Screening Report for Appropriate Assessment of proposed amendments to a permitted Large Scale Residential Development at Prussia Street, Dublin 7

Parent Permission Reference: LDR6057/24-S3A

Compiled by OPENFIELD Ecological Services

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www.openfield.ie

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Introduction

Biodiversity is a contraction of the words ‘biological diversity’ and describes the enormous variability in species, habitats and genes that exist on Earth. It provides food, building materials, fuel and clothing while maintaining clean air, water, soil fertility and the pollination of crops. A study by the Department of Environment, Heritage and Local Government placed the economic value of biodiversity to Ireland at €2.6 billion annually (Bullock et al., 2008) for these ‘ecosystem services’.

All life depends on biodiversity and its current global decline is a major challenge facing humanity. In 1992, at the Rio Earth Summit, this challenge was recognised by the United Nations through the Convention on Biological Diversity which has since been ratified by 193 countries, including Ireland. Its goal to significantly slow down the rate of biodiversity loss on Earth has been echoed by the European Union, which set a target date of 2010 for halting the decline, however this was not achieved. In 2010 in Nagoya, Japan, governments from around the world set about redoubling their efforts and issued a strategy for 2020 called ‘Living in Harmony with Nature’ however none of these targets were achieved. In December 2022, the Kunming-Montreal Global biodiversity framework was agreed with the headline of ‘living in harmony with nature’. This has set ambitious goals to not only protect, but restore, nature, including by protecting 30% of land and sea by 2030.

In 2024 the fourth national biodiversity action plan was published to incorporate the goals set out in this framework, along with its commitments to the conservation of biodiversity under national and EU law.

The main legislation for conserving biodiversity in Ireland have been the Directive 2009/147//EC of the European Parliament and of the Council of November 2009 on the conservation of wild birds (Birds Directive) and Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive). Among other things, these require member states to designate areas of their territory that contain important bird populations in the case of the former; or a representative sample of important or endangered habitats and species in the case of the latter. These areas are known as Special Protection Areas (SPA) and Special Areas of Conservation (SAC) respectively. Collectively they form a network of sites across the European Union known as Natura 2000. The Birds and Habitats Directives have been transposed into Irish legislation by the European Communities (Birds and Natural Habitats) Regulations 2011-2015. A report into the economic benefits of the Natura 2000 network concluded that “there is a new evidence base that conserving and investing in our biodiversity makes sense for climate challenges, for saving money, for jobs, for food, water and physical security, for cultural identity, health, science and learning, and of course for biodiversity itself” (EU, 2013).

Unlike traditional nature reserves or national parks, Natura 2000 sites are not ‘fenced-off’ from human activity and are frequently in private ownership. It is the responsibility of the competent national authority to ensure that ‘good

conservation status' exists for their SPAs and SACs and specifically that Article 6(3) of the Habitats Directive is met. Article 6(3) states:

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 subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the 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.

Sections 177U and 177V of the Planning and Development Act 2000 sets out the purpose of AA Screening is as follows:

A screening for appropriate assessment shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.

The test at stage 1 AA Screening is that:

The competent authority shall determine that an appropriate assessment of a 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 a European site.

The test at stage 2 (Appropriate Assessment) is:

Whether or not the proposed development, individually or in-combination with other plans or projects would adversely affect the integrity of a European site.

However, where this is not the case, a preliminary screening must first be carried out to determine whether or not a full AA is required. This screening is carried out by Dublin City Council.

The Purpose of this document

This report has been prepared by Openfield Ecological Services to assist Dublin City Council in carrying out the appropriate assessment screening. This document provides for the analysis of proposed amendments to a permitted development (Pl. Ref.: LDR6057/24-S3A) at Prussia St., Dublin 7, and its potential effects in relation to Natura 2000 sites (SACs and SPAs). Under the Planning and Development Act 2000 (as amended) all developments must be screened for AA by the competent planning authority.

A screening report for AA which accompanied the parent planning application concluded that significant effects to Natura 2000 sites were not likely to arise, either alone or in combination with other plans and projects.

About OPENFIELD Ecological Services

OPENFIELD Ecological Services is headed by Pádraic Fogarty who has worked for over 25 years in the environmental field and in 2007 was awarded an MSc from Sligo Institute of Technology for research into Ecological Impact Assessment (EcIA) in Ireland. Since its inception in 2007 OPENFIELD has carried out numerous EcIAs for Environmental Impact Assessment (EIA), Appropriate Assessment in accordance with the EU Habitats Directive, as well as individual planning applications. Pádraic is a full member of the Institute of Sustainability and Environmental Professionals (ISEP).

Guidance

This AA Screening Report has been undertaken in accordance with the following guidance:

- *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, 2001);
- *Communication from the Commission on the precautionary principle* (European Commission, 2000); and,
- *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (European Commission, 2019).
- *Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission, 2021).

Methodology

The methodology for this screening statement is clearly set out in a document prepared for the Environment DG of the European Commission entitled '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' (Oxford Brookes University, 2001). Chapter 3, part 1, of this document deals specifically with screening while Annex 2 provides the template for the screening/finding of no significant effects report matrices to be used.

In accordance with this guidance, the following methodology has been used to produce this screening statement:

Step 1: Management of the Site
This determines whether the project is necessary for the conservation management of the site in question.

Step 2: Description of the Project
This step describes the aspects of the project that may have an impact on the Natura 2000 site.

Step 3: Characteristics of the Site
This process identifies the conservation aspects of the site and determines whether negative impacts can be expected as a result of the plan. This is done through a literature survey and consultation with relevant stakeholders – particularly the National Parks and Wildlife Service (NPWS). All potential effects are identified including those that may act alone or in combination with other projects or plans.

Using the precautionary principle, and through consultation and a review of published data, it is normally possible to conclude at this point whether potential impacts are likely. Deficiencies in available data are also highlighted at this stage.

Step 4: Assessment of Significance
Assessing whether an effect is significant or not must be measured against the conservation objectives for the Natura area in question.

If this analysis shows that significant effects are likely then a full AA will be required.

The steps are compiled into a screening matrix, a template of which is provided in Appendix II of the EU methodology.

Mitigation measures cannot be taken into account in an AA screening assessment.

