Screening Report for Appropriate Assessment of a Strategic Housing Development at the corner of Charlestown Place and St. Margaret's Road, Charlestown, Dublin 11

Compiled by OPENFIELD Ecological Services

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for Puddenhill Property Limited

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Introduction

This report has been prepared by Padraic Fogarty of OPENFIELD Ecological Services. Pádraic Fogarty has worked for 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. OPENFIELD is a full member of the Institute of Environmental Management and Assessment (IEMA).

This report finds that significant effects to Natura 2000 sites will not arise as a result of this project, either alone or in combination with other plans and projects, and that this conclusion is beyond a reasonable scientific doubt on the basis of the best scientific knowledge available.

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. This target was not met but 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'. In 2011 the Irish Government incorporated the goals set out in this strategy, along with its commitments to the conservation of biodiversity under national and EU law, in the second national biodiversity action plan (Dept. of Arts, Heritage and the Gaeltacht, 2011). A third plan was published in 2017.

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. This places specific obligations on the relevant competent authority to assess the impact of a plan or project on any European sites within a reasonable proximity of the proposed development (usually considered to be 15km) or within the functional area of the competent authority. A planning authority or the Board may grant consent with modifications or conditions where they are satisfied that the proposed development, if carried out in accordance with the consent (and its modifications or conditions), would not adversely affect the integrity of the European Site concerned.

This is a two-stage process of screening and appropriate assessment. The competent national authority is required to decide whether a 'plan' or 'project' is likely to have a significant effect on a designated site. The first stage of the procedure requires the carrying out of a 'screening' exercise. If the screening exercise produces a 'positive' result, i.e. the plan or project is likely to have a significant effect, then it is necessary for the competent authority to carry out an 'appropriate assessment'. This involves a preliminary screening for appropriate assessment in order to determine whether the plan or project is likely to have a significant effect on a 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 An Bord Pleanála.

The Purpose of this document

This document provides for the screening of a proposed residential development at the corner of Charlestown Place and St. Margaret's Road, Charlestown, Dublin 11, and its potential effects in relation to Natura 2000 sites (SACs and SPAs).

This document will assess whether effects to the Natura 2000 network are likely to occur in accordance with Article 6(3) of the Habitats Directive and the Planning and Development (Amendment) Act, 2010.

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.

Reference is also made to recently published guidelines for Local Authorities from the Department of the Environment, Heritage and Local Government (DoEHLG, 2009).

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 plan 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 project is described thus, as per the planning application:

The development will consist of construction of 590no. apartment units in 4no. 2 to 10 storey blocks (Blocks 1 to 4) comprising of 235no. 1 bed apartments, 315no. 2 bed apartments and 40no. 3 bed apartments. Single level basements are proposed under Blocks 1/2 and Block 4 accommodating car parking and ancillary accommodation. A creche (542sq.m) and associated external play area is provided within Block 1 to serve the proposed residential development and the wider community. 2no. retail / commercial units (350sq.m) are provided at the corners of Blocks 1 and 2 on the corners of Charlestown Place and a proposed pedestrian boulevard. The development also includes 4no. office suites (224aq.m) and a health centre (525sq.m).

The site location is shown in figures 1 and 2 while the proposed layout is given in figure 3.

It is planned to construct a Strategic Housing Development on the site Charlestown, Dublin 11 as previously described. This will include site clearance works (there are no buildings on the site at present), 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.
- 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 new homes will be occupied.

