existing house and commercial sheds and construction of a mixed-use building ranging from 4 to 5 stories with: 12x2 bedroom apartments with 16 private balconies and 1 shared roof garden; 1 cafe / commercial / retail unit at ground floor level; ground level car park with 7 parking spaces accessed from Pim St.; Ancillary site-works including bicycle parking, bin storage, pedestrian entrances on Newport St. and service connections at 17, 18, &amp; 19, Newport Street, at Corner Of Newport Street and Pim Street, Dublin 8.</p>	<p>The application was accompanied by a Report for AA Screening which determined that there would be no significant impact on the European sites considered. This conclusion was accepted by the Competent Authority in carrying out its own AA Screening and permission was subsequently granted by the Competent Authority.</p>
4179/15	<p>The proposed development comprises a part 2, part 4 and part 6-storey building over lower ground floor level to provide 14 no. residential dwellings (comprising 12 x 3 bedroom, double stacked duplex residential units and 2 x 3 bedroom houses (with integrated car parking provision)) and c. 1,971 sq.m (GFA) of office accommodation. An ancillary roof terrace is proposed at first floor level to the rear (east) of the proposed office block and is enclosed by high level obscured glass balustrading. Ancillary roof terraces/balconies with glass balustrading are proposed at third floor level to the western elevation of the building serving the 6 no. duplex residential units at second and third floor level. Car parking in connection with the duplex units and the office accommodation are provided at lower ground level (22 No. car parking spaces) together with associated and ancillary bicycle and refuse storage areas. Vehicular access to the lower ground level is proposed at the northern end of the site off Brookfield Road. Communal landscaped open space and private gardens are provided to the rear of the proposed building at podium and ground floor levels at The Printworks, Brookfield Road, Kilmainham, Dublin 8.</p>	<p>ABP noted that <i>a screening report was not included and an assessment does not appear to have been conducted by the planning authority.</i></p> <p><i>There are seventeen European sites within fifteen kilometres of the site and the four in closest proximity are The South Dublin Bay SAC (0002100, South Dublin Bay and River Tolka Estuary SPA (004024), The North Dublin Bay SAC (00206) and the North Bull Island SPA (04006) The sites are designated for tor the tidal and estuarine habitats and wintering and water bird species which include roosting birds.</i></p> <p><i>Having regard to the location in the inner city and to the nature and scale of the development which comprises redevelopment of a brownfield site which was formerly in industrial use, to the proposed development of an office block</i></p>

		<p><i>and residential units incorporating satisfactory SUDS drainage measures, and to the nature of the receiving environment no appropriate assessment issues arise [sic ABP].</i></p> <p>This conclusion was accepted by the Competent Authority in carrying out its own AA Screening and permission was subsequently granted by the Competent Authority.</p>
3163/16	<p>The development will consist of the removal of all existing buildings on the site, and the construction of a commercial unit and 33 apartments in 2 buildings; Block A facing onto North Brunswick Street is a 6-storey building including a recessed penthouse floor, and comprises 17 apartments; and Block B facing onto North King Street is a 5-storey building, including a recessed penthouse floor, and comprises 16 apartments and 1 commercial unit. The overall development comprises 4 no. 3-bedroomed units, 18 no. 2-bedroomed units, 11 one-bedroomed units, all with balconies, one ground-floor commercial unit, bin store, internal landscaped courtyard, photovoltaic solar panels on support grids on roofs, and all associated site works at 84 North King Street and between George's Court and Red Mill Apartments on North Brunswick Street, Dublin 7. The site adjoins 85 North King Street (a Protected Structure).</p>	<p>ABP determination: <i>The subject site is located in an established city area on a brownfield site and is not located adjacent to nor in close proximity to any European sites, as defined in Section 177R of the Habitats Directive. Having regard to the nature and scale of the proposed development and/or the nature of the receiving environment and/or proximity to the nearest European site, no appropriate assessment issues arise and it is not considered that the proposed development would be likely to have a significant effect individually or in combination with other plans or projects on a European site.</i></p> <p>This conclusion was accepted by the Competent Authority in carrying out its own AA Screening and permission was subsequently granted by the Competent Authority.</p>
3503/16	<p>The proposed development consists of demolition of existing structures comprising disused buildings and sheds, construction of 10 x 2 bedroom apartments with balconies in two 6 storey blocks with associated facilities at ground floor including: 10 storage rooms with cycle parking, communal facilities, caretaker's room bin storage, plant &amp; service rooms, service connections and a raised courtyard garden at 1st floor level,</p>	<p>The application was accompanied by a Report for AA Screening which determined that there would be no significant impact on the European sites considered.</p> <p>This conclusion was accepted by the Competent Authority in carrying out its own AA Screening and permission was</p>

