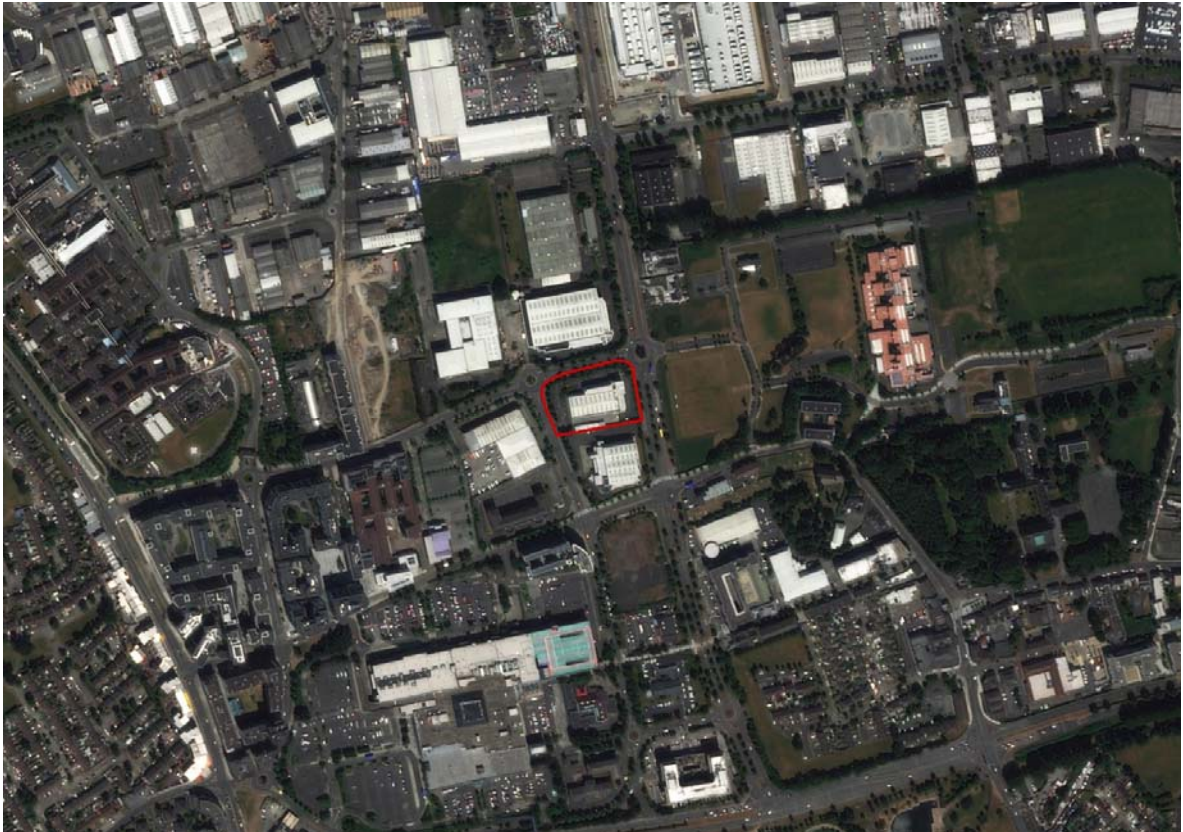


Natura Impact Statement – Information for a Stage 2 (Natura Impact Statement) AA for the proposed SHD planning application for a residential development at the site of The Arboury (former ABB site) on Belgard Road, Tallaght, Dublin 24.



**10<sup>TH</sup> May 2022**

**Prepared by:** Bryan Deegan (MCIEEM) of Altemar Ltd.

**On behalf of:** Landmarque Belgard Development Company.

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**Document Control Sheet**

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| Project | Natura Impact Statement for the proposed SHD planning application for a residential development at the site of The Arboury (former ABB site) on Belgard Road, Tallaght, Dublin 24 |
| Report  | Natura Impact Statement   |
| Date    | 10 <sup>th</sup> May 2022   |

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## Introduction

The following Natura Impact Screening (NIS) has been prepared by **Altamar Ltd.** at the request of Landmarque Belgard Development Company. The proposed development involves the demolition of all existing structures on site and the construction of a mixed-use residential development set out in 3 No. blocks including a podium over a basement, ranging in height from 2 to 13 storeys.

Natura Impact Statement examines whether the plan or project, either alone, or in combination with other plans and projects, in the view of best scientific knowledge and in view of the sites' conservation objectives, will adversely affect the integrity of the European sites.

Acting on a strictly precautionary basis, an NIS is required for South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA due to the indirect hydrological pathway from the proposed development to Dublin Bay, via the surface water network which discharges to the Jobstown Stream/River Dodder. In the absence of mitigation measures there is potential for significant effects on the features of interest of these designated European sites, via the surface water run off network.

### Altamar Ltd.

Since its inception in 2001, Altamar has been delivering ecological and environmental services to a broad range of clients. Operational areas include: residential; infrastructural; renewable; oil & gas; private industry; Local Authorities; EC projects; and, State/semi-State Departments. Bryan Deegan, the managing director of Altamar, is an Environmental Scientist and Marine Biologist with 27 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. He is currently contracted to Inland Fisheries Ireland as the sole "External Expert" to environmentally assess internal and external projects. He is also chair of an internal IFI working group on environmental assessment. Bryan Deegan (MCIEEM) holds a MSc in Environmental Science, BSc (Hons.) in Applied Marine Biology, NCEA National Diploma in Applied Aquatic Science and a NCEA National Certificate in Science (Aquaculture). Bryan Deegan carried out all elements of this Appropriate Assessment Screening.

## Stage 2: Natura Impact Statement

A Natura Impact Statement (NIS) is prepared for the purpose of allowing the competent authority to carry out and complete Stage 2 of the Appropriate Assessment process. In the case of the proposed residential development at Belgard Road, Tallaght, Dublin 24, acting on a strictly precautionary basis, an NIS is required in respect of the effects of the project on the South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA (due to the potential for downstream impacts during construction and operation via the surface water discharge network), because it cannot be excluded on the basis of best objective scientific information, in the absence of mitigation measures, following screening that the project, individually and/or in combination with other plans or projects, will have a significant effect on South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA.

A Stage 2 Appropriate Assessment is not required for the effects of the project on all other listed Natura sites within, and sites beyond, 15km because, it can be excluded, on the basis of the best objective scientific information following screening, that the project, individually and/or in combination with other plans or projects, will not have a significant effect on those listed sites.

The NIS evaluates the potential for direct, indirect effects, alone or in combination with other plans and projects having taken into account the use of mitigation measures. The NIS is informed by the accompanying EclA and Outline CEMP including the proposed mitigation measures that are outlined to reduce the potential effects of the proposed project on species/habitats of conservation importance, the surrounding environment and to ensure that there will be no adverse effects on the integrity of European (Natura 2000) sites.

## Management of the Site

The plan or project is not directly connected with, or necessary to the management of European sites.

## Description of the Proposed Project

The site of c.0.898 ha is located at the former ABB Site, Belgard Road, Tallaght, Dublin 24, D24 KD78. The site is bound by Belgard Road (R113) to the east, Belgard Square North to the North and Belgard Square East to the west and Clarity House to the south.

The proposed development will consist of:

1. Demolition of all existing structures on site (with a combined gross floor area of c. 3625 sqm)
2. The construction of a mixed-use residential development set out in 3 No. blocks including a podium over a basement, ranging in height from 2 to 13 storeys (with core access above to roof terrace), comprising:
  - 334 no. residential units of which 118 No. will be Build to Rent (BTR) residential units, with associated amenities and facilities across the development,
  - 4 No. retail/café/restaurant units and 3 no. commercial spaces associated with the 3 no. live-work units (723 sqm combined),
  - Childcare facility (144 sq.m.),
  - 670 No. bicycle parking spaces including 186 visitor spaces; 117 car parking spaces (including 6 disabled spaces) are provided at ground floor and basement level.
  - The overall development has a Gross Floor Area of 29,784 sq.m.
  - Two (2) podium residential courtyards and three (3) public accessible pocket parks, two (2) to the North & one (1) to the South.
  - Linear Park (as a provision of the Tallaght Town Centre LAP) providing safe public pedestrian and cycling access between Belgard Rd and Belgard Square East
3. Of the total 334 residential units proposed, unit types comprise:

### *Block A (Build-to-Rent)*

- 91 no. 1 bed units
- 1 no. 2 bed 3 person units
- 26 no. 2 bed 4 person units

### *Blocks B & C*

- 2 no. live-work studio units
- 102 no. 1-bed units
- 12 no. 2-bed 3 person units
- 88 no. 2-bed 4 person units including 5 no. duplex units
- 1 no. 2-bed 4 person live-work unit
- 11 no. 3-bed units

4. All associated works, plant, services, utilities, PV panels and site hoarding during construction

The proposed site outline and site layout plan is seen in Figures 1-5.