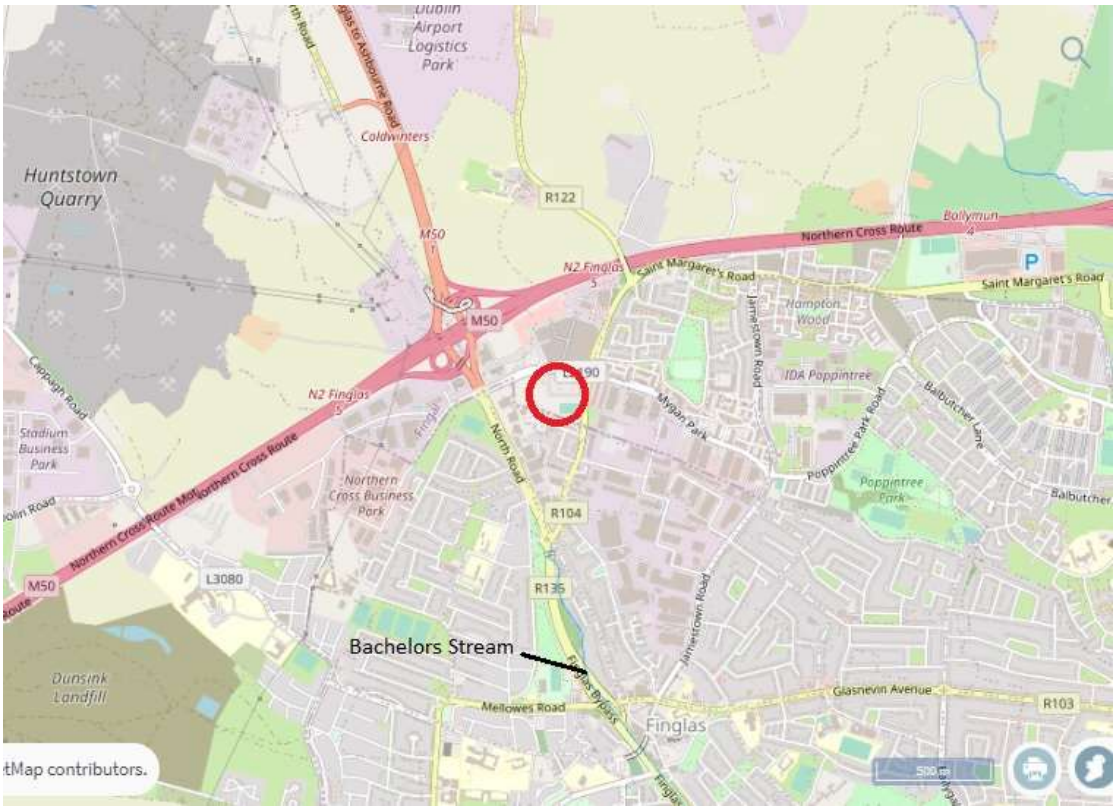

Figure 1 – Site location (red circle). There are no Natura 2000 sites in this view (www.epa.ie).

The 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 site was visited for this study on May 29th 2020 and habitats are described here in accordance with standard classifications (Fossitt, 2000). A large portion of the development site is used as a car park and is an **artificial surface – BL3**. The remaining area to the south of the car park is an ungrazed **dry meadow –**

GS2. There are grasses, Yorkshire Fog *Holcus lanatus,* False Oat *Arrhenatherum elatius* and Cock's-foot *Dactylis glomerata.* Broad-leaved species include Meadow Buttercup *Ranunculus acris,* Clovers *Trifolium sp.,* Vetches *Vicia sp.,* Ribwort Plantain *Plantago lanceolata* and Creeping Thistle *Cirsium arvense.*

The southern boundary is characterised by a mature **treeline – WL2** with tall Ash *Fraxinus excelsior,* Hawthorn *Crataegus monogyna,* Brambles *Rubus fruticosus agg.* and Ivy *Hedera helix.* This treeline is accompanied by a **drainage ditch – FW4**. The direction if flow is presumed to be towards the south where is it likely to enter the Bachelor's Stream, a tributary of the River Tolka.

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

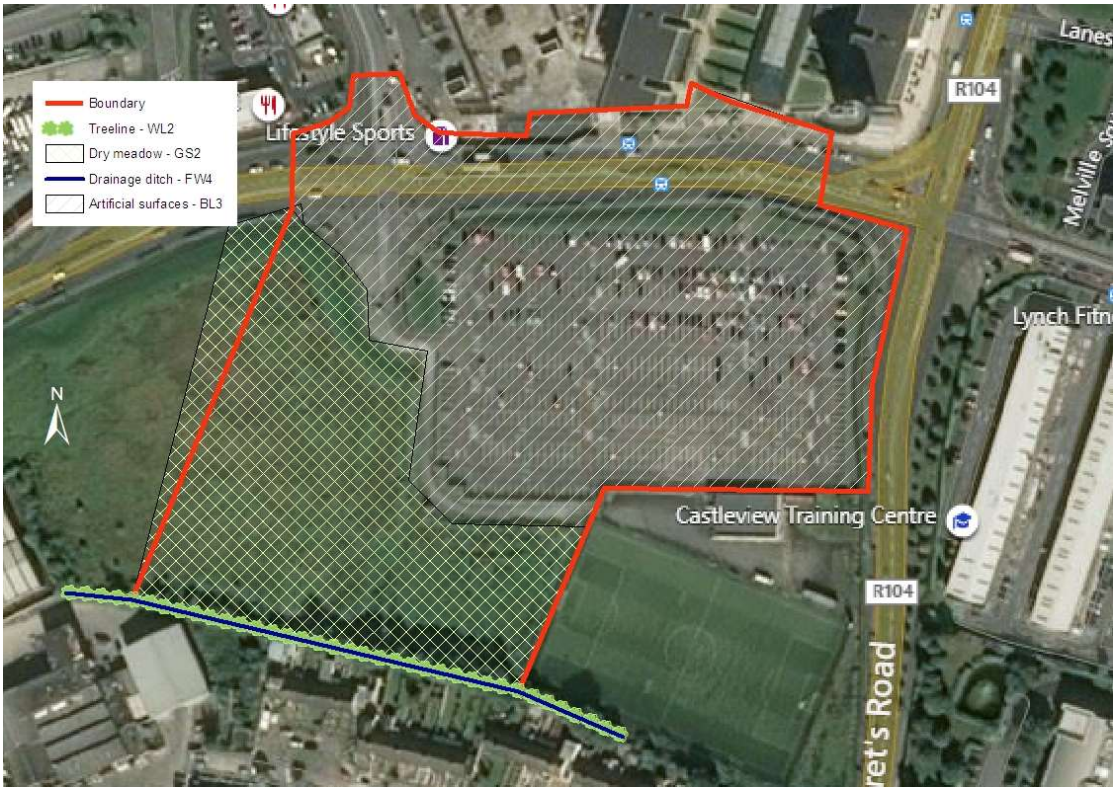

Figure 2 – Site location at Charlestown (from www.google.com)

Currently there is no attenuation of rain run-off and this enters the public surface sewer. In accordance with the Greater Dublin Strategic Drainage Study this project will incorporate sustainable drainage systems (SUDS) that will appreciably reduce the current run-off rate. This will include attenuation storage and controlled release to the combined foul sewer as well as swales and green roofs to reduce volumes of rainwater entering the public sewer. These SUDS are standard measures in all new development and are not included here to avoid or reduce an effect to a Natura 2000 site.