A full list of literature sources that have been consulted for this study is given in the References section to this report while individual references are cited within the text where relevant.

<u>Screening Template as per Annex 2 of EU methodology:</u>

This project is not necessary for the management of the site and so Step 1 as outlined above is not relevant.

Brief description of the project

The **permitted** development is described here:

Permission is sought for a Large-scale Residential Development (LRD) on lands at Nos. 23-28 Prussia Street, Dublin 7 (D07 X9X6, D07 FW30 & D07 PAF1), (located at the junction of Prussia Street and St. Joseph's Road, and bounded by No. 29 Prussia Street (Protected Structure) to the north, No. 22 Prussia Street to the south & TU Dublin, Grangegorman Campus to the east. The proposed development will consist of the demolition of the existing structures at 23 – 28 Prussia Street and the construction of 102 no. apartments and 1 no. café/restaurant unit in 3 no. blocks (ranging from 3-8 storeys over basement in height), consisting of 49 no. 1 beds, 48 no. 2 beds, 4 no. 3-beds and 1 no. 4-beds, with private balconies/terraces; 2 no. communal courtyards; bin stores; bicycle parking; a basement consisting of plant/water storage tanks; 1 no. gated servicing entrance facing onto Prussia Street with minor works to existing footpath, 1 no. ESB sub-station; landscaping and upgrades to public realm including provision of Grangegorman Campus Gateway and remedial works to existing footpath including retractable bollards to facilitate controlled vehicular access in this zone; remedial works to existing eastern boundary wall (Protected Structure) including removal of sections of wall and provision of entrance pillars; public lighting; boundary treatments; and all associated engineering and site works necessary to facilitate the development.

It is now **proposed** to amend that permission to provide for the inclusion of two additional floor levels incorporating an additional 10 residential units.

The development site location is shown in figures 1 and 2 while permitted and proposed layouts are given in figure 3 & 4.

It is planned to amend a permitted development on Prussia St., Dublin 7 as previously described. The permitted development includes site clearance works and demolition of existing buildings, a construction phase to include new surface water drainage infrastructure and connection to electricity and wastewater networks. The main phases of this project include:

- site clearance and preparation including excavation to basement level.
- A construction phase using standard building materials.
- Construction will include a new surface water drainage infrastructure and connection to electricity and wastewater networks.
- An operation phase whereby the apartments will be occupied.

To-date site clearance is complete and construction has commenced.

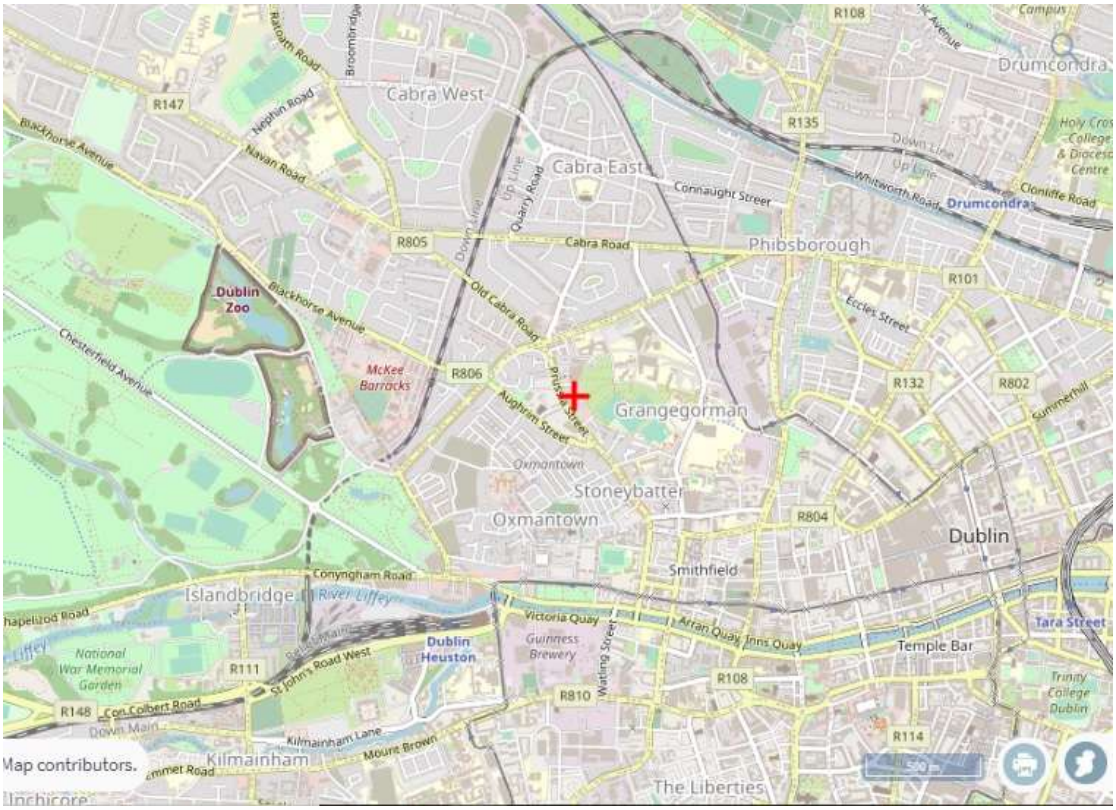

Figure 1 – Site location (red cross) (from www.epa.ie). There are no Natura 2000 sites in this vicinity.

The development site is not located within or directly adjacent to any Natura 2000 site (SAC or SPA). This part of north Dublin is a built-up business, residential and commercial zone and is predominantly composed of surfaces that are sealed with tar macadam and concrete.

The development site was surveyed for the parent development application on January 26th 2024 and this found that the site was at that time composed entirely of artificial/hard surfaces. Vegetation was very limited in extent although there was growth of the non-native Butterfly-bush *Buddleja davidii* and Clematis *Clematis vitalba* on boundaries. There were no plants growing on the site which are listed as alien invasive under SI No 374 of 2024.

The development site is located approximately 850m from the River Liffey, the banks of which are composed of artificial quay walls at this location. There are no other water courses in this vicinity.

Any inert construction and demolition waste has been removed by a licenced contractor and disposed of in accordance with the Waste Management Act.

