

Part 8 Screening Report for Appropriate Assessment of proposed development at Portobello Harbour Park, Dublin 8

Compiled by OPENFIELD Ecological Services

Pádraic Fogarty, MSc MIEMA

for Dublin City Council



www.openfield.ie

April 2024

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 Irish Government incorporated the goals set out in this framework, along with its commitments to the conservation of biodiversity under national and EU law, in the fourth national biodiversity action plan.

The main policy instruments for conserving biodiversity in Ireland have been the Birds Directive of 1979 and the Habitats Directive of 1992. 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. 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" (EC, 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.

Screening for Appropriate Assessment

Article 6(3) of the Habitats Directive 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.

The purpose of Stage 1 Screening for Appropriate Assessment is to determine whether it is necessary to carry out a Stage 2 full Appropriate Assessment (AA).

Section 177U(1) provides that a screening for appropriate assessment of a proposed development 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.

Section 177U(4) provides 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.

Dublin City Council's determination as to whether an Appropriate Assessment is required must be made on the basis of objective information and must be recorded.

Where an Appropriate Assessment is required, an applicant for planning permission must prepare and submit a Natura Impact Statement.

This Appropriate Assessment Screening Report (AASR) has been prepared in accordance with the provisions of Article 6(3) of the Habitats Directive and Section 177U of the 2000 Act.

The Purpose of this document

This document provides the information necessary to allow Dublin City Council, as competent authority, to conduct a Screening for Appropriate Assessment in respect of a proposed development at a site at Portobello Harbour Park, Dublin 8, and its potential effects in relation to Natura 2000 sites (SACs and SPAs).

Under the Planning and Development Act 2000 (as amended), and the Birds and Natural Habitats Regulations 2011, the competent authority cannot grant planning permission where significant effects may arise to a Natura 2000 site. In order to make that decision the development must, in the first instance, be screened for AA.

About OPENFIELD Ecological Services

OPENFIELD Ecological Services is headed by Pádraic Fogarty who 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 (EclA) in Ireland. Since its inception in 2007 OPENFIELD has carried out numerous EclAs 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 Environmental Management and Assessment (IEMA).

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.

Screening Template as per Annex 2 of EU methodology:

This plan is not necessary for the management of any SAC or SPA and so Step 1 as outlined above is not relevant.

Brief description of the project

This project proposes improvements to the public realm including development of a new 0.25 hectare public park.

The new park consists of hard landscape paving and soft landscape areas. Soft landscape areas include rain gardens for attenuating stormwater runoff, tree planting, pollinator friendly groundcover planting, native hedging planting, pollinator friendly hedging, lawn turf and bulb planting. The park incorporates the existing plaza, cycle track and road (Richmond Row). The existing cycle track and road surface including kerbing are to be removed. The existing Dublin Bike Station is to be removed and relocated in the locality. Play features to be incorporated within soft landscape areas. Seating to be provided at the edge of soft landscape areas and along the Canal frontage. Hard landscape surfacing to be predominantly natural stone with existing stone from the plaza to be re-used where possible. Public lighting to be provided to the primary pedestrian routes through the park. Signage and cycle stands to be provided.

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

This project will involve works to the existing public realm infrastructure on the site, with a construction phase to include enhancement of surface water drainage characteristics.