## Landscape of the Proposed Project

A Landscape Design Statement was composed by Cameo & Partners. In relation to the landscape design and plan for the proposed project, the report states that:

*'The emerging landscape positively responds to the Site's location through the creation of a series of connected public and raised amenity pocket parks and courtyards, and the strengthening of wider vistas to the Wicklow mountains to the south and into the permitted.*

*It strengthens green infrastructure through the introduction of the new green lane and the strong north south linkages.*

*It provides improved access for the local and emerging community -provides defensible space between the communal courtyards and the adjacent private frontages.*

*It provides spaces for new planting tube accommodated and to provide strong tree planting to the street frontage.'*

Furthermore, the report states that:

*'As part of the communal amenity space provision, there are three proposed designated terraces for the residents Some of the rooftops will be designated to biodiversity enhancements and as part of the SUD's strategy and PV provision.*

*As part of all the amenity terrace design, screen planting will be introduced to help alleviate the wind mitigation at this height. Typical species will be Pennisetum alopecuroides. 'Hameln', Fagus sylvatica hedge, Dryopteris wallichiana, Stipa tennussima and Hakonechloa macra.'*

The report also states that: *'A variety of trees have been selected to enhance the characteristics of the scheme. The following page illustrate these in more detail with key species. A total of 86 no. large multi-stem and large shrubs are proposed across the development overall.'*

In relation to the biodiversity enhancement proposed by the Landscape Design Statement, the report states that: *'The scheme presents numerous opportunities to deliver ecological enhancements for the benefit of the new residents and local biodiversity. Some of these are:*

- *Rain garden*
- *Green roofs*
- *Native Planting*
- *Habitat creation for Wildlife*

*Other enhancements that may also be adopted to maximise the opportunities for the inclusion of biodiversity are listed below. These are aimed at meeting local biodiversity targets and will be considered upon guidance from the Ecology Officer.*

#### **BAT BOXES**

*The inclusion of bat boxes can help provide roosts for a variety of species. These boxes can be fabricated from a range of materials and positioned against building facades, fences and amongst tree planting. Coordination with an ecologist will be required.*

#### **INSECT HOTELS**

*Insect hotels may be positioned in a couple of locations across the scheme providing the perfect habitat for invertebrates such as bees and butterflies. The inclusion of these types of habitat will help cross pollination of the planting, help sustain other wildlife and provide an interesting educational tool too. The design, scale and location to be developed in collaboration with an ecologist to maximise the benefits associated with this habitat type.*

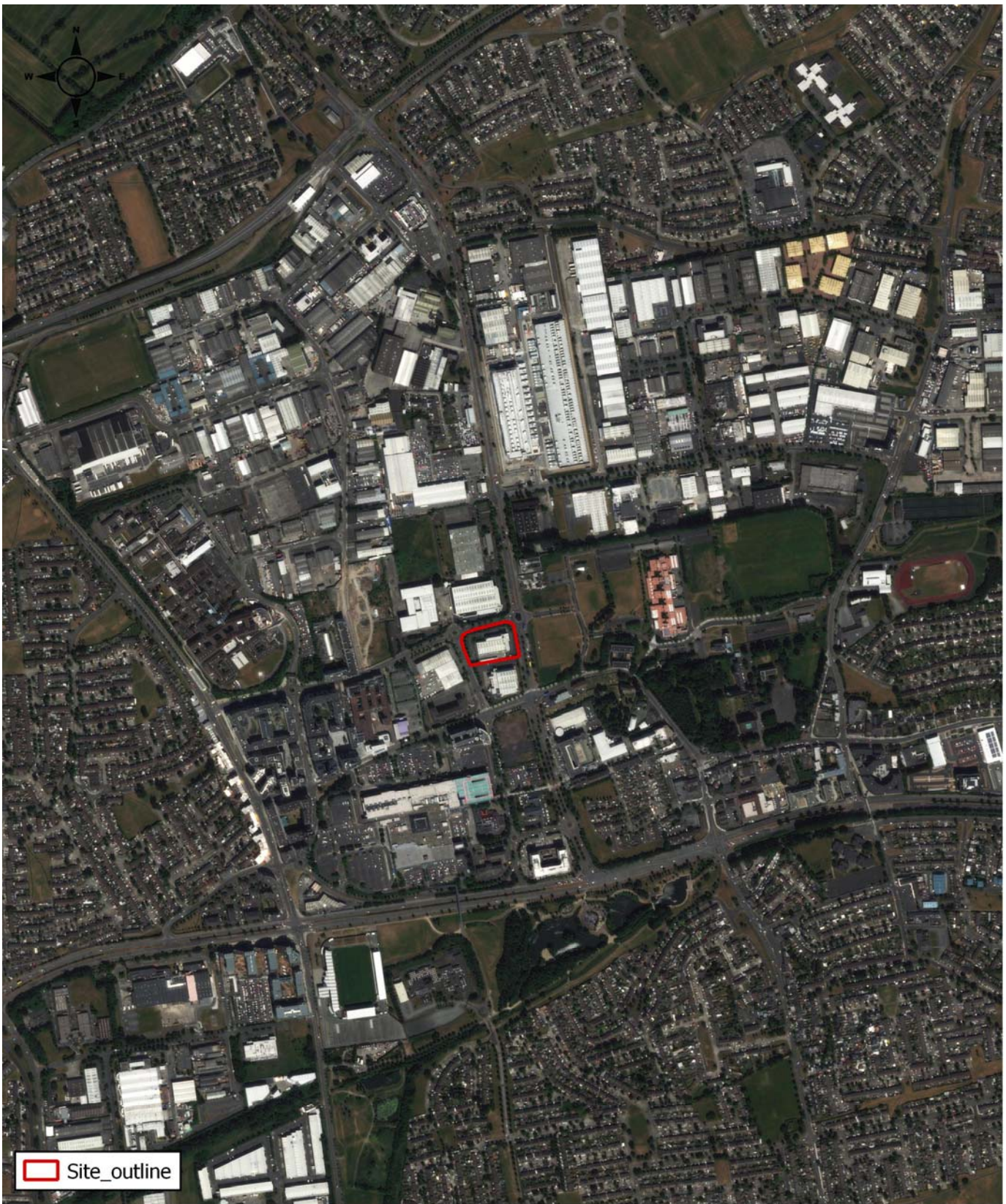
#### **BIRD BOXES**

*Bird boxes provide a low tech and effective way to encourage wildlife into the scheme. Positioned on buildings and within trees these simple habitats provide visual interest and can echo the architectural styles seen throughout the development. Here it is suggested that these are incorporated into language of the play area on totems.'*

The proposed landscape general arrangements plan for the Ground Floor is seen in Figure 6.

### [Outline Construction and Environmental Management Plan](#)

CS Consulting has been appointed to prepare this Outline Construction Environmental Management Plan (Outline CEMP) and the OCEMP accompanies this submission. This Outline CEMP was reviewed, and mitigation included within the NIS where necessary. The Outline CEMP sets out the procedures, standards, work practices and management responsibilities to address potential environmental effects that may arise from the Proposed Development. The Outline CEMP outlines the approach that will be adopted to environmental management throughout the development works at the site, with the primary aim of reducing any adverse effects from construction on the environment.



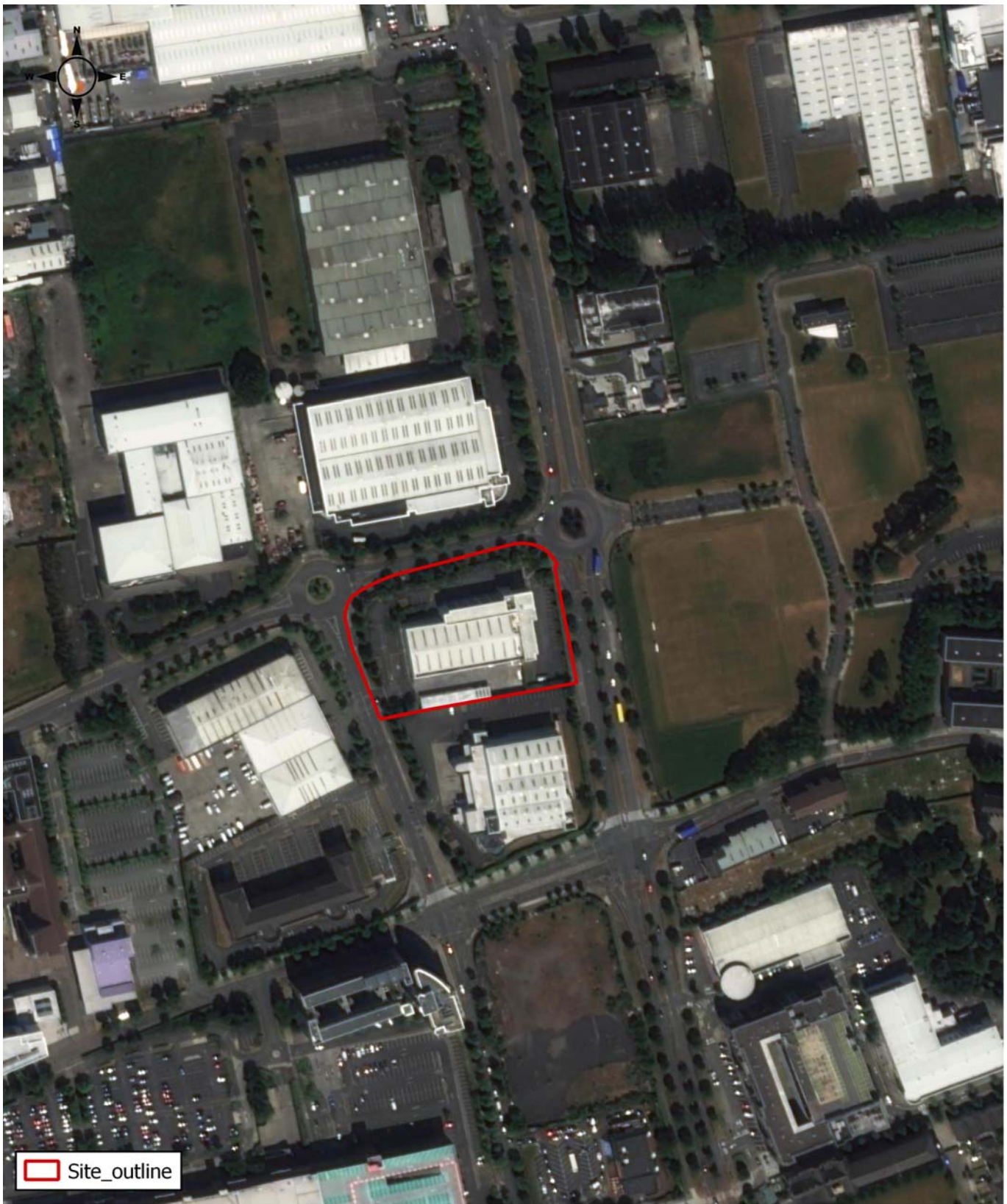
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Project: Belgard Road  
 Location: Talaght, Dublin 24, Co. Dublin  
 Date: 20th February 2022  
 Drawn By: Bryan Deegan (Altamar)