	services enclosures on roofs, landscaping, railings and all associated site works at 10, Usher's Island, And 32 Island Street, Dublin 8.	subsequently granted by the Competent Authority.
4261/16	The development will consist of the demolition of all existing structures including no. 20 Stoneybatter and the construction of a part 1, 3, 4 and 5 storey student accommodation development of 2,980.8 sqm. Also proposed are all ancillary site and services accommodation works at the rear of nos. 20 to 23a, Stoneybatter and nos. 1 and 2 Manor street, Stoneybatter, Dublin 7.	Information submitted with the application determined that the proposed development will not impact upon any designated Natura 2000 sites and therefore further AA consideration is not necessary.  This conclusion was accepted by the Competent Authority in carrying out its own AA Screening and permission was subsequently granted by the Competent Authority.
3885/17	The development will consist of the refurbishment and deep retrofit of the existing 4-storey Block A and 2-storey Block B; the total area of the completed development is c. 2,023 sq.m over 4 storeys and 2 storeys respectively, providing a total of 22 units...and all associated ancillary site development works at Ellis Court, Benburb Street, Dublin 7 .	There is no record of Appropriate Assessment with the case file.
3014/18	Development comprising: (i) Demolition of the existing two-storey, flat roof, commercial building; (ii) Construction of a new seven-storey (22 metres in height) apartment building comprising 41 apartments (19 no. one-bedroom and 22 no. two-bedroom apartments) fronting Blackhall Street and Oxmantown Lane.	There is no record of Appropriate Assessment with the case file.
3328/18	The proposed development will involve the demolition of all existing structures onsite (c. 1,028 sqm) to provide for a new 6-8 storey residential over ground floor commercial development (c.3,166.7 sqm GFA),in one block accommodating 28 no. apartments..boundary treatments; PV panels; SuDS measures including blue roof surface water attenuation; and all other associated site excavation and site development works above and below ground. Access to the residential units will be provided via a private entrance lobby off Usher Street, with	There is no record of Appropriate Assessment with the case file.

	access to the commercial unit provided off Usher's Quay. Site at Nos. 1, 1A and 2 Usher Street and Nos. 29/30, Usher's Quay, Dublin 8.	
2290/19	Permission for a residential development on this overall site of c. 0.07 ha. The proposed development shall comprise the demolition of the on site vacant 2-storey dwelling unit and vacant 1-storey shed, and provide for the construction of 29 no. residential units in the form of 1 no. 2 to 6 storey apartment building...landscaped communal open space area at ground level; all boundary treatment and landscaping works and all associated site development works at 6, 6A and 7, Pim Street, Dublin 8.	<p>The application was screened for Appropriate Assessment and it was considered that significant effects are not likely to arise, either alone or in combination with other plans and projects that will result in significant effects to any Natura 2000 area. A full Appropriate Assessment of this project is therefore not required.</p> <p>This conclusion was accepted by the Competent Authority in carrying out its own AA Screening and permission was subsequently granted by the Competent Authority.</p>

The Dublin City Development Plan, in complying with the requirements of the Habitats Directive, requires that all Projects and Plans that could affect the Natura 2000 sites in the same zone of impact of the development site be initially screened for AA and, if it is determined that Stage 2 AA is required, that appropriate employable mitigation measures would be put in place to avoid, reduce or ameliorate negative impacts.