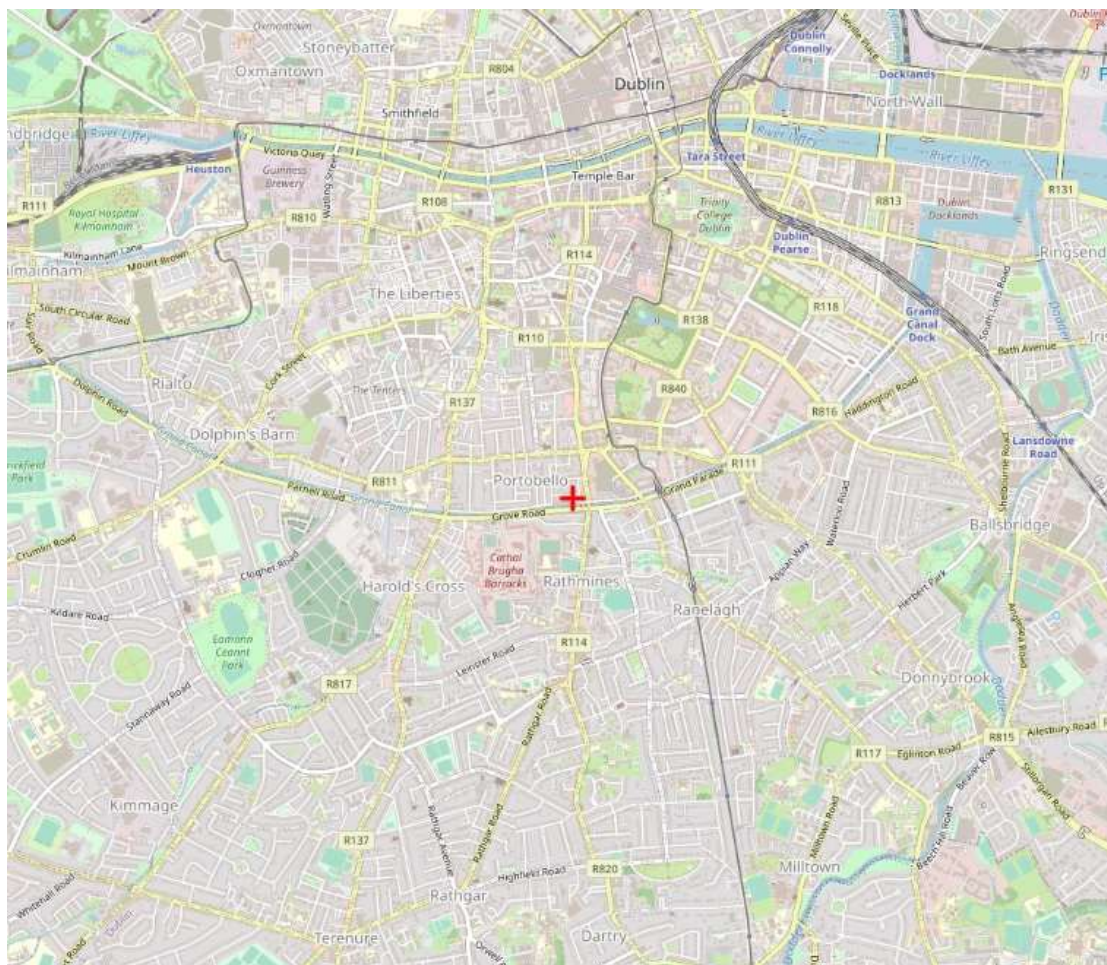


Figure 1 – Site location (red cross) and water courses from www.epa.ie). There are no Natura 2000 sites in this view.

The main phases of this project include:

- Works to existing public realm.
- A construction phase using standard building materials
- Construction will include nature-based solutions for treatment of surface water
- An operation phase whereby the space will continue to be used as an amenity.

The development site is not located within or directly adjacent to any Natura 2000 site (SAC or SPA). This part of south Dublin is a built-up business, residential and commercial zone and is predominantly composed of surfaces that are sealed with tar macadam and concrete. It is close to the Grand Canal, an artificial water body. The boundary of the development site is c.3.5km from the South Dublin Bay and River Tolka Estuary SPA, the nearest Natura 2000 site to the development site.

The development site is entirely composed of hard surfaces with small areas of highly modified green space. It is surrounded on three sides by either roads or other buildings. The Grand Canal is found to the south as can be seen in figures 1 & 2. Figure 2 shows the boundary of the development site.



Figure 2 – Proposed development boundary

As there will be no change to the area of hard standing arising from this development, there can be no negative impact upon surface water quality or quantity leaving the site. The soft landscape zones of the park will incorporate rain gardens. The rain gardens are shallow depressions planted with low groundcover plants and designed to intercept stormwater runoff from the paved areas and allow the water to percolate into the soil. This will enhance the drainage character of the site.

There is no source of foul effluent from this project.

There are no other discharges from this operation.

There is no source of freshwater required for this development.

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



Figure 3 – Proposed 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 project
- The location and nature of Natura 2000 sites
- Pathways between the development and the Natura 2000 network

It has already been stated that the development site is not located within or directly adjacent to any Natura 2000 site. Surface hydrological pathways lead to the **South Dublin Bay and River Tolka Estuary SPA (site code: 4024)** and the **South Dublin Bay SAC (0210)**. The **North Dublin Bay SAC (site code: 0206)**, **North Bull Island SPA (site code: 4006)** and **North West Irish Sea SPA (site code: 4236)** are also in this region. These are the only Natura 2000 sites within the zone of influence of the development as pathways do not exist to other areas.