Currently there is no attenuation of rain run-off and this enters the combined public sewer. In accordance with the Greater Dublin Strategic Drainage Study the permitted development incorporates sustainable drainage systems (SUDS) that will appreciably reduce the current run-off rate. This includes attenuation storage and controlled release to the combined foul sewer. According to the Proposed Drainage & Watermain Report by Lohan & Donnelly Consulting

Engineers SUDS measures will include permeable paving, blue and green roofs, tree pits and rain gardens/bio-retention areas.

SUDS are standard measures which are included in all development projects and are not included here to reduce or avoid any effect to a Natura 2000 site. This is confirmed in the judgment recently issued from the ECJU (Case C-721/21, Eco Advocacy CLG v An Bord Pleanála) which confirms that where standard measures are included in the application they cannot be considered as mitigation in an AA context.



Figure 2 – Site location at Prussia Street with pre-construction aerial view.

Foul effluent from the permitted development will be sent to the wastewater treatment plant at Ringsend in Dublin. Emissions from the plant are currently not in compliance with the Urban Wastewater Treatment Directive. The Ringsend plant is licenced to discharge treated effluent by the EPA (licence number D0034-01) and is managed by Uisce Éireann. It treats effluent for a population equivalent (P.E.) on average of 1.65 million however weekly averages can spike at around 2.36 million. This variation is due to storm water inflows during periods of wet weather as this is not separated from the foul network for much of the older quarters of the city.

The Annual Environmental Report for 2024, the most recent available, indicated that there were a number of exceedances of the emission limit values. In April 2019 Irish Water (now Uisce Éireann) was granted planning permission to upgrade the Ringsend plant. This will see improved treatment standards and will increase network capacity by 50% on a phased basis. In 2026 Uisce Éireann announced that these works are now complete, although reporting on

its effectiveness may not be available for some time as reporting is on an annual cycle.

There are no other discharges from this operation.

Fresh water supply for the development will be via a mains supply. This may originate from in the Poulaphouca Reservoir.

There are no point air emissions from the site while some dust and noise can be expected during the construction phase.



Figure 3 – Permitted site layout



Figure 4 – Proposed layout with amendments

Pathway Analysis

There is no direct natural hydrological connection from the development site to Dublin Bay. There is an indirect pathway to Dublin Bay through the combined foul sewer en route to the Ringsend WWTP.

Sampling of water quality in Dublin Bay (and presented in the Annual Environmental Report for the WWTP) indicates that the discharge from the wastewater treatment plant is having an observable effect in the 'near field' of the discharge. This includes the inner Liffey Estuary and the Tolka Estuary, but not the coastal waters of Dublin Bay. This indicates that potential effects arising from the treatment plant are confined to these areas, and that the zone of influence does not extend to the coastal waters or the Irish Sea.

There are consequently pathways to a number of Natura 2000 sites. There are hydrological links to the South Dublin Bay and River Tolka Estuary SPA (site code: 4024), the South Dublin Bay SAC (site code: 0210), the North Bull Island SPA (site code: 4006), the North Dublin Bay SAC (site code: 0206) and the North West Irish Sea SPA (site code: 4236). The Poulaphouca Reservoir SPA (site code: 4063), from which drinking water supply for this development will originate, is also considered to fall within the zone of influence of this project.

Brief description of Natura 2000 sites

In assessing the zone of influence of this project upon Natura 2000 sites the following factors must be considered:

- Potential impacts arising from the project
- The location and nature of Natura 2000 sites
- Pathways between the development and the Natura 2000 network

This is referred to as the source-pathway-receptor model. Following the pathway analysis, the following Natura 2000 sites are assessed in detail:

North Dublin Bay SAC/North Bull Island SPA
The North Dublin Bay SAC (site code: 0206) is focussed on the sand spit on the North Bull island. The qualifying interests for it are shown in table 1. The status of the habitat is also given and this is an assessment of its range, area, structure and function, and future prospects on a national level and not within the SAC itself.

Table 1 – Qualifying interests for the North Dublin Bay SAC

Code	Habitat/Species	Status
1140	Mudflats and sandflats not covered by seawater at low tide	Inadequate
1320	Salicornia and other annuals colonizing mud and sand	Favourable
1330	Atlantic salt meadows	Inadequate
1410	Mediterranean salt meadows	Inadequate
1210	Annual vegetation of drift lines	Inadequate
2110	Embryonic shifting dunes	Inadequate
2120	Shifting dunes along the shoreline with Ammophila arenaria (white dunes)	Inadequate
2130	Fixed coastal dunes with herbaceous vegetation (grey dunes)	Bad
2190	Humid dune slacks	Inadequate
1395	*Petalophyllum ralfsii* Petalwort	Favourable

- **Annual vegetation of drift lines (1210)** This habitat of the upper shore is characterised by raised banks of pebbles and stones. They are inhabited by a sparse but unique assemblage of plants, some of which are very rare. The principle pressures are listed as gravel extraction, the building of pipelines and coastal defences.
- **Embryonic shifting dunes (2110).** As their name suggests these sand structures represent the start of a sand dune's life. Perhaps only a meter high they are a transient habitat, vulnerable to inundation by the sea, or

developing further into white dunes with Marram Grass. They are threatened by recreational uses, coastal defences, trampling and erosion.

- **Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) (2120).** These are the second stage in dune formation and depend upon the stabilising effects of Marram Grass. The presence of the grass traps additional sand, thus growing the dunes. They are threatened by erosion, climate change, coastal flooding and built development.
- **Fixed coastal dunes with herbaceous vegetation (grey dunes) (2130 – priority habitat).** These are more stable dune systems, typically located on the landward side of the mobile dunes. They have a more or less permanent, and complete covering of vegetation, the quality of which depends on local hydrology and grazing regimes. They are the most endangered of the dune habitat types and are under pressure from built developments such as golf courses and caravan parks, over-grazing, under-grazing and invasive species.
- **Humid dune slacks (2190).** These are wet, nutrient enriched (relatively) depressions that are found between dune ridges. During winter months or wet weather these can flood and water levels are maintained by a soil layer or saltwater intrusion in the groundwater. There are found around the coast within the larger dune systems.
- **Petalwort (1395).** There are 30 extant populations of this small green liverwort, predominantly along the Atlantic seaboard but also with one in Dublin. It grows within sand dune systems and can attain high populations locally.