**ALTEMAR**  
 Marine & Environmental Consultancy



Figure 1. Site location map



0 0.09 0.18 0.27 km

Project: Belgard Road  
 Location: Talaght, Dublin 24, Co. Dublin  
 Date: 20th February 2022  
 Drawn By: Bryan Deegan (Altamar)

**ALTEMAR**  
 Marine & Environmental Consultancy



Figure 2. Proposed site outline





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**LEGEND**

- 1 Bed 2 People
- 2 Bed 3 People
- 2 Bed 4 People
- 3 Bed 5 People
- 2 Bed Duplex
- Studio - Work Unit
- 2 Bed - Work Unit
- Commercial
- Amenity
- Bike parking
- Car parking
- Bin storage
- District Heating Plant Room
- Incoming Telco's Room
- Service/Riser
- Circulation

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Project Title: SHD Application  
 Client: Landmarque Property Group Ltd  
 Project: Belgard Rd, Tallaght  
 Drawing Title: PLAN - LEVEL 00  
 Drawn: AB, Checked: SOD, Scale: As indicated, Date: 10/09/20  
 Project No: 19-150, Drawing No: 2100

Drawing Code: PE-19150-CWO-ZZ-00-ORA-2100  
 Code Area: P022  
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00 - Ground Floor  
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Figure 3. Site layout plan (Level 0)



Figure 4. Site layout plan (Basement Level)

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Project Stage  
**SHD Application**

Client  
**Landmarque Property Group Ltd**

Project  
**Belgard Rd, Tallaght**

Drawing Title  
**PLAN - ROOF**

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Project No  
**19-150**

Drawing No  
**2113**

Drawing Name  
**PE19150-CWO-ZZ-13-DRA-2113**

CDE Area  
 Subcategory Code  
 BIM Revision  
**P014**

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Figure 5. Site layout plan (Roof Level)

13 - Level 13  
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Figure 6. Landscape General Arrangements Plan (Ground Floor)

## Drainage

An Engineering Services Report was composed by CS Consulting Group. The report assesses the proposed development in the context of the existing and proposed foul and surface water drainage systems.

### **Foul Water Drainage**

In relation to the existing foul water drainage, the report states that: ‘

*Further to a review of the Irish Water drainage records for the area suggests that there is an existing 225mm diameter gravity foul sewer traversing the Belgard Square Road, flowing down the Belgard Square East Road (towards the N81). See Appendix A for Irish Water drainage records. The proposed development shall be serviced by a new drainage system with separate sewers and manholes for both foul and storm water within the sites boundary. The proposed foul network has been designed in accordance with Irish Water Codes of Practice for Waste Water, the Building Regulations & the Regional Code of Practice for Drainage Works, Version 6.’*

In relation to the proposed foul water drainage, the report states that: ‘*All foul effluent generated from the proposed development shall be collected in 150mm diameter pipe, provision for a pumping station should be made subject to a survey of the existing levels to ensure a new connection to the existing 225mm diameter foul sewer running adjacent to the Belgard Square East Road can be made.*

*The drainage network for the development shall be in accordance with Part H of the Building Regulations and to the requirements and specifications of Irish Water.*

*A Pre-Connection Enquiry for 389 Residential Units and 1,500m<sup>2</sup> of Retail Units (over and above what is proposed by the development) was submitted to Irish Water on the 24/08/2020 for a 150mm diameter water connection and the Client has received a response which requires further discussion with Irish Water prior to lodgment of the Stage 3 SHD application documentation. It is to be noted that these figures applied as part of the pre-connection enquiry are more than the 334 units now currently proposed. The confirmation of feasibility letter was issued by Irish Water after an extensive period of modelling on the capacity of their network in the area .....’*

The foul water discharge from the site will then be treated at Ringsend Wastewater Treatment Plant (WwTP).

### **Surface Water Drainage**

In relation to the existing surface water drainage, the report states that: ‘*Following receipt of the drainage records (see Appendix A) there is an existing 225mm stormwater line running along the eastern boundary of the development site on Belgard Road. There is also a stormwater line running along the northern and western boundaries of the site, the diameter of which is unknown.*

In relation to the proposed surface water drainage, the report states that: ‘*In accordance with the requirements of SDCC Drainage Division, all new developments are to incorporate the principles of Sustainable Urban Drainage Systems, (SuDS). The SuDS principles require a two-fold approach to address storm water management on new developments. The first aspect is to reduce any post development run-off to predevelopment discharge rates. The development is to retain storm water volumes predicted to be experienced during extreme rainfall events. This is defined as the volume of storm water generated during a 1 in 100-year storm event increased for predicted climate change factors. To ensure an accurate calculation of the required attenuation for the site Met Eireann was contacted to provide:*

*a) The SAAR (Standard Annual Average Rainfall) for the area: 825mm*

*b) The sliding duration table for the site indicating the 1:100-year rainwater intensities to be used.*

*Based on the above criteria, the development shall require 1139 m<sup>3</sup>, this is based on effective permeable area of 0.813 has, soil type 2, and a SAAR of 825mm. The site area is 0.898ha. GSDSDS recommend maximum Qbar of 2l/s/ha (subject to a minimum of 2l/s for operation/maintenance reasons. Therefore, the total outflow is limited to 2l/s for the development. See calculations in*

*Appendix C The restricted flow from the development site shall then discharge to the existing 225mm stormwater network along the eastern boundary. The last public manhole and network to the existing boundary sewer is to be constructed in accordance with the Local Authority's requirements.*

*The second aspect is the policy of the Local Authority is to include Sustainable Urban Drainage Systems, SuDS, for all new applications, as such a range of SuDS devices are generally available but some not feasibility for smaller urban brownfield sites such as this such as below:*

- Green/Blue roofs – Green roofs are provided to all roof surfaces as highlighted on C+WOB Architects roof drawing (see figure below)*
- Swales – due to the urban brownfield nature of the site, swales are not possible*
- Filter Drains/Channel rills – due to the urban brownfield nature of the site, swales are not possible*
- Infiltration systems – based on recent experience in the area, it is known that the ground is not conducive to surface water disposal via infiltration*
- Rain Gardens – numerous landscaping soft features are proposed throughout the development at ground level and terraces; refer to CAMEO Landscaping layout drawings*
- Permeable Paving/Asphalt – The full site coverage of the podium structure, coupled with other soft landscaping areas makes permeable paving not possible*
- Tree pits – numerous landscaping soft features are proposed throughout the development at ground level and terraces; refer to CAMEO Landscaping layout drawings*
- Rainwater harvesting – rainwater harvesting is not proposed for the development.'*
  - The proposed drainage layout is demonstrated in Figure 7.*

#### Flood Risk Assessment

A Flood Risk Assessment was composed by CS Consulting Group. In conclusion, the report states that:

- The site is in Flood Zone C and therefore no justification test is required.*
- There is no river that runs through, or adjacent to the site.*
- A review of the Office of Public Works flood maps database shows no flooding on the applicant site, with the nearest flooding being TUD, Tallaght Campus, and south of the N81.*
- Predicted flood mapping for pluvial/tidal flood events shall not affect the subject lands.*
- The proposed development shall have a storm water attenuation system to address a 1 in 100 -year storm events, increased for predicted climate change values. This shall significantly reduce the volume of storm water leaving the site during storms events which in turn shall have the effect of reducing the pressure on the existing public drainage system.'*



Figure 7. Proposed drainage layout

## Identification of Relevant European sites (Natura 2000 sites)

The proposed works are not within a European site. The European sites within 15km are seen in Figures 8 & 9 and Table 2. The 15km distance has been used as a guide for assessment but any European sites beyond that which have the potential to be significantly affected have also been assessed. Watercourses and potential pathways to European sites are seen in Figures 10-14. The features of interest of European sites and the potential impact of the works on the features of interest, are seen in Tables 3 and 4. Following the precautionary principle screening of all European sites within 15km (Tables 3 and 4) is carried out. Due to dilution and mixing within the marine environment it is considered that there is no direct or indirect pathway to European sites beyond 15km.

The proposed development site is located in a built up, urban area. The closest watercourse to the development is the Jobstown Stream within the River Dodder catchment, which is located approximately 689 m south of the proposed development. Given the significant terrestrial buffer between the watercourses, it is not likely that any dust from the construction or operation of the development will enter the watercourses. However, surface water from the proposed development site shall discharge to the existing 225 mm stormwater network along the eastern boundary, before it is discharged to the Jobstown Stream which leads to the River Dodder. The River Dodder ultimately outfalls to the marine environment at Dublin Bay, which is hydrologically connected to the South Dublin Bay SAC, North Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA. There is an indirect pathway from the proposed development to these designated European sites. Foul water from the proposed development will be collected in the public foul water network. The foul water from the site will then be pumped to Ringsend WwTP where it will be treated and discharged to the Liffey Estuary Lower<sup>1</sup>. There is, therefore, also an indirect pathway for foul water from the proposed development to the designated European sites at Dublin Bay (South Dublin Bay SAC, North Dublin Bay SAC, North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA).