Foul effluent from the proposed 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. In April 2019 Irish Water was granted planning permission to upgrade the Ringsend plant. This will see improved treatment standards and will increase network capacity by 50%. There are no other discharges from this operation. 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.

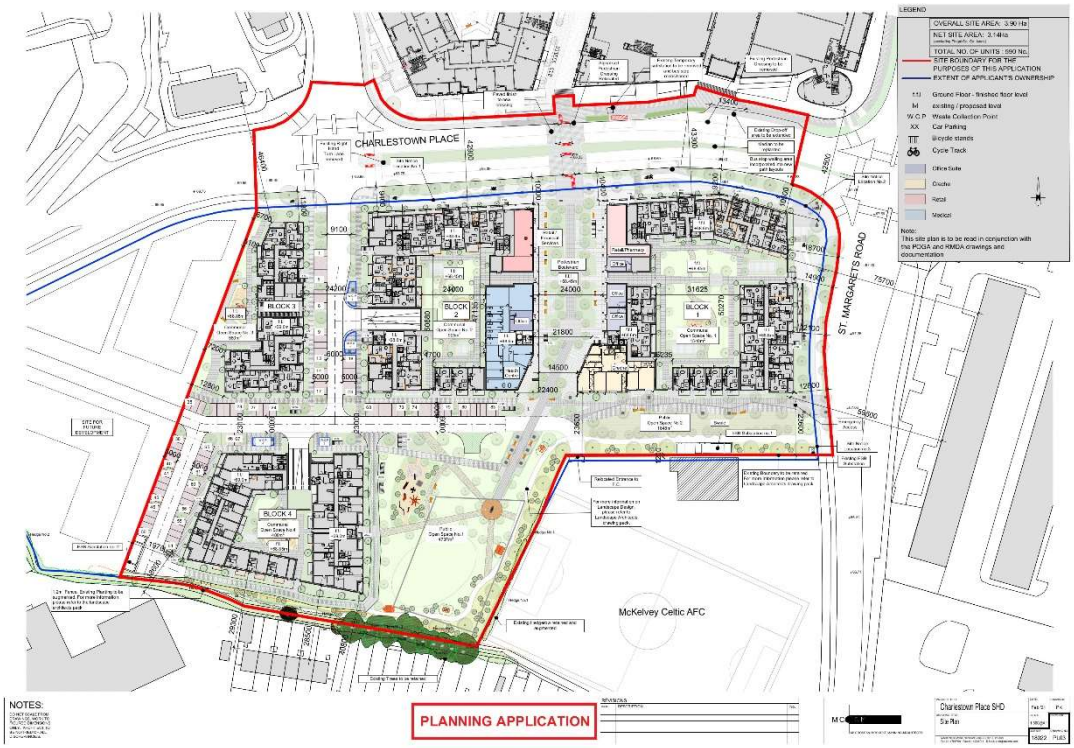

Figure 3 – Proposed site layout

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 development
- The location and nature of Natura 2000 sites
- Pathways between the development and the Natura 2000 network

It has already been stated that the site is not located within or directly adjacent to any Natura 2000 site. For projects of this nature an initial 15km radius is normally examined. This is an arbitrary distance however and impacts can occur at distances greater than this. There are a number of Natura 2000 sites within this radius.