Mudflats (code 1140)
Permanent habitat area stable or increasing (estimated at 578 hectares); Maintain the extent and high quality of the *Mytilus edulis*-dominated community, subject to natural processes; Conserve the following community types in a natural condition: Fine sand to sandy mud with *Pygospio elegans* and *Crangon crangon* community complex; Fine sand with *Spio martinensis* community complex.

Atlantic/Mediterranean Salt Meadows (1330/1410)
Maintain habitat area and distribution including physical structure (sediment supply, creeks and pans, flooding regime). Maintain vegetation structure as measured by vegetation height, vegetation cover, typical species and sub-communities. Absences of the invasive *Spartina anglica.*

Annual vegetation of drift lines (code: 1210)
Habitat areas stable or increasing subject to natural variation; no decline in habitat distribution; maintain physical and vegetation structure without any physical obstructions, maintain vegetation structure and composition subject to natural variations.

Embryonic shifting dunes (code: 2110)
Habitat areas stable or increasing subject to natural variation; no decline in habitat distribution; maintain physical and vegetation structure without any physical obstructions, maintain vegetation structure and composition subject to natural variations.

Salicornia and other annuals colonising mud and sand (code: 3110)
Habitat area stable or increasing; no decline in habitat distribution; maintain physical and vegetation structure.

Fixed Coastal Dunes/Shifting Dunes (2130/2120)
Maintain habitat area and distribution including physical structure (functionality and sediment supply, percentage of bare ground, sward height). Maintain vegetation structure as measured by zonation, vegetation cover, typical species and sub-communities. Absences of the invasive *Hippophae rhamnoides.*

Humid dune slacks (code: 2190)
Area increasing, subject to natural processes including erosion and succession; No decline or change in habitat distribution, subject to natural processes; Maintain the natural circulation of sediment and organic matter, without any physical obstructions; Maintain natural hydrological regime; Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession; Bare ground should not exceed 5% of dune slack habitat, with the exception of pioneer slacks which can have up to 20% bare ground; Maintain structural variation within sward; Maintain range of subcommunities with typical species; Maintain less than 40% cover of creeping willow (Salix repens); Negative indicator species (including non-natives) to represent less than 5% cover.

Petalwort *Petalophyllum ralfsii* (code: 1395)
No decline in known populations. No decline in population, estimated at 5,824 thalli. No decline in area of suitable habitat. Maintain hydrological conditions; maintain open, low vegetation, with a high percentage cover of bryophytes (small acrocarps and liverwort turf) and bare ground.

The North Bull Island SPA (site code: 0206) is largely coincident with the North Dublin Bay SAC with the exception of the terrestrial portion of Bull Island. Table 2 lists its qualifying interests.

Table 2 – Qualifying interests for the North Bull Island SPA

Species	National Status
Light-bellied Brent Goose *Branta bernicla hrota*	Amber (Wintering)
Oystercatcher *Haematopus ostralegus*	Amber (Breeding & Wintering)
Teal *Anas crecca*	Amber (Breeding & Wintering)
Pintail *Anas acuta*	Red (Wintering)
Shoveler *Anas clypeata*	Red (Wintering)
Shelduck *Tadorna tadorna*	Amber (Breeding & Wintering)
Golden Plover *Pluvialis apricaria*	Red (Breeding & Wintering)

Grey Plover *Pluvialis squatarola*	Amber (Wintering)
Knot *Calidris canutus*	Amber (Wintering)
Sanderling *Calidris alba*	Green (Wintering)
Dunlin *Calidris alpina*	Red (Breeding & Wintering)
Black-tailed Godwit *Limosa limosa*	Amber (Wintering)
Bar-tailed Godwit *Limosa lapponica*	Amber (Wintering)
Curlew *Numenius arquata*	Red (Breeding & Wintering)
Redshank *Tringa totanus*	Red (Breeding & Wintering)
Turnstone *Arenaria interpres*	Green (Wintering)
Black-headed Gull *Larus ridibundus*	Red (Breeding)
Wetlands & Waterbirds	

- **Oystercatcher.** Predominantly coastal in habit Oystercatchers are resident birds whose numbers continue to expand in Ireland.
- **Teal**. In winter this duck is widespread throughout the country. Land use change and drainage however have contributed to a massive decline in its breeding range over the past 40 years.
- **Pintail**. Dabbling duck wintering on grazing marshes, river floodplains, sheltered coasts and estuaries. It is a localised species and has suffered a small decline in distribution in Ireland for unknown reasons.
- **Shoveler**. Favoured wintering sites for this duck are inland wetlands and coastal estuaries. While there have been local shifts in population and distribution, overall their status is stable in Ireland.
- **Knot.** These small wading birds do not breed in Ireland but gather in coastal wetlands in winter. Their numbers have increased dramatically since the mid-1990s although the reasons for this are unclear.
- **Sanderling.** This small bird breeds in the high Arctic and winters in Ireland along sandy beaches and sandbars. Its wintering distribution has increased by 21% in the previous 30 years.
- **Dunlin.** Although widespread and stable in number during the winter season, the Irish breeding population has collapsed by nearly 70% in 40 years. Breeding is now confined to just seven sites in the north and west as habitat in former nesting areas has been degraded.
- **Black-tailed Godwit.** Breeding in Iceland these waders winter in selected sites around the Irish coast, but predominantly to the east and southern halves. Their range here has increase substantially of late.
- **Curlew.** Still a common sight during winter at coastal and inland areas around the country it breeding population here has effectively collapsed. Their habitat has been affected by the destruction of peat bogs,

afforestation, farmland intensification and land abandonment. Their wintering distribution also appears to be in decline.

- **Redshank.** Once common breeders throughout the peatlands and wet grasslands of the midlands Redshanks have undergone a 55% decline in distribution in the past 40 years. Agricultural intensification, drainage of wetlands and predation are the chief drivers of this change.
- **Turnstone.** This winter visitor to Irish coasts favours sandy beaches, estuaries and rocky shores. It is found throughout the island but changes may be occurring due to climate change.
- **Black-headed Gull.** Widespread and abundant in winter these gulls are nevertheless considered to be in decline. The reasons behind this are unclear but may relate to the loss of safe nesting sites, drainage, food depletion and increase predation.