Table 2. Proximity to designated sites of conservation importance

| Code                                 | European Site                                | Distance | Direct Hydrological / Biodiversity Connection |
|--------------------------------------|--|----------|---|
| <b>Special Areas of Conservation</b> |  |          |   |
| IE0000210                            | South Dublin Bay SAC                         | 11.2 km  | <b>No</b>                                     |
| IE0000206                            | North Dublin Bay SAC                         | 14.6 km  | <b>No</b>                                     |
| IE0001209                            | Glenasmole Valley SAC                        | 3.6 km   | <b>No</b>                                     |
| IE0002122                            | Wicklow Mountains SAC                        | 5.8 km   | <b>No</b>                                     |
| IE0001398                            | Rye Water Valley/Carlton SAC                 | 11.3 km  | <b>No</b>                                     |
| IE0000725                            | Knocksink Wood SAC                           | 13.4 km  | <b>No</b>                                     |
| IE0000397                            | Red Bog, Kildare SAC                         | 14.9 km  | <b>No</b>                                     |
| <b>Special Protected Areas</b>       |  |          |   |
| IE0004024                            | South Dublin Bay and River Tolka Estuary SPA | 11.3 km  | <b>No</b>                                     |
| IE0004006                            | North Bull Island SPA                        | 14.6 km  | <b>No</b>                                     |
| IE0004040                            | Wicklow Mountains SPA                        | 7.3 km   | <b>No</b>                                     |
| IE0004063                            | Poulaphouca Reservoir SPA                    | 14.3 km  | <b>No</b>                                     |

Table 3. European Sites Screened In for Natura Impact Statement

<sup>1</sup> [090151b28066d5e3.pdf \(epa.ie\)](#)



| European Code                        | Name                 | Screened IN/OUT | Details/Reason   |
|--------------------------------------|----------------------|-----------------|--|
| <b>Special Areas of Conservation</b> |                      |                 |  |
| IE0000210                            | South Dublin Bay SAC | IN              | <p><b>Conservation Objectives</b><br/>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p><b>Features of Interest</b><br/>Mudflats and sandflats not covered by seawater at low tide [1140]<br/>Annual vegetation of drift lines [1210]<br/>Salicornia and other annuals colonising mud and sand [1310]<br/>Embryonic shifting dunes [2110]</p> <p><b>Potential Impact</b><br/>The proposed development site is located 11.2 km from the South Dublin Bay SAC (Figure 8).</p> <p>There is an indirect hydrological pathway from the site to this SAC via the public surface water network to the Jobstown Stream, River Dodder and the marine environment. Surface water from the site will discharge to the Jobstown Stream/River Dodder and ultimately the marine environment at Dublin Bay. In the absence of mitigation measures, it is considered significant effects on the conservation objectives of this SAC are likely.</p> <p>There is an indirect hydrological connection to this SAC via foul wastewater drainage. Foul water from the proposed development will be discharged via a new connection to the existing foul sewer running adjacent to the Belgard Square East Road. However, given the distance (11.2 km) via the indirect pathway and that the foul water will be treated under licence before being discharged to the Liffey Estuary at Ringsend, any silt laden run off, pollutants or dust would be diluted or dispersed and will not result in significant effects on this SAC.</p> <p><b>A Natura Impact Statement is required for this site.</b></p> |
| IE0000206                            | North Dublin Bay SAC | IN              | <p><b>Conservation Objectives</b><br/>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p><b>Features of Interest</b><br/>Mudflats and sandflats not covered by seawater at low tide [1140]<br/>Annual vegetation of drift lines [1210]<br/>Salicornia and other annuals colonising mud and sand [1310]<br/>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]<br/>Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]<br/>Embryonic shifting dunes [2110]<br/>Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]</p>  |

| European Code                  | Name   | Screened IN/OUT | Details/Reason   |
|--------------------------------|--|-----------------|--|
|                                |  |                 | <p>Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]<br/> Humid dune slacks [2190]<br/> <i>Petalophyllum ralfsii</i> (Petalwort) [1395]</p> <p><b>Potential Impact</b><br/> The proposed development is located 14.6 km from the North Dublin Bay SAC (Figure 8).</p> <p>There is an indirect hydrological pathway from the site to this SAC via the public surface water network to the Jobstown Stream/River Dodder. Surface water from the site will discharge to the Jobstown Stream/River Dodder and ultimately the marine environment at Dublin Bay. In the absence of mitigation measures, it is considered significant effects on the conservation objectives of this SAC are likely.</p> <p>There is an indirect hydrological connection to this SAC via foul wastewater drainage. Foul water from the proposed development will be discharged via a new connection to the existing foul sewer running adjacent to the Belgard Square East Road. However, given the distance (14.6 km) via the indirect pathway and that the foul water will be treated under licence before being discharged to the Liffey Estuary, any silt laden run off, pollutants or dust would be diluted or dispersed and will not result in significant effects on this SAC.</p> <p><b>A Natura Impact Statement is required for this site.</b></p> |
| <b>Special Protected Areas</b> |  |                 |  |
| IE0004024                      | South Dublin Bay and River Tolka Estuary SPA | <b>IN</b>       | <p><b>Conservation Objectives</b><br/> The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p><b>Features of Interest</b><br/> Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]<br/> Oystercatcher (<i>Haematopus ostralegus</i>) [A130]<br/> Ringed Plover (<i>Charadrius hiaticula</i>) [A137]<br/> Grey Plover (<i>Pluvialis squatarola</i>) [A141]<br/> Knot (<i>Calidris canutus</i>) [A143]<br/> Sanderling (<i>Calidris alba</i>) [A144]<br/> Dunlin (<i>Calidris alpina</i>) [A149]<br/> Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]<br/> Redshank (<i>Tringa totanus</i>) [A162]<br/> Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]<br/> Roseate Tern (<i>Sterna dougallii</i>) [A192]<br/> Common Tern (<i>Sterna hirundo</i>) [A193]<br/> Arctic Tern (<i>Sterna paradisaea</i>) [A194]<br/> Wetland and Waterbirds [A999]</p> <p><b>Potential Impact</b><br/> The proposed development is located 11.3 km from the South Dublin Bay and River Tolka Estuary SPA (Figure 9).</p>   |

| European Code | Name                  | Screened IN/OUT | Details/Reason   |
|---------------|-----------------------|-----------------|--|
|               |                       |                 | <p>Noise disturbances from the development would be localised to the immediate environs of the site and would not have a significant impact on the features of interest of this site. As seen in Figure 2, the site consists of built land and would not be a habitat that would form an ex-situ site for the qualifying interests of this SPA.</p> <p>There is an indirect hydrological pathway from the proposed development to this SPA via the public surface water network. Surface water from the site will discharge to the Jobstown Stream/ River Dodder and ultimately the marine environment at Dublin Bay. In the absence of mitigation measures, it is considered significant effects on the conservation objectives of this SPA are likely.</p> <p>There is an indirect hydrological connection to this SAC via foul wastewater drainage. Foul water from the proposed development will be discharged via a new connection to the existing foul sewer running adjacent to the Belgard Square East Road. However, given the distance (11.3 km) via the indirect pathway and that the foul water will be treated under licence before being discharged to the Liffey Estuary, any silt laden run off, pollutants or dust would be diluted or dispersed and will not result in significant effects on this SPA.</p> <p><b>A Natura Impact Statement is required for this site.</b></p> |
| IE0004006     | North Bull Island SPA | <b>IN</b>       | <p><b>Conservation Objectives</b></p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p><b>Features of Interest</b></p> <p>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]<br/> Shelduck (<i>Tadorna tadorna</i>) [A048]<br/> Teal (<i>Anas crecca</i>) [A052]<br/> Pintail (<i>Anas acuta</i>) [A054]<br/> Shoveler (<i>Anas clypeata</i>) [A056]<br/> Oystercatcher (<i>Haematopus ostralegus</i>) [A130]<br/> Golden Plover (<i>Pluvialis apricaria</i>) [A140]<br/> Grey Plover (<i>Pluvialis squatarola</i>) [A141]<br/> Knot (<i>Calidris canutus</i>) [A143]<br/> Sanderling (<i>Calidris alba</i>) [A144]<br/> Dunlin (<i>Calidris alpina</i>) [A149]<br/> Black-tailed Godwit (<i>Limosa limosa</i>) [A156]<br/> Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]<br/> Curlew (<i>Numenius arquata</i>) [A160]<br/> Redshank (<i>Tringa totanus</i>) [A162]<br/> Turnstone (<i>Arenaria interpres</i>) [A169]<br/> Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]<br/> Wetland and Waterbirds [A999]</p> <p><b>Potential Impact</b></p>   |

| European Code | Name | Screened IN/OUT | Details/Reason   |
|---------------|------|-----------------|--|
|               |      |                 | <p>The proposed development is located 14.6 km from North Bull Island SPA (Figure 9).</p> <p>Noise disturbances from the development would be localised to the immediate environs of the site and would not have a significant impact on the features of interest of this site. The site consists of built land and would not be a habitat that would form an ex-situ site for the qualifying interests of this SPA</p> <p>There is an indirect hydrological pathway from the proposed development to this SPA via the public surface water network. Surface water from the site will discharge to the Jobstown Stream/ River Dodder and ultimately the marine environment at Dublin Bay. . In the absence of mitigation measures, it is considered significant effects on the conservation objectives of this SPA are likely.</p> <p>There is an indirect hydrological connection to this SAC via foul wastewater drainage. Foul water from the proposed development will be discharged via a new connection to the existing foul sewer running adjacent to the Belgard Square East Road. However, given the distance (14.6 km) via the indirect pathway and that the foul water will be treated under licence before being discharged to the Liffey Estuary, any silt laden run off, pollutants or dust would be diluted or dispersed and will not result in significant effects on this SPA.</p> <p><b>A Natura Impact Statement is required for this site.</b></p> |