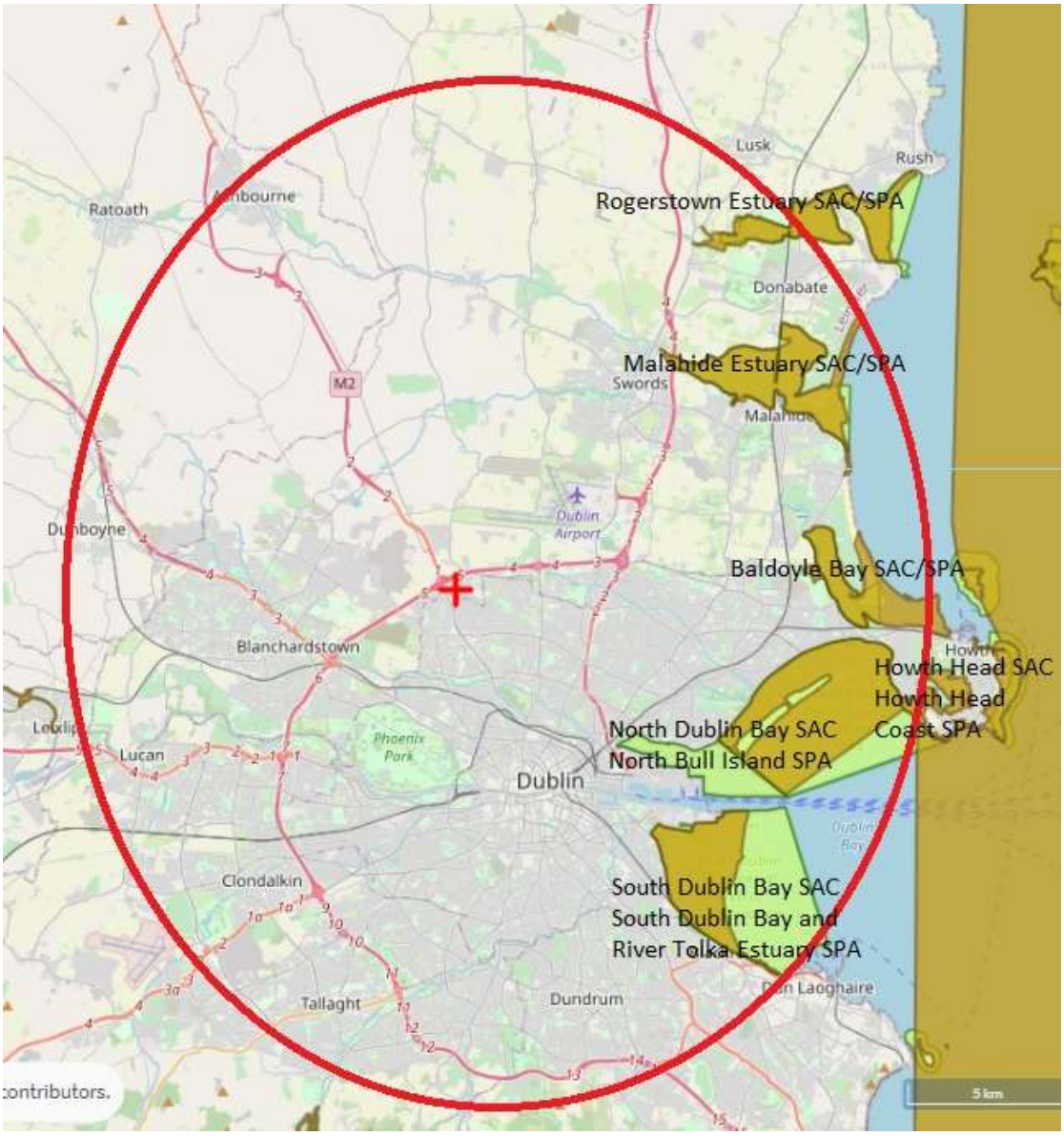

Figure 4 – Approximate 15km radius around the proposed development site (red circle) and Natura 2000 sites.

Baldoyle Bay SAC/SPA

This SAC (site code: 0199) is the estuary of the Sluice and the Mayne Rivers that is largely enclosed by a sand spit that stretches from Portmarnock to Howth. At low tide it has large areas of exposed mud and sediment that support rich invertebrate communities. There are a number of habitats here that are listed in the EU's Habitats Directive Annex I while there are two plants recorded from the Bay that are protected under the Flora Protection Order: Borrer's Saltmarsh-grass *Puccinellia fasciculata* and Meadow Barley *Hordeum secalinum*.

The reasons why the bay falls under the SAC designation are set out in the qualifying interests. They are either habitat types listed in Annex I or species listed in Annex II of the Habitats Directive. This information is provided by the National Parks and Wildlife Service (NPWS) and is shown in table 1 below. In this case the SAC is designated only for protected habitat types. Status is based on the NPWS national assessments under Article 17 of the Habitats Directive and unless otherwise stated do not refer to the status within the SAC in question.

Table 1 – Qualifying interests for the Baldoyle Bay SAC (from NPWS)

Code	Habitats	Status
1140	Mudflats and sandflats	Inadequate
1310	Salicornia and other annuals colonizing mud and sand	Favourable
1330	Atlantic salt meadows	Inadequate
1410	Mediterranean salt meadows	Inadequate

- 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.
- Atlantic and Mediterranean salt meadows (1330 & 1410): these are intertidal habitats that differ somewhat in their vegetation composition. They are dynamic habitats that depend upon processes of erosion, sedimentation and colonisation by a typical suite of salt-tolerant organisms. The main pressures are invasion by the non-native Spartina anglica and overgrazing by cattle and sheep.

The Baldoyle Bay SPA (site codes: 4016) is composed of estuarine habitats. They are some of the most productive in the world and the nutrients that are

deposited here fuel primary and secondary production (levels in the food chain) that in turn provide food for internationally significant numbers of wintering birds (Little, 2000). It had a mean of 5,780 birds between the winters of 2006/07 and 2010/11 (Crowe et al., 2012). Specifically, it has a number of species which are 'features of interest' of the SPA, along with 'wetlands and waterbirds'. Table 2 details these.

Table 2 – Features of Interest for the Baldoyle Bay SPA (from NPWS)

Species	National Status[1]	SPA Status[2]
Branta bernicula hrota Light-bellied brent goose	Amber (Wintering)	Favourable
Charadrius hiaticula Ringed plover	Green	Intermediate unfavourable
Limosa lapponica Bar-tailed godwit	Amber (Wintering)	Highly unfavourable
Pluvialis apricaria Golden plover	Red (Breeding & Wintering)	Unfavourable
Pluvialis squatarola Grey plover	Amber (Wintering)	Unfavourable
Tadorna Tadorna Shelduck	Amber (Breeding & Wintering)	Favourable
Wetlands & Waterbirds		

- **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.
- **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.
- **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.
- **Golden Plover.** In winter these birds are recorded across the midlands and coastal regions. They breed only in suitable upland habitat in the north-west. Wintering abundance in Ireland has changed little in recent years although it is estimated that half of its breeding range has been lost in the last 40 years.
- **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.