Site specific conservation objectives have been published for this SPA (NPWS, 2015a) and are similar for each bird species. They can be summarised as:

Birds (similar for all species)
Long term population trend stable or increasing; there should be no significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation

Wetlands
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

The **South Dublin Bay and Tolka Estuary SPA** (side code: 4024) is largely coincident with the South Dublin Bay SAC boundary with the exception of the Tolka Estuary. These designations encompass all of the intertidal areas in Dublin Bay from south of Bull Island to the pier in Dun Laoghaire. Wintering birds in particular are attracted to these areas in great number as they shelter from harsh conditions further north and avail of the available food supply within sands and soft sediments. Table 6 lists the features of interest.

- **Light-bellied Brent Goose.** There has been a 67% increase in the distribution of this goose which winters throughout the Irish coast. The light-bellied subspecies found in Ireland breeds predominantly in the Canadian Arctic.
- **Sanderling.** This small bird breeds in the high Arctic and winters in Ireland along sandy beaches and sandbars. Its wintering distribution has increased by 21% in the previous 30 years.
- **Dunlin.** Although widespread and stable in number during the winter season, the Irish breeding population has collapsed by nearly 70% in 40 years. Breeding is now confined to just seven sites in the north and west as habitat in former nesting areas has been degraded.

- **Knot.** These small wading birds do not breed in Ireland but gather in coastal wetlands in winter. Their numbers have increased dramatically since the mid-1990s although the reasons for this are unclear.
- **Black-headed Gull.** Widespread and abundant in winter these gulls are nevertheless considered to be in decline. The reasons behind this are unclear but may relate to the loss of safe nesting sites, drainage, food depletion and increase predation.
- **Ringed Plover.** This bird is a common sight around the Irish coast where it is resident. They breed on stony beaches but also, more recently, on cut-away bog in the midlands.
- **Oystercatcher.** Predominantly coastal in habit Oystercatchers are resident birds whose numbers continue to expand in Ireland.
- **Bar-tailed Godwit.** These wetland wading birds do not breed in Ireland but are found throughout the littoral zone during winter months. They prefer estuaries where there are areas of soft mud and sediments on which to feed.
- **Grey Plover.** These birds do not breed in Ireland but winter throughout coastal estuaries and wetlands. Its population and distribution is considered to be stable.
- **Roseate Tern.** This tern breeds at only a few stations along Ireland's east coast. Most of these are in decline although at Dublin their colony is increasing.
- **Common Tern.** This summer visitor nests along the coast and on islands in the largest lakes. Its breeding range has halved in Ireland since the 1968-1972 period.
- **Arctic Tern.** These long-distance travellers predominantly breed in coastal areas of Ireland. They have suffered from predation by invasive mink and are declining in much of their range.
- **Redshank.** Once common breeders throughout the peatlands and wet grasslands of the midlands Redshanks have undergone a 55% decline in distribution in the past 40 years. Agricultural intensification, drainage of wetlands and predation are the chief drivers of this change.

Bird counts form BirdWatch Ireland are taken from Dublin Bay as a whole and are not specific to any particular portion of the Bay. Dublin Bay is recognised as an internationally important site for water birds as it supports over 20,000 individuals. Table 3 shows the most recent count data available[1].

Table 3 – Mean count of birds species (qualifying interests of SPAs) for Dublin Bay from the Irish Wetland Birds Survey (IWeBS) from 2010 - 2020

Species	Mean
Light-bellied Brent Goose	3,453
Sanderling	500
Dunlin	5,951
Knot	5,093
Black-headed Gull	3,340

[1] https://f1.caspio.com/dp.asp?AppKey=f4db3000060acbd80db9403f857c

Ringed Plover	176
Oystercatcher	3,419
Bar-tailed Godwit	1,965
Grey Plover	328
Roseate Tern	0
Common Tern	23
Arctic Tern	0
Redshank	2,050
Teal	1,335
Pintail	184
Shoveler	101
Black-tailed Godwit	2,038
Curlew	882
Turnstone	272

There were also internationally important populations of particular birds recorded in Dublin Bay (i.e. over 1% of the world population): Light-bellied brent geese *Branta bernicula hrota*; Black-tailed godwit *Limosa limosa*; Knot *Calidris canutus* and Bar-tailed godwit *L. lapponica*.

Table 4 – Qualifying interests for the South Dublin Bay & River Tolka Estuary SPA (EU code in square parenthesis)

Species
Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]
Oystercatcher (*Haematopus ostralegus*) [A130]
Ringed Plover (*Charadrius hiaticula*) [A137]
Grey Plover (*Pluvialis squatarola*) [A140]
Knot (*Calidris canutus*) [A143]
Sanderling (*Calidris alba*) [A144]
Dunlin (*Calidris alpina*) [A149]
Bar-tailed Godwit (*Limosa lapponica*) [A157]
Redshank (*Tringa totanus*) [A162]
Black-headed Gull (*Croicocephalus ridibundus*) [A179]
Roseate Tern (*Sterna dougallii*) [A192]

Common Tern (*Sterna hirundo*) [A193]
Arctic Tern (*Sterna paradisaea*) [A194]
Wetlands & Waterbirds [A999]

Site specific conservation objectives have been published for this SPA (NPWS, 2015b) and are similar for each bird species. They can be summarised as:

Birds (similar for all species)
Long term population trend stable or increasing; there should be no significant decrease in the numbers or range of areas used by waterbird species, other than that occurring from natural patterns of variation

Wetlands
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

The **South Dublin Bay SAC** (side code: 0210; approximately 800m from the site) is concentrated on the intertidal area of Sandymount Strand. It has four qualifying interests: mudflats and sandflats not covered by seawater at low tide (1140), annual vegetation of drift lines (1210), Salicornia and other annuals colonising mud and sand (1310) and Embryonic shifting dunes (2110).