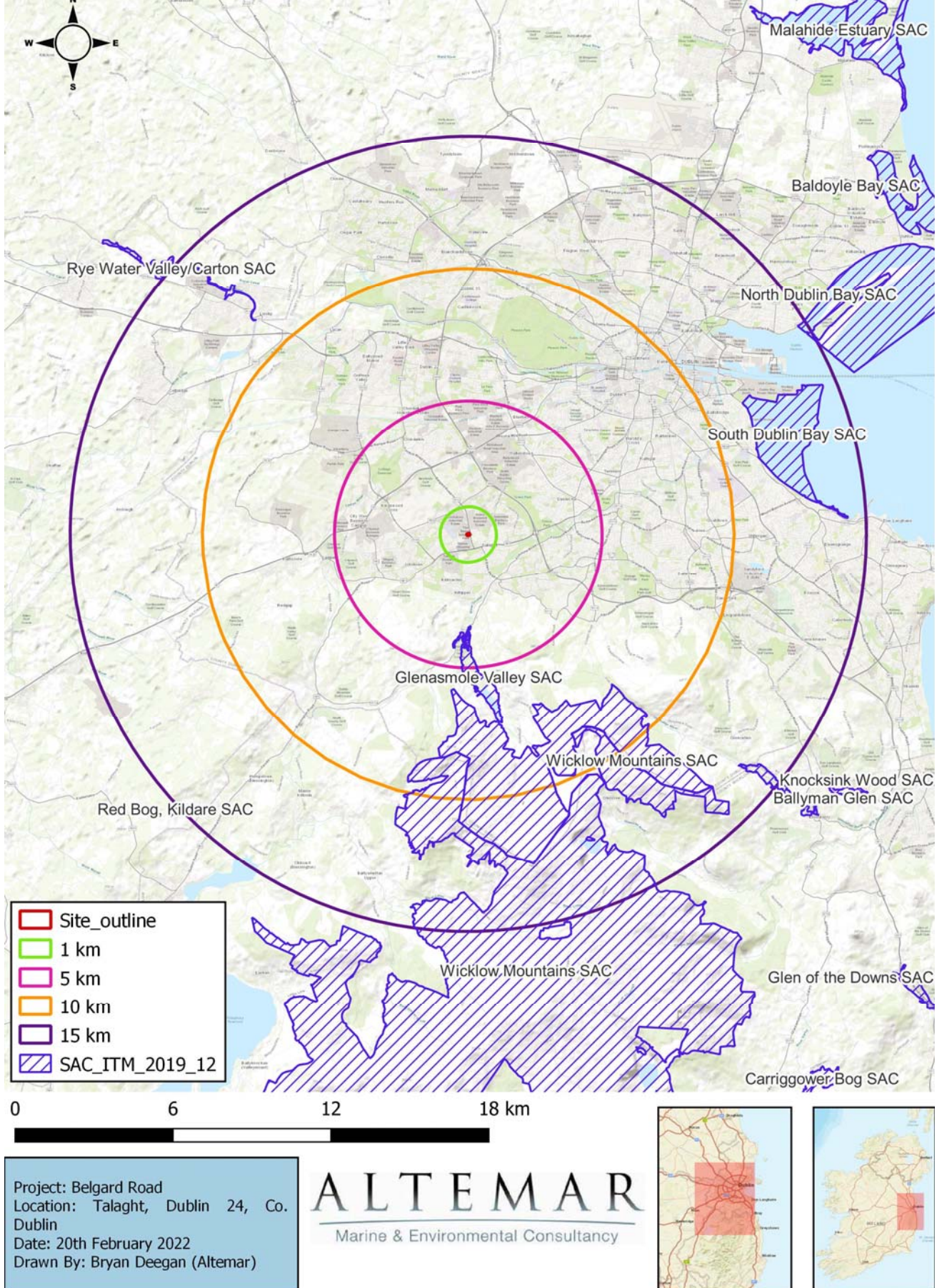


Figure 8. Special Areas of Conservation located within 15 km of the proposed development

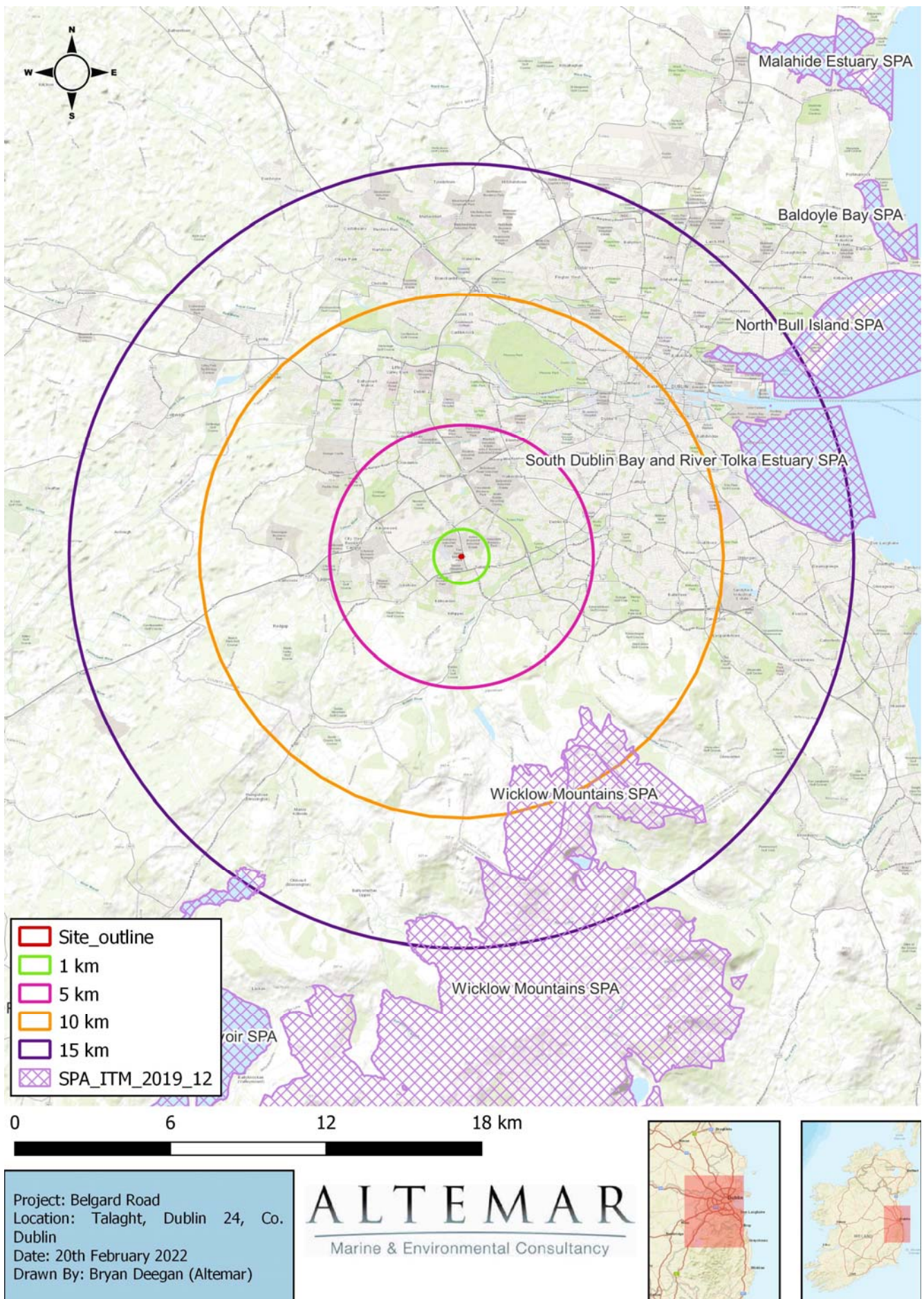


Figure 9. Special Protected Areas located within 15 km of the proposed development



Project: Belgard Road  
 Location: Talaght, Dublin 24, Co. Dublin  
 Date: 20th February 2022  
 Drawn By: Bryan Deegan (Altamar)