[1] Birds of Conservation Concern in Ireland. Colhoun & Cummins, 2013

[2] Conservation Objectives Supporting Document. Version 1. National Parks & Wildlife Service. 2012.

- **Shelduck.** The largest of our ducks, Shelduck both breed and winter around the coasts with some isolate stations inland. Its population and range are considered stable.

Of those species with unfavourable status in the SPA, Ringed Plover and Bar-tailed Godwit have exhibited losses at Baldoyle Bay while the national population remains stable or has increased. It is therefore reasonable to assume that local factors are leading to declines. The NPWS list a number of factors that may be contributing to this including human disturbance (walkers with or without dogs) and nutrient enrichment (pollution). The latter effect is exhibited by algal mats, typically Sea-lettuce Ulva sp. which covers the sediment surface at low tide. This is good for those species which feed on Sea-lettuce but bad for those which cannot reach their favoured prey under the mats.

North Dublin Bay SAC/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 3. 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 3 – 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.

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 4 lists its features of interest

Table 4 – Features of interest for the North Dublin Bay SPA

North Bull Island SPA	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.

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 5 shows the most recent count data available[3].

Table 5 – Annual count data for Dublin Bay from the Irish Wetland Birds Survey (IWeBS)

Year	2010/11	2011/12	2012/13	2013/14	2014/15	Mean
Count	27,931	30,725	30,021	35,878	33,486	31,608

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 6 – Features of interest for the South Dublin Bay & River Tolka Estuary SPA (EU code in square parenthesis)

South Dublin Bay and Tolka Estuary SPA
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]

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

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]

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.

At its nearest point the **Poulaphouca Reservoir SPA** (site code: 4063) is located approximately 23km 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.

- **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.

Rogerstown estuary SAC (code: 0208) SPA (code: 4015)
This area is also a Statutory Nature Reserve, a proposed Natural Heritage Area (code: 0208) and is listed under the international Ramsar convention on the protection of wetlands (site no. 412).

The estuary is situated north of Donabate and is transected by the Rogerstown viaduct, built in the 1840s and rebuilt after a section of it collapsed in 2009. The mudflats, salt marsh and sand dune habitats are all important and during winter there are internationally important populations of the pale-bellied brent goose *Branta bernicula hrota*. The site is also of international importance as it supports in excess of 20,000 waterbirds each season.

There is site-specific information available for the SAC and SPA available from the NPWS as 'site synopsis' reports (from 2013c and 2014 respectively). 'Site qualifying interests' (i.e. the reasons the site is designated) are given by the NPWS for the SAC. For the SPA 'features of interest' are given. These are shown in tables 7 & 8.

Table 7 – Site qualifying interests for the Rogerstown estuary SAC

Habitat and EU code	Current national status
Fixed coastal dunes with herbaceous vegetation (grey dunes) (code: 2130)	Bad
Shifting dunes along the shoreline with *Ammophila aranaria* ('white dunes') (code: 2120)	Inadequate
Salicornia and other annuals colonizing mud and sand (code: 1310)	Favourable
Mediterranean salt meadows (code: 1410)	Inadequate
Atlantic salt meadows (code: 1330)	Inadequate
Estuaries (code: 1130)	Inadequate
Mudflats and sandflats not covered by seawater at low tide (code: 1140)	Inadequate

- **Estuary (1130)**: This is the portion of a river that is influenced by the tide but retaining a significant freshwater influence. Substrates can range from rocks and boulders, to expanses of fine mud and sand. They are an important resource for birds and other fauna and many estuaries have twin designations (i.e. both SAC and SPA). It considered that the majority of

estuary habitat is in good condition however approximately a quarter is negatively affected by excess nutrient input and damaging fishing practices.

Table 8 – Site features of interest for the Rogerstown Estuary SPA

Species and EU Code	**National Status**
Shoveler (*Anas clypeata*) [A056]	Red (Wintering)
Greylag Goose (*Anser anser*) [A043]	Amber (Wintering)
Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]	Amber (Wintering)
Knot (*Calidris canutus*) [A143]	Amber (Wintering)
Dunlin (*Calidris alpina*) [A149]	Red (Breeding & Wintering)
Ringed Plover (*Charadrius hiaticula*) [A137]	Green
Oystercatcher (*Haematopus ostralegus*) [A130]	Amber (Breeding & Wintering)
Black-tailed Godwit (*Limosa limosa*) [A156]	Amber (Breeding)
Grey Plover (*Pluvialis squatarola*) [A141]	Amber (Wintering)
Shelduck (*Tadorna tadorna*) [A048]	Amber (Breeding & Wintering)
Redshank (*Tringa totanus*) [A162]	Red (Breeding & Wintering)
Wetlands and waterbirds	-

The status given for each species is taken from BirdWatch Ireland's 'Birds of Conservation Concern in Ireland' (Colhoun & Cummins, 2013) while the summaries below are all from the *Bird Atlas 2007-11* (Balmer et al., 2013).

- **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.
- **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.
- **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.
- **Shelduck.** The largest of our ducks, Shelduck both breed and winter around the coasts with some isolate stations inland. Its population and range are considered stable.

Pathway Analysis

The drainage ditch on the development site provides a direct natural hydrological connection from the site to Dublin Bay. There is also an indirect pathway through the foul sewer which includes significant dilution on 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) and the North Dublin Bay SAC (site code: 0206). The Poulaphouca Reservoir SPA (site code: 4063), from which drinking water supply for this development may originate, is also considered to fall within the zone of influence of this project.