- **Annual vegetation of drift lines (1210)** This habitat of the upper shore is characterised by raised banks of pebbles and stones. They are inhabited by a sparse but unique assemblage of plants, some of which are very rare. The principle pressures are listed as gravel extraction, the building of pipelines and coastal defences.
- **Embryonic shifting dunes (2110).** As their name suggests these sand structures represent the start of a sand dune's life. Perhaps only a meter high they are a transient habitat, vulnerable to inundation by the sea, or developing further into white dunes with Marram Grass. They are threatened by recreational uses, coastal defences, trampling and erosion.
- **Tidal mudflats (1140)**. This is an intertidal habitat characterised by fine silt and sediment. Most of the area in Ireland is of favourable status however water quality and fishing activity, including aquaculture, are negatively affecting some areas.
- **Salicornia mudflats (1310)**: This is a pioneer saltmarsh community and so is associated with intertidal areas. It is dependent upon a supply of fresh, bare mud and can be promoted by damage to other salt marsh habitats. It is chiefly threatened by the advance of the alien invasive Cordgrass *Spartina anglica.* Erosion can be destructive but in many cases this is a natural process.

Site specific conservation objectives have been set out for habitats in this SAC (NPWS, 2026) and are summarised as:

Mudflats (code 1140)
Permanent habitat area stable or increasing (estimated at 720 hectares); Maintain the extent of the Zostera-dominated community, subject to natural processes; Conserve the high quality of the Zostera-dominated community, subject to natural processes; Conserve the following community type in a natural condition: Fine sands with Angulus tenuis community complex.

Salicornia mudflats (code 1310)
Area stable or increasing, subject to natural processes, including erosion and succession; No decline in range, subject to natural processes; Natural hydrology and processes of erosion and succession intact, no disturbance to creek and pan structure, as compared to baseline data; There should be a combined density of more than 10 plants per sq. metre at 75% of stops or more; Percentage Spartina spp. cover, or other negative species, within 5m radius of stop less than/equal to baseline at 75% of stops or more; negative indicator species absent.

Embryonic shifting dunes (code 2110)
Area stable or increasing, subject to natural processes, including erosion and succession; No decline in distribution, subject to natural processes; Natural circulation of sediment and organic matter, absence of any physical obstructions or evidence of sediment extraction from the beach and its environs. Physical obstructions that have been in place and are unchanged since prior to 1994 are excluded from this target, unless they have a current adverse impact on sediment circulation; No more than 20% of the habitat should be subject to disturbance e.g. trampling, vehicle damage, removal of substrate; No negative species occurs at a frequency of more than 60% of stops and combined cover of all negative species across the habitat is 5% or less and highest % cover of any negative species within any stop is 25% or less; No non-native species occurs at a frequency of more than 20% of stops and no evidence that % cover is increasing; No evidence of decline in local distinctiveness since designation.

Annual vegetation of drift lines (code 1210)
Permanent habitat area stable or increasing; no decline in range, subject to natural processes; Natural circulation of sediment and organic matter, absence of any physical obstructions or evidence of sediment extraction from the beach and its environs; No more than 20% of the habitat is subject to disturbance e.g. trampling, vehicle damage, removal of substrate; At least one species occurs with a frequency of at least 40% of stops and another species occurs with a frequency of more than 20% of stops; No negative species occurs at a frequency of more than 60% of stops and combined cover of all negative species across the habitat is 5% or less and highest % cover of any negative species within any stop is 25% or less; No individual species occurs at a frequency of more than 20% of stops and no evidence that % cover is increasing; No evidence of decline in local distinctiveness since designation.

The **North-West Irish Sea SPA (site code: 4236)**

This is a large SPA that was designated in July 2023 and extends for 2,333km2 from Dublin Bay in the south to the southern tip of Dundalk Bay in the north. It encompasses marine and coastal areas while bordering a number of other SPAs in this region.

Table 5 – Qualifying interests for the North-West Irish Sea SPA (EU code in square parenthesis)

Roseate Tern (*Sterna dougallii*) [A192]
Common Tern (*Sterna hirundo*) [A193]
Arctic Tern (*Sterna paradisaea*) [A194]
Little Tern (*Sterna albifrons*) [A195]
Common Scoter (*Melanitta nigra*) [A065]
Red-throated Diver (*Gavia stellata*) [A001]
Great Northern Diver (*Gavia immer*) [A003]
Fulmar (*Fulmarus glacialis*) [A009]
Manx Shearwater (*Puffinus puffinus*) [A013]
Shag (*Phalacrocorax aristotelis*) [A018]
Cormorant (*Phalacrocorax carbo*) [A017]
Little Gull (*Larus minutus*) [A177]
Kittiwake (*Rissa tridactyla*) [A188]
Black-headed Gull (*Croicocephalus ridibundus*) [A179]
Common Gull (*Larus canus*) [A182]
Lesser Black-backed Gull (*Larus fuscus*) [A183]
Herring Gull (*Larus argentatus*) [A184]
Great Black-backed Gull (*Larus marinus*) [A187]
Puffin (*Fratercula arctica*) [A204]
Razorbill (*Alca torda*) [A200]
Guillemot (*Uria aalge*) [A199]

- **Roseate Tern.** This tern breeds at only a few stations along Ireland's east coast. Most of these are in decline although at Dublin their colony is increasing.
- **Common Tern.** This summer visitor nests along the coast and on islands in the largest lakes. Its breeding range has halved in Ireland since the 1968-1972 period.
- **Arctic Tern.** These long-distance travellers predominantly breed in coastal areas of Ireland. They have suffered from predation by invasive mink and are declining in much of their range.
- **Little Tern.** Breeding colonies have declines in nearly all scattered Irish nesting localities over the past 40 years. On mainland colonies wardening, to prevent predation effects, is now crucial for long-term survival.
- **Common Scoter.** While a familiar winter visitor this duck breeds only in small numbers in lakes of Counties Galway, Mayo, Fermanagh and Sligo. A significant decline in numbers is evident and is attributed to pollution, predation by the invasive American Mink and the introduction of non-native coarse fish.
- **Great Northern Diver.** This Arctic breeding bird migrates to Irish waters for winter, preferring coastal waters but occasionally frequenting inland wetlands. Galway Bay, Donegal Bay and Blacksod/Tullaghan Bays are of international importance.
- **Red-throated Diver.** While common around the coast in winter this diver breeds only in the far north-west of Donegal. Here they nest in bog-pools and freshwater lakes, and only in small numbers.
- **Fulmar.** Resident seabird that nests on sea cliffs. Historically, the population is believed to have expanded as a result of fishing bycatch but recent declines may be linked to a reduction in fishing activity as well as climate change.
- **Manx Shearwater.** Summer visitor to Ireland where it breeds on grassy slopes on a small number of offshore islands.
- **Shag.** Nearly half of the global population of this seabird is to be found around Ireland and Britain. Its population has shown great fluctuation since counts began although the reasons for this are largely unknown. It is to be found around the Irish coast throughout the year.
- **Cormorant.** Wintering populations of this large, fish-eating bird have increased in Ireland since the early 1980s. Breeding also occurs widely along the coast and inland waterways. It is amber-listed due to a moderate decline in numbers.
- **Little Gull.** This gull is present in Ireland in winter with only a scattering of breeding records.
- **Kittiwake.** These vocal seagulls spend most of their time at sea, returning to favoured coastal sites for breeding. Nesting is on suitable rocky cliffs around the Irish coast. These Irish colonies are considered stable.
- **Common Gull.** Breeding sites for this gull in Ireland are confined to coastal locations, and mostly in the north and west. Their population is boosted by winter arrivals but again, there is a distinct coastal bias in their distribution.
- **Herring Gull.** This large gull breeds predominantly around the Irish coast and only occasionally inland. Numbers at these colonies have fallen by