Similar policies are followed under other plans for the area of county Dublin. In this way in-combination impacts of Plans or Projects for the development area and surrounding townlands in which the development site is located, would be avoided. Any new applications for the Project area will be assessed on a case by case basis initially by Dublin County Council which will determine the requirement for AA Screening as per the requirements of Article 6(3) of the Habitats Directive.

### 5.3 Summary of Potential Impacts

*Table 7 Outlining the potential impacts in the absence of mitigation of the Project.*

Site	Potential Direct Impacts e.g. Habitat Loss	Potential Indirect Impacts e.g. alteration to hydrological regime	Surface or Groundwater Contamination	Disturbance to Protected Species (Habitats Directive Annex II & IV)	Stage 2 AA Required
000206 North Dublin Bay SAC	No	Yes	Uncertain	No	Yes
000210 South Dublin Bay SAC	No	Yes	Uncertain	No	Yes
004006 North Bull Island SPA	No	Yes	Uncertain	No	Yes
004024 South Dublin Bay and River Tolka Estuary SPA	No	Yes	Uncertain	No	Yes

## 6. Conclusion

There will be no direct impacts on the Dublin Bay European sites and there will be no habitat loss or fragmentation as a result of the proposed development. Potential direct impacts on SPA bird species can be ruled out given the nature of the proposed development, within an existing urban zone, with existing levels of human activity, e.g., movement of vehicles and background noise, and given the distance of the site from Dublin Bay.

Having considered direct impacts and ruling them out, indirect impacts are then considered.

The primary pathway to European sites during the construction phase is hydrologically via the River Liffey and in this way, the nearest sites are the South Dublin Bay and River Tolka Estuary SPA which is located over 6.8 river km downstream and the North Dublin Bay SAC and North Bull Island SPA which are located over 8.4 river km downstream. The South Dublin Bay SAC is located outside the South Bull wall and while hydrologically more disconnected from the River Liffey, it is included as it overlaps the South Dublin Bay and River Tolka Estuary SPA.

A worst-case scenario may be considered whereby the proposed development would be the source of a significant detrimental change in water quality in Dublin Bay either alone or in combination with other projects or plans as a result of indirect pollution via the River Liffey. The effect would have to be considered in terms of changes in water quality which would affect the habitats or food sources of the species for which the Dublin Bay sites are designated.

In the absence of pollution control measures, there is the potential for suspended solids, from dewatering activities, to enter the adjacent River Liffey during the construction phase of the proposed development. Similarly, in the absence of pollution control measures, there is the potential for other polluting substances such as cement or hydrocarbons to enter the River Liffey during the construction phase of the proposed development. As outlined above, there is an indirect hydrological pathway to Dublin Bay, via the River Liffey.

Chemical spills can result in fish mortality and could affect feeding habitats for bird species that rely on the sand and mudflats downstream in Dublin Bay for food sources.

Wet concrete and cement are very alkaline and corrosive and can cause serious pollution to watercourses.

In the absence of construction management and pollution control measures, the potential impact on downstream European sites is uncertain.

Thus, in line with Departmental Guidance and having regard to ECJ case law and the 'Precautionary Principle', Stage 2 Appropriate Assessment is required in respect of the four European sites referred to, i.e.:

- North Dublin Bay SAC 000206
- South Dublin Bay SAC 000210
- North Bull Island SPA 004006
- South Dublin Bay and River Tolka Estuary SPA 004024

We refer the Board to the Stage 2 Appropriate Assessment – Natura Impact Statement – that accompanies this SHD planning application.

The possibility of any significant impacts, whether arising from the project itself or in combination with other plans and projects, on any of the other European Sites, can then be excluded beyond a reasonable scientific doubt on the basis of the best scientific knowledge available.

## 7. References

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