Table 9 – Summary table of Natura 2000 sites

Natura 2000 sites found to lie within the zone of influence of the project
North Dublin Bay SAC
North Bull Island SPA
South Dublin Bay SAC
South Dublin Bay and River Tolka Estuary SPA
Poulaphouca Reservoir SPA
Natura 2000 sites examined but found not to lie within the zone of influence of the project
Baldoyle Bay SAC
Baldoyle Bay SPA
Howth Head SAC
Howth Head Coast SPA
Malahide Estuary SAC
Malahide Estuary SPA
Rogerstown Estuary SAC
Rogerstown Estuary SPA

Significance of Effects

Whether effects are significant or not must be measured against the conservation objectives of the SAC or SPA in question.

The specific conservation objectives which have been set for mudflats in the South Dublin Bay SAC (generic objectives only are available for other qualifying interests) .and qualifying interests in the North Dublin Bay SAC relate to habitat area, community extent, community structure and community distribution within the qualifying interest. There are no objectives in relation to water quality (NPWS, 2013).

For the South Dublin Bay & Tolka Estuary SPA and the North Bull Island SPA the conservation objectives for each bird species relates to maintaining a population trend that is stable or increasing, and maintaining the current distribution in time and space (NPWS, 2015a & b).

For the Poulaphouca Reservoir SPA, generic conservation objectives have been published by the NPWS and are as previously stated above (NPWS, 2018).

To maintain or restore the favourable conservation condition of the Annexed species for which the SPA has been selected. (NPWS, 2018).

In a generic sense 'favourable conservation status' of a habitat is achieved when:

• its natural range, and area it covers within that range, are stable or increasing, and
• the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
• the conservation status of its typical species is favourable.

While the 'favourable conservation status' of a species is achieved when:
• population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
• the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
• there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Data collected to carry out the assessment

A survey of habitats on the site showed that habitats are not associated with either intertidal habitats or species listed in tables 1 or 2.

The EU's Water Framework Directive (WFD) stipulates that all water bodies were to have attained 'good ecological status' by 2015. This includes estuarine waters and Dublin Bay is located within the Eastern River Basin District. In 2009 a management plan was published to address pollution issues and includes a 'programme of measures' which must be completed. This plan was approved in 2010 while the second River Basin Management Plan was published in 2018. The Charlestown site is not located adjacent to any significant surface water course. Drainage pathways lead to the Bachelor's Stream which is culverted for substantial stretches under the Finglas Road before reaching the River Tolka near Glasnevin Cemetery. The River Tolka has been assessed as 'poor' in this location while the estuary of the Tolka is 'moderate'. The coastal water beyond the estuary, i.e. Dublin Bay, have been assessed as 'good status' (from www.epa.ie). These classifications indicate that water quality across Dublin Bay is currently meeting the requirements of the WFD however more needs to be done to achieve good status along the Tolka system.

Details from the NPWS site synopsis report and the most recent data from BirdWatch Ireland's Wetlands Bird Survey (IWeBS) (Crowe et al., 2012) indicate that Dublin Bay is of international importance for wintering birds meaning that it regularly holds a population of over 20,000 birds.

Of the species listed in table 1 six: Curlew, Dunlin, Redshank, Pintail, Shoveler and Black-headed Gull are listed as of high conservation concern, and on BirdWatch Ireland's red list (Colhoun & Cummins, 2013).

- Dunlins do not breed on the east coast of Ireland while their winter range, which includes a number of coastal and wetland areas across the country, has declined by over 50% between 1994/5 and 2008/09. The reason for this decline is unclear.
- Wintering Redshank numbers in Ireland have changed little since the early 1980s while their breeding sites, based around wetlands west of the River Shannon and some eastern coastal areas, has fallen by 55% in 40 years. This can be attributed to habitat loss from agricultural intensification and drainage.
- Black-headed Gulls remain a frequent winter presence and their red listing relates to their breeding status only. This has seen a 55% decline in 40 years for reasons which are not clear but may relate to loss of nesting sites, predation, food depletion or drainage. They are not recorded as breeding in the Dublin area.
- Wintering Pintails and Shoveler are believed to be declining in Dublin Bay
- Wintering Curlew have experienced a small decline but their status is nevertheless assessed as 'favourable' (Balmer et al., 2013).

A ‘supporting document’ has been published by the NPWS which gives a detailed assessment of the features of interest for which SPAs in Dublin Bay have been designated (NPWS, 2014). In particular it presents information on the trends of these features and the pressures which are likely to affect these trends. It has determined that five species: Grey Plover, Shelduck, Pintail, Shoveler, Golden Plover and Black-headed Gull, are of unfavourable status while the remainder are ‘favourable’. In the case of the Grey Plover it was found that its population trend is decreasing both within Dublin Bay and at an all-Ireland level. For this reason it is reasonable to assume that the factors for its decline are not unique to Dublin Bay. The Black-headed Gull population was not assessed in this way. Only for Shoveler is it considered that significant declines are being experience due to site conditions.

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’.