60% since 1969, a decline which is attributed to a number of sources including a reduction in available food at landfill, botulism and predation.

- **Lesser Black-backed Gull.** The wintering range of this distinctive gull has expanded in Ireland by 55% since the early 1980s while breeding colonies have similarly increased.
- **Black-headed Gull.** Widespread and abundant in winter these gulls are nevertheless considered to be in decline. The reasons behind this are unclear but may relate to the loss of safe nesting sites, drainage, food depletion and increase predation.
- **Great Black-backed Gull.** This gull winters all around the coast of Ireland while summer breeding sites are predominantly coastal in character. Its range has declined by 30% since the late 1960s.
- **Razorbill.** This member of the auk family breeds exclusively at suitable coastal sites, where there are rocky cliffs to provide protection from predators. Indications are that populations at Irish colonies are stable.
- **Puffin.** This unmistakable auk spends the winter far out to sea, only coming to shore in the summer to breed. Colonies are scattered around the coasts and the birds face an uncertain future due to the scale of industrial fishing combined with climate change.
- **Guillemot.** This member of the auk family is found only near land during the breeding season. They nest on suitable rocky outcrops and cliffs where there is protection from predators. The population at four of Ireland's largest colonies is estimated to have increased by 22% over the past decade.

Conservation objectives for this SPA have been published (NPWS, 2023).

Birds (similar for all species)
no significant decline in the breeding/non-breeding population; maintain sufficient number of locations, area, and availability (in terms of timing and intensity of use) of suitable habitat to support the population; maintain sufficient number of locations, area of suitable habitat and available forage biomass to support the population target; ensure that the intensity, frequency, timing and duration of disturbance occurs at levels that do not significantly impact the achievement of targets for population size and spatial distribution; ensure that the number, location, shape and area of barriers do not significantly impact the site population's access to the SPA or other ecologically important sites outside the SPA.

At its nearest point the **Poulaphouca Reservoir SPA** (site code: 4063) is located approximately 25km from the site of the proposed development. Its 'features of interest' include the Greylag Goose *Anser anser* and the Lesser Black-backed Gull *Chroicocephalus ridibundus*.

- **Greylag Goose.** Wintering Greylag Geese are very scattered in Ireland and occur on both coastal in inland sites. Their population has expanded greatly in their more northerly ranges (Iceland and Scotland) and this has coincided with losses elsewhere.

- **Lesser Black-backed Gull.** The wintering range of this distinctive gull has expanded in Ireland by 55% since the early 1980s while breeding colonies have similarly increased.

Site specific conservation objectives are available for this SPA and are similar for all bird species (NPWS, 2024).

Greylag Goose/Lesser Black-backed Gull (codes: A043/A)
Long term winter population trend is stable or increasing; Sufficient number of locations, area, and availability (in terms of timing and intensity of use) of suitable habitat to support the population target; Disturbance occurs at levels that do not significantly impact the achievement of targets for population trend and spatial distribution; Barriers do not significantly impact the wintering population's access to the SPA or other ecologically important sites outside the SPA; Sufficient number of locations, area of suitable habitat and available forage biomass to support the population target; Sufficient number of locations, area and availability of suitable roosting habitat to support the population target; Sufficient area of utilisable habitat available in ecologically important sites outside the SPA.

Data collected to carry out the assessment

Details from the NPWS site synopsis report and the most recent data from BirdWatch Ireland's Wetlands Bird Survey (IWeBS) indicate that Dublin Bay is of international importance for wintering birds meaning that it regularly holds a population of over 20,000 birds.

The development site is composed of highly modified habitats with which are of negligeable value to biodiversity. It is located in a built-up area of Dublin with no surface water bodies leading to Dublin Bay. There are potential pathways to a number of Natura 2000 sites via surface water run-off during the construction and operational phases and wastewater during the operational phase.

The EU's Water Framework Directive (WFD) stipulates that all water bodies must attain 'good ecological status' by 2015 or, with some exceptions, by 2027 at the latest. This includes estuarine waters and Dublin Bay was originally located within the Eastern River Basin District under the first River Basin Management Plan (RBMP) published in 2009 to address pollution issues.

The River Liffey in Dublin city centre (Liffey Estuary Upper; water body code: IE_EA_090_0400) is 'moderate' status while the Liffey Estuary Lower (water body code: IE_EA_090_0300) is also 'moderate'. The estuary of the River Tolka (water body code: IE_EA_090_0200) is 'poor'.

Dublin Bay (water body code: IE_EA_090_0000) is 'good status' while the coastal waters of the Irish Sea south of Dublin Bay (water body code: IE_EA_100_0000) is also 'good status'. These classifications indicate that

water quality in coastal waters is currently meeting the requirements of the WFD.

In 2018 a second RBMP was published which highlighted 190 ‘priority areas for action’ where resources were to be focused over the 2018-2021 period. The Rivers Dodder and Tolka are among these areas although the specific actions to be undertaken to achieve ‘good status’ are not available. A third RBMP was published in 2024.