Figure 10. Watercourses bordering the site boundary

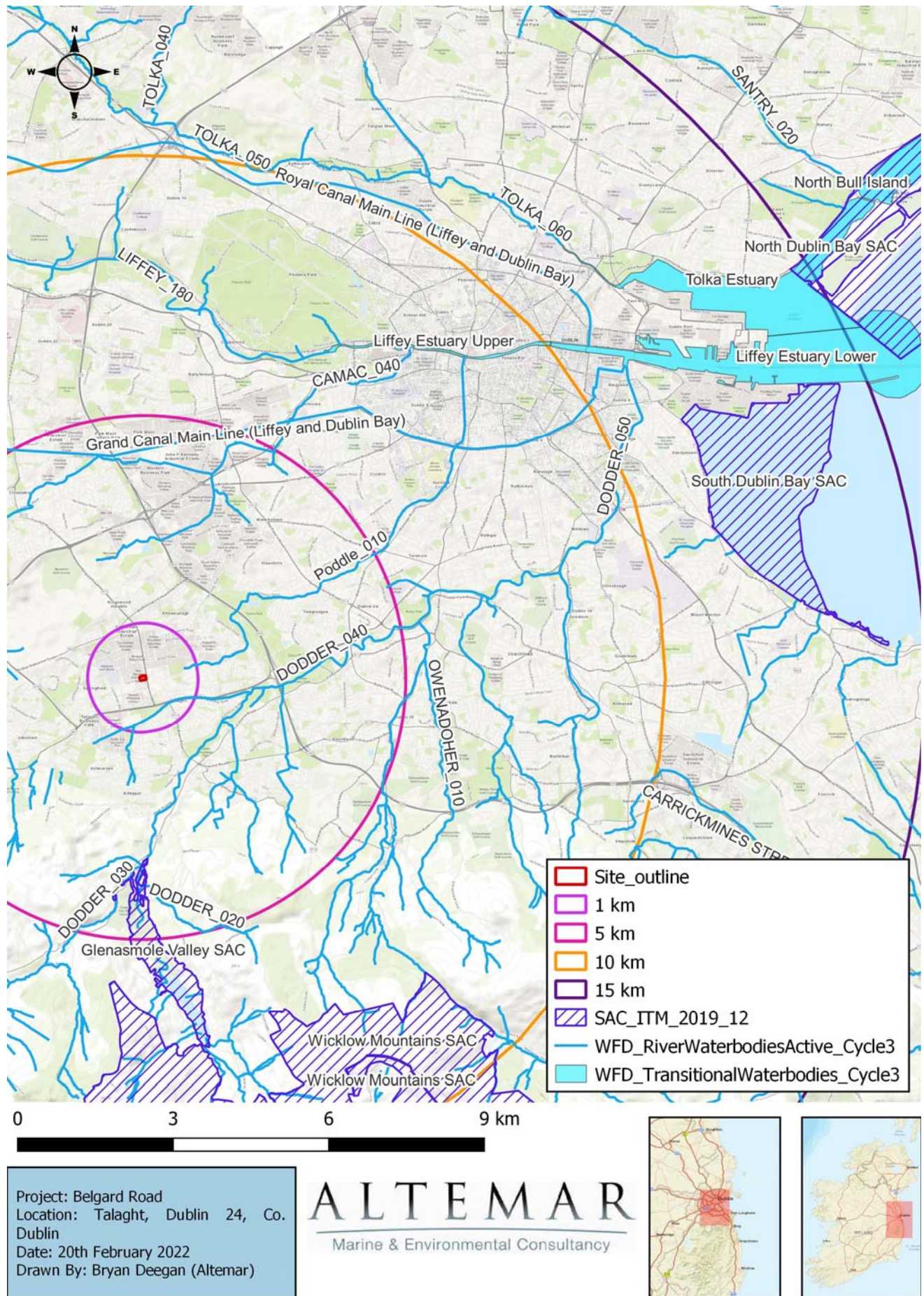
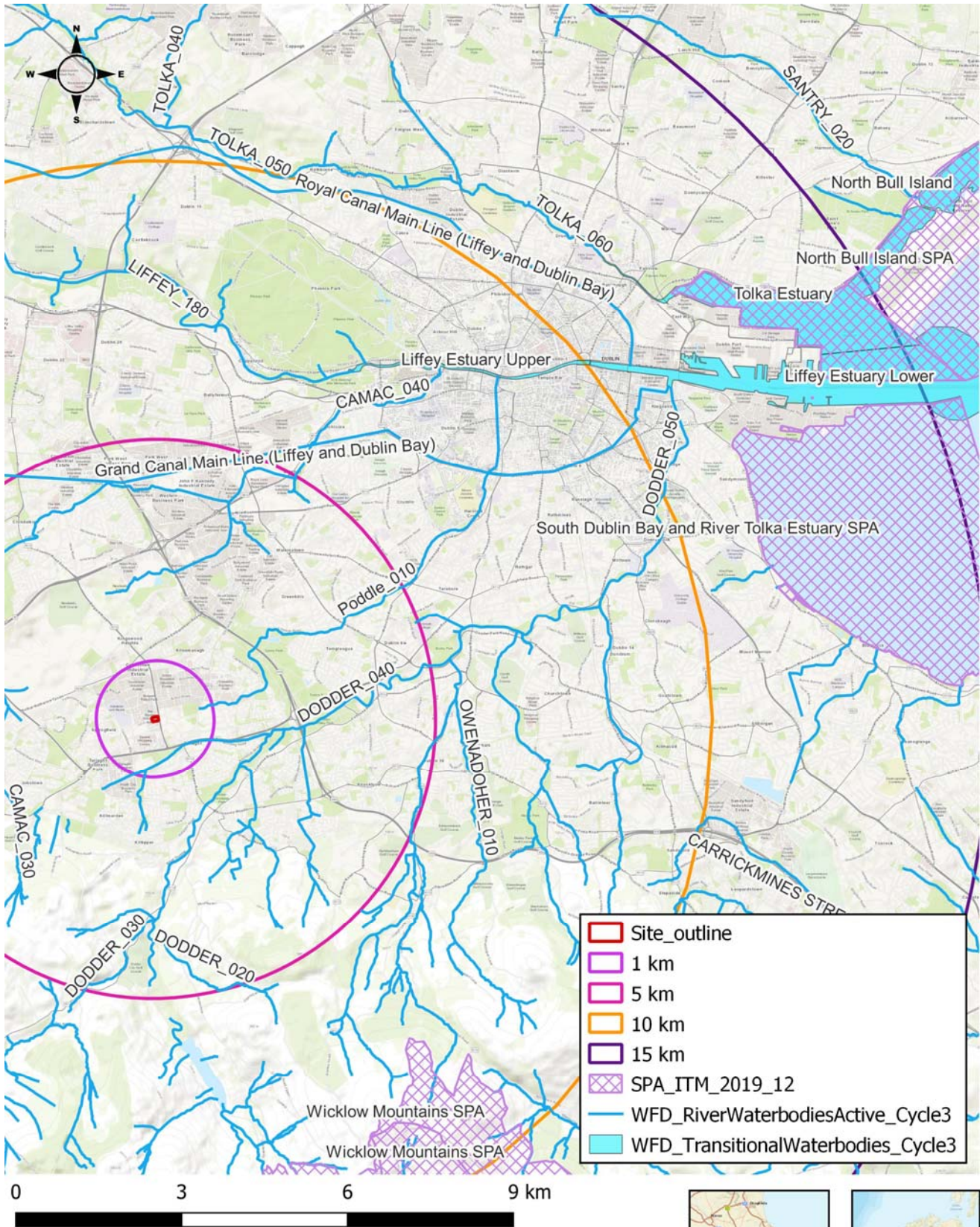


Figure 11. Watercourses and potential pathways to SACs via the River Dodder





Project: Belgard Road  
 Location: Talaght, Dublin 24, Co. Dublin  
 Date: 20th February 2022  
 Drawn By: Bryan Deegan (Altamar)

**ALTEMAR**  
 Marine & Environmental Consultancy

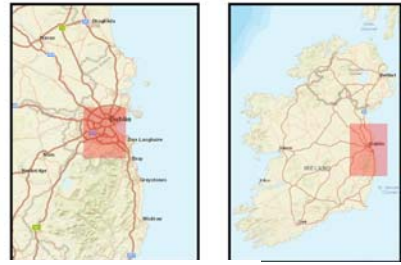


Figure 12. Watercourses and potential pathways to SPAs via the River Dodder

There are numerous development proposals located in the areas surrounding the subject site that have been granted permission. The following is a list of planning application were assessed:

*Table 5. In-combination effects evaluated*

| Application Number | Development Description  | Development Address  | Decision         | Grant Date |
|--------------------|--|--|------------------|------------|
| SD21A/0123         | Sliding steel entrance gate to the main entrance; partial demolition of a section of existing boundary wall; construction of new site entrance piers and the extension of the existing perimeter railings to meet the new piers; 2 new bicycle shelters and all associated site development works.   | Killakee House, Belgard Square, Tallaght, Dublin 24                                | GRANT PERMISSION | 2022-01-17 |
| SD21A/0104         | Footbridge from car park of university campus to Airton Close.   | TU Dublin, Tallaght & Airton Close, Tallaght, Dublin 24                            | GRANT PERMISSION | 2022-01-14 |
| SD21A/0174         | Change of use of part of existing unit from industrial use for use as a restaurant facility with sit-down facility, cafe and deli with take away produce (teas, coffees, sandwiches etc) over two floors and all associated site works.  | Unit 3, Airton Road, Tallaght, Dublin 24.  | GRANT PERMISSION | 2021-09-23 |
| SHD3ABP-309916-21  | Demolition of the existing industrial and commercial office buildings totalling c.4,628sqm; Construction of a Build-to-Rent Housing Development comprising 170 apartment units and crèche arranged in 2 blocks across 4-7 storeys over basement car park (total gross floor area c.13,880sq.m excluding basement)  | Glen Abbey Complex, Belgard Road, Cookstown Industrial Estate, Dublin 24, D24 W2XA | GRANT PERMISSION | 2021-09-21 |
| SD21A/0134         | Amendments to previously granted permission (SD20A/0017) comprising of alterations to façade; installation of roof lights and PV panels.   | Unit 2, The Square Industrial Complex, Belgard Square East, Tallaght, Dublin 24    | GRANT PERMISSION | 2021-07-19 |
| SD21A/0030         | Demolition of existing fire damaged commercial unit and site clearance including all associated site works.  | Unit 74, Cookstown Road, Cookstown Industrial Estate, Dublin 24                    | GRANT PERMISSION | 2021-04-12 |
| SD21A/0013         | Installation and operation of a natural gas combined heat and power system and the associated infrastructure.  | Land at Tallaght University Hospital, Tallaght, Dublin 24                          | GRANT PERMISSION | 2021-03-21 |
| SD21A/0014         | Construction of a new two storey extension adjacent to the existing Pharmacy Department located on the east side of the campus to provide a new Aseptic Pharmacy Unit incorporating laboratory areas; support rooms and first floor plantroom; external stairway; new exit door from the Pharmacy corridor to the adjacent service yard; new exit door from the delivery bay area to the hospital delivery yard and associated site and landscaping works.   | Tallaght University Hospital, Belgard Square North, Tallaght, Dublin 24            | GRANT PERMISSION | 2021-02-25 |
| SHD3ABP-308398-20  | (i) Demolition of the existing industrial buildings, (ii) construction of: (a) 252 'build-to-rent' apartments in a two to nine storey development. Each apartment has associated private open space in the form of a ground floor terrace or a balcony and has access to 613sq.m of internal communal amenity space (including a concierge and management facilities, communal gym, flexible meeting rooms, library/co-working space, lounge, cinema/multimedia room and external covered game area); 1792sq.m of external | Units 66 & 67 Fourth Avenue, Cookstown Industrial Estate, Tallaght, Dublin 24      | GRANT PERMISSION | 2021-01-28 |