In June 2018 Irish Water applied for (and subsequently received) planning permission for works to the Ringsend Wastewater Treatment (WwTP) facility. As part of this application an Environmental Impact Assessment Report (EIAR) was submitted. Sections 5 and 6 of this EIAR related to Marine Biodiversity and Terrestrial Biodiversity respectively and each contained a section on the ‘do-nothing scenario’. These review the effects to biodiversity in Dublin Bay in the absence of the upgrade works and so are relevant to this response. Extracts from these sections include:

“*If the Proposed WwTP Component is not constructed, the nutrient and suspended solid loads from the plant into Dublin Bay will continue at the same levels and the impact of these loadings should maintain the same level of effects on marine biodiversity. […]*

If the status quo is maintained there will be little or no change in the majority of the intertidal faunal assemblages found in Dublin Bay which would likely continue to be relatively diverse and rich across the bay *[our emphasis]. Previous studies suggest that the outer and south bays are largely unaffected by the nutrient inputs from the WwTP at Ringsend and from the Liffey and Tolka rivers. Therefore, the sandy communities found in those areas will likely remain dominated by the same assemblage of Nepthys, tellinids and other pollution-sensitive species, albeit subjected to natural spatial and seasonal variations.*

However, the areas in the Tolka Estuary and North Bull Island channel will continue to be affected by the cumulative nutrient loads from the river Liffey and Tolka and the effluent from the Ringsend WwTP. These areas will likely continue to be colonised by opportunistic taxa tolerant of organic enrichment. There is a possibility that an increase in the nutrient outputs from the plant due

to the operational overload and storm water discharges could result in a decline in the biodiversity of these communities as a result of low oxygen availability caused by increased organic enrichment. Considering the existing situation, it is possible that through the future oversupply of DIN to the area impacted by the existing outfall, benthic production could be adversely impacted due to hypoxic or even anoxic conditions. An increase in the cover of opportunistic macroalgae could lead to further deterioration in the lagoons in the North Bull as they add to the organic load on the benthos and further increase the BOD. These events, although localised, could deteriorate the biological status for Dublin Bay as a whole. ***Nonetheless, it is unlikely, as existing historical data suggests that pollution in Dublin Bay has had little or no effect on the composition and richness of the benthic macroinvertebrate fauna*** *[our emphasis]. Although a localised decline could occur, it is not envisaged to be to a scale that could pose a threat to the shellfish, fish, bird or marine mammal populations that occur in the area. (section 5.7.1) […]*

If there is no change to the treatment process at Ringsend WwTP then the terrestrial environment adjacent to the site will remain largely unchanged *[our emphasis]. […]*

If the Proposed WwTP Component is not implemented, there will be little or no change in the majority of the intertidal faunal assemblages found in Dublin Bay which would likely continue to be relatively diverse and rich across the bay […]. The sandy communities found in South Dublin Bay will likely remain dominated by the same assemblage of the polychaete worm Nepthys caeca, Cockle Cerastoderma edula, tellinids and other pollution-sensitive species, albeit subjected to natural spatial and seasonal variations. ***Bird populations in these areas will be unaffected by the discharge from the WwTP*** *[our emphasis].*

If the Proposed WwTP Component is not implemented, there is a possibility that an increase in the nutrient outputs from the plant due to operational overload and storm water discharges could result in a decline in the biodiversity of invertebrate communities in the Tolka Estuary and North Bull Island channel as a result of low oxygen availability caused by increased organic enrichment. An increase in the cover of opportunistic macroalgae could lead to further deterioration in the lagoons in the North Bull as they add to the organic load on the benthos and further increase the BOD. These events, although localised, could deteriorate the biological status for Dublin Bay as a whole. ***It is unlikely that they would have any significant impact on the waterbird populations that forage on invertebrates in Dublin Bay*** *[our emphasis] (section 6.5.1).*"

A graphic from the EIAR prepared by Irish Water in 2018 showed the zone of influence of the discharge from the Ringsend WwTP and this indicated that effects from the discharge do not extend to the south side of the bay. This is reproduced in figure 5.