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
1310	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 <i>Ammophila arenaria</i> (white dunes)	Inadequate
2130	Fixed coastal dunes with herbaceous vegetation (grey dunes)	Bad
2190	Humid dune slacks	Inadequate
1395	<i>Petalophyllum ralfsii</i> Petalwort	Good

- **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.

Site specific conservation objectives are available for this SAC (NPWS, 2013b) and are summarised as:

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 features of interest

Table 2 – Features of interest for the North Bull Island SPA

North Bull Island SPA	National Status
Light-bellied Brent Goose <i>Branta bernicla hrota</i>	Amber (Wintering)
Oystercatcher <i>Haematopus ostralegus</i>	Red (Breeding & Wintering)
Teal <i>Anas crecca</i>	Amber (Breeding & Wintering)

Pintail <i>Anas acuta</i>	Amber (Wintering)
Shoveler <i>Anas clypeata</i>	Amber (Wintering)
Shelduck <i>Tadorna tadorna</i>	Amber (Breeding & Wintering)
Golden Plover <i>Pluvialis apricaria</i>	Red (Breeding & Wintering)
Grey Plover <i>Pluvialis squatarola</i>	Red (Wintering)
Knot <i>Calidris canutus</i>	Red (Wintering)
Sanderling <i>Calidris alba</i>	Green (Wintering)
Dunlin <i>Calidris alpina</i>	Red (Breeding & Wintering)
Black-tailed Godwit <i>Limosa limosa</i>	Red (Wintering)
Bar-tailed Godwit <i>Limosa lapponica</i>	Red (Wintering)
Curlew <i>Numenius arquata</i>	Red (Breeding & Wintering)
Redshank <i>Tringa totanus</i>	Red (Breeding & Wintering)
Turnstone <i>Arenaria interpres</i>	Amber (Wintering)
Black-headed Gull <i>Larus ridibundus</i>	Amber (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)

This SPA 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 from 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 available¹.

¹ <https://c0amf055.caspio.com/dp/f4db30005dbe20614b404564be88>

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
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)

South Dublin Bay and Tolka Estuary SPA
Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]
Oystercatcher (<i>Haematopus ostralegus</i>) [A130]
Ringed Plover (<i>Charadrius hiaticula</i>) [A137]
Grey Plover (<i>Pluvialis squatarola</i>) [A140]
Knot (<i>Calidris canutus</i>) [A143]

Sanderling (<i>Calidris alba</i>) [A144]
Dunlin (<i>Calidris alpina</i>) [A149]
Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]
Redshank (<i>Tringa totanus</i>) [A162]
Black-headed Gull (<i>Croicocephalus ridibundus</i>) [A179]
Roseate Tern (<i>Sterna dougallii</i>) [A192]
Common Tern (<i>Sterna hirundo</i>) [A193]
Arctic Tern (<i>Sterna paradisaea</i>) [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**

This SAC is concentrated on the intertidal area of Sandymount Strand (NPWS, 2015d). 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. The overall status of the habitat is inadequate and declining due to pollution from agriculture, forestry, wastewater sources and marine aquaculture.
- **Salicornia mudflats (1310)**: This is a pioneer saltmarsh community and so is associated with intertidal areas. It is dependant 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 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 mudflats in this SAC (NPWS, 2013c) 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.

For other qualifying interests, only generic conservation objectives are available.

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)

South Dublin Bay and Tolka Estuary SPA
Roseate Tern (<i>Sterna dougallii</i>) [A192]
Common Tern (<i>Sterna hirundo</i>) [A193]
Arctic Tern (<i>Sterna paradisaea</i>) [A194]
Little Tern (<i>Sterna albifrons</i>) [A195]
Common Scoter (<i>Melanitta nigra</i>) [A065]
Red-throated Diver (<i>Gavia stellata</i>) [A001]