| Application Number | Development Description   | Development Address  | Decision                       | Grant Date |
|--------------------|---|--|--------------------------------|------------|
|                    | communal amenity space at first and second floor levels; and a 65sq.m external covered communal amenity area at first floor level.  |  |                                |            |
| SD20A/0050         | Three storey apartment building containing six apartments with external terraces/private gardens (3 x two bed & 3 x three bed duplex) & one end of terrace two storey house (two bed), landscaping of site and play area, footpath, bin stores, eight car parking spaces, eighteen bicycle parking spaces and all associated site works.  | Colberts Fort, Belgard Road, Tallaght, Dublin 24.                                    | GRANT PERMISSION               | 2021-01-18 |
| SD20A/0289         | Alterations to existing external service area to the north eastern side of The Square Shopping Centre at the entrance to the existing service yard comprising of construction of an external plant area (c.135sq.m) enclosed by 2.4 metre high galvanised fencing to accommodate an Air Handling Unit (AHU) and a Chiller Unit ancillary to the shopping centre; new flat roof boiler room building (c.34sq.m gross floor area) within the proposed new enclosed plant enclosure; installation of a metal frame (2.4 metres wide x 1 metre high and located 2-3 metres above the ground supported by metal stilts) to facilitate the connection of the Air Handling Unit and Chiller within the plant area to the covered service yard area; replacement of mesh panels on existing wall on the western and norther side of the service yard with metal louvered panels; all associated site and development works. | The Square Shopping Centre, Tallaght, Dublin 24                                      | GRANT PERMISSION               | 2021-01-08 |
| SD20A/0201         | A telecommunications field technician apprenticeship training area, comprising of a compound, 35m by 25m enclosed by a 3m perimeter fence. The area will contain a number of street cabinets, underground access chambers, underground ducting, half height training poles and a storage unit.  | Technological University Dublin, Old Blessington Road, Tallaght, Dublin 24, D24 FKT9 | GRANT PERMISSION               | 2020-12-18 |
| SD20A/0148         | Retention for internal mezzanine storage area (132sq.m); single storey compressor room extension (12sq.m) to rear of existing building and single storey packaging shed extension (38sq.m) to side of existing building.  | Unit 30, Second Avenue, Cookstown Industrial Estate, Dublin 24                       | GRANT PERMISSION FOR RETENTION | 2020-08-16 |
| SD20A/0145         | Subdivision of the existing retail department store (Unit 116 - 5,396sq.m. - formerly Debenhams) to comprise 2 retail units - 116A (2,431sq.m) and 116B (2,270sq.m) and new service corridor (176sq.m) to the rear of the proposed unit 116B to provide access to the existing service yard; associated modifications including the removal of the existing mezzanine floor within Unit 116 (497sq.m); creation of new retail frontage within the internal mall and associated signage; revisions to existing retail Unit 117 (113sq.m) and 118 (102sq.m) to form a single amalgamated unit (169sq.m) and creation of additional mall floor space (47sq.m) arising from the unit reconfiguration; all associated site and development works including minor revisions to the layout of the existing service yard.   | Units 116, 117 and 118, The Square Shopping Centre, Tallaght, Dublin 24              | GRANT PERMISSION               | 2020-08-12 |
| SD20A/0088         | Replacement of a portion of the facade; removal of escalators and infill of voids at first floor (ex. mezzanine 93.5sq.m and second floor (ex. food courts 64sq.m); change of use of the mezzanine floor of the previously approved and constructed retail known as C4 to a Primary Care Centre (Class 8); change of use for ground floor, first floor and second floor of the previously approved and constructed retail unit known as Food Court, to a Primary Care Centre (Class 8).   | Russell Centre, Tallaght Cross West, Dublin 24                                       | GRANT PERMISSION               | 2020-07-16 |

| Application Number | Development Description  | Development Address                                  | Decision         | Grant Date |
|--------------------|--|--|------------------|------------|
| SD20A/0105         | Revisions to previously permitted internal modifications as approved under Ref. SD18A/0399 resulting in the reductions in the kiosk zone at Level 2 only by 196sq.m (from 1073sq.m to 877sq.m) to accommodate a new partially enclosed restaurant/café unit (196sq.m) and associated setting; the new restaurant and seating area will correspond with the footprint of the existing Units 260/262 and 263 and will contain associated facilities including a kitchen, front and rear counters, condiment unit, dining tables, chairs, booths and benches; associated signage and development works.   | The Square Shopping Centre, Tallaght, Dublin 24      | GRANT PERMISSION | 2020-07-16 |
| SD19A/0394         | Mixed use commercial extension (9,956sq.m gross floor space) to the southern side of The Square Shopping Centre and a new public plaza and all associated site and development works including new signage; Level 1 - no changes; Level 2 - removal of southern mall entrance lobby and construction of new extension to existing Level 2 mall to include 6 retail units (2,611sq.m), a food hall/market hall area for multiple restaurant/food and beverage type uses with associated seating areas (2,041sq.m), a restaurant/cafe unit (67sq.m) and associated ancillary accommodation and circulation (1,534sq.m) and plant rooms (176sq.m) and introduction of new internal service corridor; Level 2 extension is replacing surface parking spaces (140) to the south of the shopping centre and an existing parking area (34 spaces) to the east of the proposed extension is to be reconfigured; creation of Level 3 entrance and creation of new public plaza to replace roof car park (111 spaces) and the new outdoor public plaza (0.74ha) will be used for multi-purpose events, civic and recreational uses and retail and food and beverage concessions involving temporary moveable structures erected on a seasonal basis; the creation of the new Level 3 entrance involves replacement of existing retail unit at Level 3 (Unit 307A) with mall area to include flexible kiosk type retail concession areas; 2 buildings accommodating 9 restaurant/bar units (3,324sq.m) and ancillary accommodation (175sq.m) and associated outdoor seating areas in the new plaza on south facing terraces; Level 4 - ancillary accommodation and service areas (28sq.m) on roof of 2 restaurants buildings within provision for screened plant areas and solar panels; the proposed extension has a maximum building height of 18 metres above existing ground levels; the extension is to replace and supersede the Plot B development previously permitted under Reg. Ref. SD13A/0192 (Bod Ref. PL06S.243280) which included a gross floor space of 5,684sq.m; the permitted northern extension (Plot A) remains unchanged. Permission is sought to amend Condition 3(a) of the Reg. Ref. SD13A/0132 (Bord Ref. PL06S.243280) to facilitate the construction of the proposed southern extension prior to the permitted northern extension (Plot A) subject to a phasing programme to be agreed. | The Square Shopping Centre, Tallaght, Dublin 24      | GRANT PERMISSION | 2020-06-17 |
| SD20A/0010         | Change of use from office to medical/dentist use with revisions to front elevation.  | Unit 8, High Street, Tallaght, Dublin 24.            | GRANT PERMISSION | 2020-03-11 |
| SD19A/0397         | Change of use of existing open plan 997sq.m shell and core retail unit to the use as a spa/recreational facility to include swimming pool area; relaxation areas; treatment rooms; associated office/administration areas; changing facilities; internal dining/restaurant area; associated kitchen facilities; plant areas; associated ducting/extraction vents with  | Unit 11, Tallaght Retail Centre, Tallaght, Dublin 24 | GRANT PERMISSION | 2020-02-20 |

| Application Number | Development Description  | Development Address  | Decision         | Grant Date |
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|                    | associated elevational changes; connections to all services and site development works; new internal mezzanine floor to provide additional 602sq.m at new first floor level and on-street bicycle parking outside the building for 18 bicycles at the corner of Abberley Square and Abberley Square East.  |  |                  |            |
| SHD3ABP-305763-19  | Demolition of the existing industrial buildings on site (4,800sq.m) and the construction of 2 blocks comprising: 328 apartments (93 1-bed, 222 2-bed and 13 3-bed), ancillary residential support facilities and commercial floorspace measuring 31,147sq.m gross floor space above a single basement level measuring 5,861sq.m. Block A is a part-5 to part-7 storey (13,710sq.m) over basement block comprising 149 apartments with office space (222sq.m). Block B is a part-6 to part-9 storey (17,437sq.m) over basement block comprising 179 apartments, 2 double-height retail/commercial (Class 1/Class 2) units (354sq.m), a café/restaurant (313sq.m) , a creche (360sq.m), internal residents amenity area (644sq.m) at ground floor including reception (37.7sq.m), residents lounge (91.3sq.m), private dining area (52.6sq.m), co-working space (45.5sq.m), games room (47.3sq.m), gym (80sq.m) and communal lounge (220sq.m) at 6th floor level. The development also consists of the provision of a landscaped courtyard; public plaza at the corner of Airton and Belgard Road; pedestrian access from Airton Road to the Technological University campus; balconies; landscaped roof terrace at 6th floor level (7th Storey) of Block B (671sq.m); 184 car parking spaces at basement level including 14 club car spaces, 10 disabled parking spaces and 4 creche parking spaces; 727 basement and surface bicycle parking spaces; 4 motorbike parking spaces; bin storage; boundary treatments; green roofs; hard and soft landscaping; plant; lighting; Vodafone cabin sub-station; ESB sub-stations, switch rooms and generators; and all other associated site works above and below ground. | Site at the corner of Airton Road and Belgard Road, Tallaght, Dublin 24, D24 HD35      | GRANT PERMISSION | 2020-02-20 |
| SD19A/0390         | Change of use from 2 existing office units to 2 two bedroom student accommodation units located at first floor level including minor internal modification works and retaining the existing entrances off the main courtyard.  | 17/18, Tramway Court, Old Blessington Road, Tallaght, Dublin 24                        | GRANT PERMISSION | 2020-02-18 |
| SD19A/0367         | Demolition of existing commercial building (736sq.m) and construction of a single storey cafe/restaurant (79sq.m); single storey bicycle workshop building (32sq.m); improved public realm area to include seating; bicycle parking (60 spaces) and hard and soft landscaping and all associated site and development works.   | An Post Building, The Square Shopping Centre, Belgard Square East, Tallaght, Dublin 24 | GRANT PERMISSION | 2020-01-27 |
| SD19A/0299         | (a) Partial change of use at ground floor from 324sq.m light industrial warehouse use to office & laboratory; (b) construction of a new internal first floor level, containing 120sq.m. office space; (c) 7 new windows at first floor level on the front elevation (east facade); (d) removal of existing roller shutter on the front elevation (east facade) and replacement with new door & glazing panel & new signage on the front elevation (east facade); (e) 3 new windows at ground floor level at side elevation (south facade); (f) new door at ground floor level at side elevation (south facade); (g) roller shutter door at rear elevation (west facade); (h) construction of new 13.8sq.m. external enclosed covered storage to rear elevation (west facade); (i) new door on the rear elevation (west facade) and all associated site works.  | Unit 5, Airton Close, Airton Road, Tallaght, Dublin 24                                 | GRANT PERMISSION | 2019-11-18 |