Of the species listed in table 1 eleven: Curlew, Dunlin, Redshank, Shoveler, Oystercatcher, Grey Plover, Knot, Golden Plover, Bar-tailed Godwit, Black-tailed Godwit and Black-headed Gull are listed as of high conservation concern, and on BirdWatch Ireland’s red list (Gilbert et al., 2021).

In 2020 the NPWS published a report entitled ‘The monitoring and assessment of six EU Habitats Directive Annex I Marine Habitats’ (Scally & Hewett, 2020). This report specifically assessed the status of the habitat: mudflats and sandflats not covered by seawater at low tide (1140) which is a qualifying interest of the North Dublin Bay SAC and the South Dublin Bay SAC. Table 22 of this report assessed the status of this habitat within both SACs as ‘favourable’.

The Assessment of Significance of Effects

Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 site.

In order for an effect to occur there must be a pathway between the source (the development site) and the receptor (the SAC or SPA). Where a pathway does not exist an impact cannot occur.

The proposed development is not located within, or adjacent to, any SAC or SPA.

Habitat loss

The site is approximately 3.9km from the boundary of the South Dublin Bay and River Tolka estuary SPA/SAC as the crow flies but following the flow of the River Liffey this distance is over 7km. Because of this significant distance separating the two areas there is no pathway for loss or disturbance of habitats associated with any Natura 2000 site or other semi-natural habitats that may act as ecological corridors for important species associated with the qualifying interests of the Natura 2000 sites.

The proposed amendments to the permitted project are not likely to result in significant negative effects to Natura 2000 sites.

Habitat disturbance/Ex-situ impacts
The development site is located in a heavily urbanised environment close to significant noise and artificial light sources such as roads. This development cannot contribute to potential disturbance impacts to species or habitats for which Natura 2000 sites have been designated.

The lands are not suitable for regularly occurring populations of wetland/wintering/wading birds which may be associated with Natura 2000 sites in Dublin Bay. These species are associated with coastal and intertidal habitats and some species – notably the Light-bellied Brent Goose – can use inland areas of amenity grassland for feeding. No such habitat is present on or adjacent to the development lands.

The proposed amendments to the permitted project are not likely to result in significant negative effects to Natura 2000 sites.

Hydrological pathways
There is a pathway from the development site via surface and wastewater water flows to Dublin Bay via the city's main wastewater treatment plant.

- **Pollution from wastewater during operation**

With completion of upgrading works at Ringsend, it is expected that emission limit standards are being met (although confirmation of this is not likely until later in 2027). Additional loading to this plant arising from the operation of this project is not significant as the best available scientific data suggests that pollution through nutrient input is not affecting the conservation objectives of Natura 2000 sites in Dublin Bay.

The effect of this project on Natura 2000 sites is therefore not significant.

- **Pollution from surface water during operation**

Permitted surface water attenuation measures are designed so that there will be a net enhancement to the quantity and quality of surface water leaving the site. These are standard measures which are included in all development projects and are not included here to reduce or avoid any effect to a Natura 2000 site. They are not mitigation in an AA context. The proposed amendments to the permitted project will have no effect on the surface water drainage design.

No significant effects to Natura 2000 sites are likely to arise from this source.

- **Pollution during construction**

During the site clearance and construction phases some sediment may become entrained in rain run-off. However this cannot result in significant effects to Natura 2000 sites given its temporary nature, the substantial distance to Natura 2000 sites, and given that large quantities of sediment are deposited in estuaries as part of their natural functioning. The proposed amendments to the permitted project will result in no measurable change to the construction phase in terms of the potential for pollution.

During the construction phase it can be expected that some dust emission will occur. It is difficult to quantify this but is likely to be localised and temporary in nature. Dust deposition can impact upon ecosystems through blocking the stomata of leaves, thus retarding plant growth. Research has found however that this impact is localised in nature and typically occurs where there are significant dust emissions (Bell & Treeshow, 2002). Given the distance to Natura 2000 sites and the lack of natural vegetation in the vicinity of the site, this is not considered significant.

No significant effects to Natura 2000 sites can arise from this source.

Abstraction
Evidence suggests that abstraction is not affecting the conservation objectives for Greylag Geese or Black-headed Gulls at the Poulaphouca Reservoir. Nationally the Greylag Goose has undergone a significant increase over 30 years in its wintering population in Ireland. The recently published Bird Atlas 2007-11 shows that there has been a decrease in the Poulaphouca numbers however. This source suggests that the decline, which also occurred in a number of other sites in Ireland, “may be linked with a northerly redistribution of the Icelandic wintering population” (Balmer et al., 2013).

No effects are likely to arise to the Poulaphouca Reservoir SPA arising from this project.

Are there other projects or plans that together with the project or plan being assessed could affect the site?

Eventual implementation of the WFD will result in continued improvements to water quality in Dublin Bay. Environmental water quality can be impacted by the effects of surface water run-off from areas of hard standing. These impacts are particularly pronounced in urban areas and can include pollution from particulate matter and hydrocarbon residues, and downstream erosion from accelerated flows during flood events. The latter impact is unlikely to occur in Dublin since the estuary mouth has long been channelled and defined by sea walls and other defences.

In March 2005 the Greater Dublin Drainage Study (GDDS) was published as a policy document designed to provide for drainage infrastructure to 2030. The implementation of this policy will see broad compliance with environmental and planning requirements in an integrated manner. This is likely to result in a long-term improvement to the quality and quantity of storm water run-off in the capital. This project will not impact upon the patter of surface water run-off.

The completion of upgrade works at Ringsend will see greater compliance with quality standards of effluent and so an expected improvement in water quality in Dublin Bay.

This project can be seen in combination with infill development across the city and the wider catchment of the Ringsend wastewater treatment plant. This type

of development is planned for under statutory development plans provided by each of the four Local Authorities. These plans have each been subjected to AA by the competent authority.

There are no effects arising from this project which can act in combination with the current proposal to result in likely significant effects to Natura 2000 sites.

Conclusion and Finding of No Significant Effects

This project has been screened for AA under the appropriate methodology. It has found that significant effects are not likely to arise, either alone or in combination with other plans or projects to any SAC or SPA. No mitigation measures are relied upon in arriving at this assessment. This conclusion is based upon the best available scientific evidence.

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