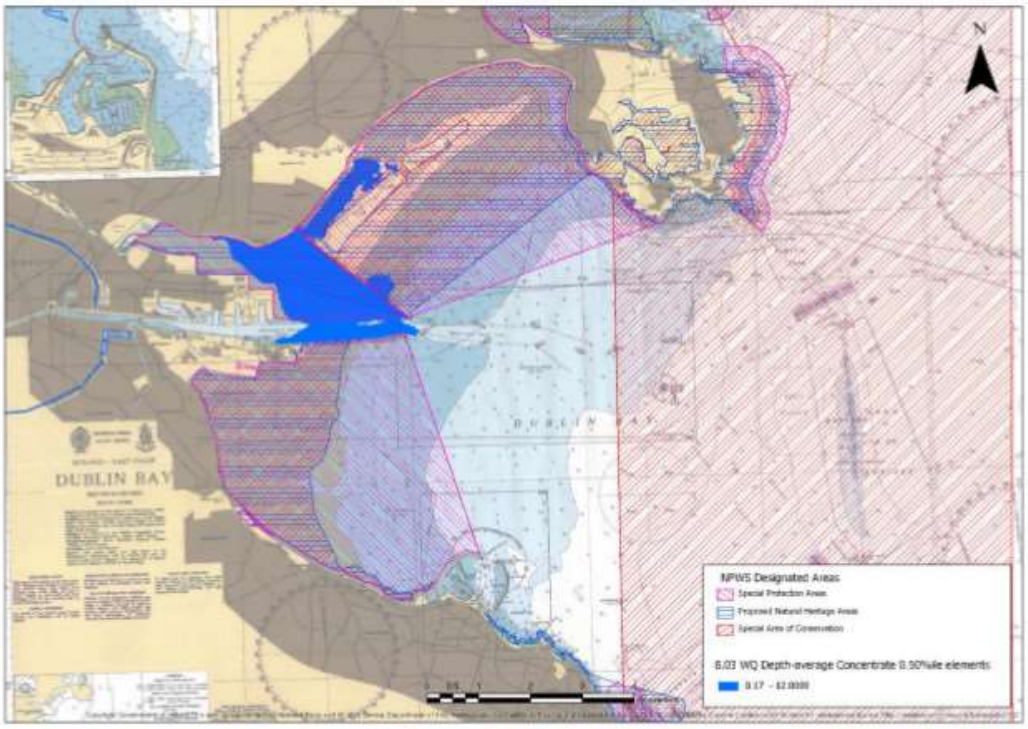

Figure 5-16: Extent of the Zone of Influence (in blue) of the effluent from the Proposed WwTP Component on the predicted modelled output for Winter depth averages 50%ile for Dissolved Inorganic Nitrogen (DIN)

Figure 5 – Extract from the EIAR prepared by Irish Water (2018) showing the zone of influence of the Ringsend WWTP outfall pipe.

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

Habitat disturbance
The subject 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 of for which Natura 2000 sites have been designated.

Pollution during operation – wastewater
The Ringsend plant is licenced to discharge treated effluent by the EPA (licence number D0034-01) and is managed by Irish Water. 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, including at the subject site. The Annual Environmental Report for 2018, the most recent available, indicated that there were a number of exceedences of the emission limit values set under the Urban Wastewater Treatment Directive and these can be traced to pulse inflows arising from wet weather. In April 2019 Irish Water was granted planning permission to upgrade the Ringsend plant. This will see improved treatment standards and will increase network capacity by 50%.

While the issues at Ringsend wastewater treatment plant are being dealt with in the medium term evidence suggests that some nutrient enrichment is benefiting wintering birds for which SPAs have been designated in Dublin Bay (Nairn & O'Hallaran eds, 2012). No negative impacts to Natura 2000 sites can arise from the additional loading arising from this development as there is no evidence that negative effects are occurring to SACs or SPAs from water quality.

Pollution during operation - surface water
Because SUDS measures have been incorporated into the project design there can be no negative impact from this development to the quantity or quality of surface water leaving the site. These are standard measures which are included in all development projects and are not included here to avoid or reduce any effect to a Natura 2000 site. In this regard, SUDS are not mitigation measures in an AA context.

Pollution during the construction phase
During the demolition and construction phase it is not likely that sediment will enter water courses as there are no significant water courses in this vicinity. This effect is not considered significant given its temporary nature of this phase and given that large quantities of sediment are deposited in estuaries as part of their natural functioning.

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.

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?

Potential in combination effects were identified based on projects which are permitted or planned in the immediate vicinity of the development site as well as through the catchment of the Ringsend wastewater treatment plant. While not considered necessary to list these individually, these include new development on brown-field sites, infrastructure projects such as roads and drainage, as well as new developments on green-field sites. Development in the city is based upon forward planning by the four local authorities in Co. Dublin

and their associated development plans. Each of these plans has been subject to Screening for Appropriate Assessment and, where relevant, a full Appropriate Assessment has been carried out to ensure adverse effects to Natura 2000 sites do not occur.

The impacts from built development in this area include loss of habitat, additions to drainage infrastructure, particularly wastewater and surface water, and the in combination effects of pollution arising from multiple construction projects happening at the same time.

Implementation of the WFD will ensure that improvements to water quality in Dublin Bay and the River Liffey are maintained. 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. In this case there will be no change to the area of hard standing, so that no negative impacts to surface water quality/quantity will occur.

In March 2005 the Greater Dublin Strategic Drainage Study (GDDS) was published as a policy document designed to provide for future drainage infrastructure. 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 is fully compliant with SUDS principles.

This development will add to the loading at the Ringsend wastewater treatment plant. This plant is not compliant with its emission limit standards however work is underway to increase treatment capacity. According to the 2018 Annual Environmental Report for the plant, “the discharge from the wastewater treatment plant does have an observable negative impact on the water quality in the near field of the discharge and in the Liffey and Tolka Estuaries”. This report highlights that other sources of pollution also present from riverine inputs, sewerage overflows, misconnections and unsewered properties. The AER does not comment on whether, or how, these issues are affecting Natura 2000 sites in Dublin Bay and there is currently no evidence to suggest that such effects are occurring. Therefore no ‘in combination’ effects may arise from this source.

There are no effects which could act in combination with the subject proposal to result in significant effects to Natura areas.

Conclusion and Finding of No Significant Effects

No significant effects will arise from this project to Natura 2000 sites in Dublin Bay: the North Dublin Bay SAC, South Dublin Bay SAC, the North Bull Island SPA or the South Dublin Bay and River Tolka Estuary SPA.

In carrying out this AA screening, mitigation measures have not been taken into account. Standard best practice construction measures which could have the effect of mitigating any effects on any European Sites have similarly not been taken into account.

On the basis of the screening exercise carried out above, it can be concluded that the possibility of any significant impacts on any European Sites, whether arising from the project itself or in combination with other plans and projects, can be excluded beyond a reasonable scientific doubt on the basis of the best scientific knowledge available.

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