Great Northern Diver (<i>Gavia immer</i>) [A003]
Fulmar (<i>Fulmarus glacialis</i>) [A009]
Manx Shearwater (<i>Puffinus puffinus</i>) [A013]
Shag (<i>Phalacrocorax aristotelis</i>) [A018]
Cormorant (<i>Phalacrocorax carbo</i>) [A017]
Little Gull (<i>Larus minutus</i>) [A177]
Kittiwake (<i>Rissa tridactyla</i>) [A188]
Black-headed Gull (<i>Croicocephalus ridibundus</i>) [A179]
Common Gull (<i>Larus canus</i>) [A182]
Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183]
Herring Gull (<i>Larus argentatus</i>) [A184]
Great Black-backed Gull (<i>Larus marinus</i>) [A187]
Puffin (<i>Fratercula arctica</i>) [A204]
Razorbill (<i>Alca torda</i>) [A200]
Guillemot (<i>Uria aalge</i>) [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.

Data collected to carry out the assessment

Habitats on the site are not associated with any species or habitat which is associated with qualifying interests of Natura 2000 sites.

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 was originally 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. A third plan is due for publication in 2024.

The development site is not located directly adjacent to any surface water course while the Royal Canal can be found directly to the south. This is an artificial water body and is assessed as having 'good ecological potential', although the Grand Canal Dock is assessed as 'moderate'. Where the Canal joins the Liffey, the Lower Estuary is assessed as 'good'.

The lower Liffey Estuary (water body code: IE_EA_090_0300) has been assessed by the Environmental Protection Agency (EPA) as 'moderate status' for the 2016-2021 reporting period (the most recent). The coastal water beyond the estuary (Dublin Bay, water body code: IE_EA_090_0000) is assessed as 'good status'. The Tolka Estuary (water body code: IE_EA_090_0200) is 'poor status' and so is unsatisfactory (from www.epa.ie).

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 site is composed entirely of artificial surfaces within a heavily built-up area of Dublin city. It is weakly connected to a number of Natura 2000 sites via surface water run-off.

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). Of relevance to this study it is noted that although declines in these species cannot always be attributed to clear causes, there is no evidence that water quality issues have been a factor.

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 development site is approximately 3.5km from the boundary of the South Dublin Bay and River Tolka estuary SPA (the nearest Natura 2000 site) as the crow flies but following the path of the Grand Canal and the River Liffey this distance is over 8km. Because of this significant distance separating the two areas there is no pathway for loss or disturbance of habitats in 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.

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

Habitat disturbance

This development cannot increase disturbance effects to birds in Dublin Bay given its distance from these Natura 2000 sites. There are no sources of light or noise over and above that which is already experienced in this built-up, urbanised location.

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

Ex-situ impacts

Habitats on the development site are not suitable for regularly occurring populations of wetland or wading birds which may be features of interest of the South Dublin Bay and River Tolka Estuary SPA. No ex-situ impacts can occur.

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

Hydrological pathways

There is a pathway from the development site to Dublin Bay via the surface water run-off. There is no source of wastewater.

There can be no negative effect arising to surface water quality or quantity as there will be no change to the area of hard surfacing.

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

Pollution during the construction phase

The construction phase will involve works that can result in sediment or toxic substances such as concrete, oils, fuels etc. entering water courses. However there is no direct pathway to any SAC or SPA, or other sensitive habitats, from this source.

The Grand Canal is not a water course and has very low/no flow. Therefore there is minimal capacity for the canal to transport pollutants to the River Liffey. The risk of reaching Natura 2000 sites is consequently effectively zero.

Due to the scale of this project and its distance to Natura 2000 sites, no effects to Natura 2000 sites are likely to arise from this source.

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

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

Implementation of the WFD will ensure that improvements to water quality in Dublin Bay and the River Liffey are maintained or enhanced where relevant.

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 the proposed development will result in no negative effects to the quality and quantity of water leaving the site.

In March 2005 the Greater Dublin 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 the GDDS although this is not mitigation in an AA context as the rain garden is not intended to reduce or avoid any effect to a Natura 2000 site.

There are no plans or projects which could act in combination with the proposed development to result in significant effects to Natura 2000 sites.

Conclusion and Finding of No Significant Effects

Mitigation in an AA context is given as any measure which is introduced in order to avoid or reduce an impact to a Natura 2000 site. In this case no mitigation measures are suggested during either the construction or operation phases.

This project has been screened for AA under the appropriate methodology. It has found that significant effects are not likely to arise, either individually or in combination with other plans or projects to the Natura 2000 network. This conclusion is based on best scientific knowledge.

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