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| SD19A/0085         | Demolition of a single storey modular building extension to the rear (north) of the existing facility building and the provision of a 26.68m x 7.43m x 3.51m high (gross floor area of 187sq.m) single storey modular building and associated works to the rear (north) of the light industrial facility.   | Broomhill Industrial Estate, Broomhill Road, Dublin 24                 | GRANT PERMISSION | 2019-08-26 |
| SD19A/0152         | (A) Construction of a 4 storey general teaching building (c.5,211sq.m) comprising teaching spaces, class kitchens and restaurant, lecture theatres, labs and computer rooms, breakout spaces and ancillary service area with roof level plant; (B) landscaping works including the provision of a kitchen garden, orchard and wildflower meadow with beehives; (C) 28 covered cycle parking spaces; (D) all associated site development, site services, landscaping and boundary treatment works.   | Tallaght Campus, Old Blessington Road, Tallaght, Dublin 24             | GRANT PERMISSION | 2019-06-27 |
| SD19A/0118         | Modifications to external facade facing Westpark including double height glazing; signage panel; relocation of entrance door and ATM and blocking up existing entrance door.  | 8, Old Bawn Road, Tallaght, Dublin 24                                  | GRANT PERMISSION | 2019-05-30 |
| SHD3ABP-303306-18  | Development of 438 apartment units consisting of 158 no. 1 beds, 230 no. 2 beds and 50 no. 3 beds (total apartment units include 8 no. live/work units with a total c. 509 sqm work areas at ground floor) and c. 732 sqm of tenant/resident service amenities all within blocks A1, A2, A3 and B1. Block B2 to comprise a 403 bedspace student accommodation scheme and associated student amenity and staff facilities (c.815 sqm); childcare facility (c.380 sq.m) and external playing area (c. 242sq.m); 6 retail/commercial units (c. 632sq.m in total); security room (c.52sq.m); 107 car parking spaces below podium; 22 car parking spaces at surface level; 1227 bicycle parking spaces; 4 semi-private courtyards of c. 5,516sq.m; public plaza; public realm & landscaping (c.7,442sq.m).                     | Junction of Belgard Road and Belgard Square North, Tallaght, Dublin 24 | GRANT PERMISSION | 2019-04-15 |
| SD19A/0052         | Internal reorganisation of the existing ground floor bar/dining/reception area resulting in the relocation of the main entrance door and reception area; provision of a toilet; an increase in area of the existing bar/dining area of 35sq.m; change of use from retail to a 12sq.m kitchen store, accessed from the existing kitchen; 895sq.m hotel extension, providing 24 bedrooms and ancillary spaces is proposed on the first floor consisting of the change of use of 790sq.m retail and a 105sq.m extension within the existing perimeter; 12 residents and 3 staff car parking spaces are provided within the existing basement car park, the allocated spaces are currently associated with first floor retail use; an additional 4 bicycle spaces have been provided as an addition to the current provision. | The Glashaus Hotel, Belgard Square West, Tallaght, Dublin 24           | GRANT PERMISSION | 2019-04-15 |
| SD18B/0438         | Construction of a part single, part two storey attached rear extension; extended front driveway entrance; accessible ramp providing access to new replaced front door; internal alterations and all ancillary works.  | 40, Westpark, Tallaght, Dublin 24                                      | GRANT PERMISSION | 2019-03-20 |
| SD18A/0435         | (1) A Sport Science, Health and Recreation Building containing a single storey sports hall and teaching accommodation and associated facilities arranged over two storey plus roof plant areas with a total floor area 3,175sq.m; grass playing pitch 140 x 90m with flood lighting; score boards; 1m high spectator barrier; 12m high x 25m wide ball catch nets behind goal posts and spectator seating; (2) external landscaped quadrangle; pedestrian areas; footpaths and landscaping; linking existing facilities with the development; building signage; 56 covered bicycle parking spaces; covered walkways and demolition of 46 existing car   | Institute of Technology, Old Blessington Road, Tallaght, Dublin 24.    | GRANT PERMISSION | 2019-02-08 |

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|                    | parking spaces and associated site works; (3) enhanced pedestrian crossing facilities at Greenhills Road access, comprising new raised entry treatment across access and pedestrian refuge island on Greenhills Road with associated road markings and traffic signs. The application site is centrally located within the ITT campus which is bounded by Belgard Road to the west, industrial buildings accessed off Airton Road to the north, Greenhills Road to the east and to the south by Old Blessington Road and the grounds of the Old Priory, Tallaght.   |   |   |            |
| SD18A/0370         | (i) Change of use from taxi office to restaurant/café; (ii) shopfront signage and all ancillary works necessary to facilitate the development.  | Unit 4, Block 6, Tallaght Retail Centre, High Street, Tallaght, Dublin 24   | GRANT PERMISSION                          | 2018-12-04 |
| SD13A/0192/EP      | Development to consist of the phased construction of two independent extensions to the existing shopping centre (The Square) with a total gross floor area of 21,490sq.m. (including floor area of car parking of 22,861sq.m.; the total development area is 44,351sq.m.)   | The Square Shopping Centre, Belgard Square, Tallaght, Dublin 24   | GRANT EXTENSION OF DURATION OF PERMISSION | 2018-11-21 |
| SD18A/0219         | (1) The construction of a new two storey c.23,283sq.m building for use as data storage facilities containing: data storage rooms, electrical & mechanical plant rooms and support areas including offices and welfare facilities, loading bays, back-up generators and water storage tanks, mechanical plant at roof level is screened from view on all sides by permanent screens; (2) 27 car parking spaces; (3) amendment to previously permitted site landscaping, boundary treatment and associated site infrastructure (planning permission Reg. Ref. SD16A/0093) and (4) the demolition of a single storey building (floor area of 310sq.m). | Former Jacob's/Allied Biscuits Site, Belgard Road, Tallaght, Dublin 24, D24 DA27  | GRANT PERMISSION                          | 2018-08-07 |
| SD18A/0197         | Construction of a new car park to provide 85 parking spaces, controlled taxi-rank, covered bicycle parking zone, new covered walkway located adjacent to the main hospital entrance together with alterations to the existing road, footpath, retaining wall & car park to provide an additional 5 disabled use bays including all associated site works.   | The Adelaide & Meath Hospital, Incorporating The National Children's Hospital, (Tallaght Hospital), Tallaght, Dublin 24 | GRANT PERMISSION                          | 2018-07-20 |
| SD18A/0043         | Sub-division and change of use of existing Unit F-05 from Hotel/Bar/Restaurant use at ground floor level (260sq.m) and mezzanine floor level (390sq.m) to office unit at ground floor level (225sq.m) and to NCBI Offices use and associated staff facilities at mezzanine floor level (390sq.m) through new access doors on the northern elevation of the existing building, new access stairs and existing lift to mezzanine floor level (35sq.m) at ground floor level, extend the mezzanine floor area (48sq.m) within the existing approved development Reg. Ref. No. SD02A/0392 and SD08A/0197.   | Block F, Belgard Square North and West, Tallaght Town Centre, Dublin 24   | GRANT PERMISSION                          | 2018-04-04 |
| SD17A/0439         | Construction of a cafe/restaurant unit with an overall height of 4.05m and a total GFA of 175sq.m to be located in the central section of the car park of Belgard Retail Park. The proposal includes signage for the unit, associated outdoor seating area, bin store, landscaping and all associated site works. The development proposes the removal of 40 existing car parking spaces and provision of 8 new car   | Belgard Retail Park, Belgard Road, Tallaght, Dublin 24.   | GRANT PERMISSION                          | 2018-02-09 |

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|                    | parking spaces to the south of the proposed cafe/restaurant unit. It is also proposed to provide a 2m wide footpath from the proposed cafe/restaurant unit to the retail warehouse units.  |  |                  |            |
| SD17A/0436         | Single storey first floor extension to the existing Intensive Care Unit (ICU) consisting of twelve isolation bedrooms, associated ancillary spaces, public waiting and overnight areas and staff areas.  | Tallaght University Hospital, Belgard Square North, Tallaght, Dublin 24        | GRANT PERMISSION | 2018-02-06 |
| SD17A/0430         | The construction of a new entrance lobby and concourse of total 250sq.m. additional floor area and 6m in height, including new information desk, informal seating area and display facilities  | Tallaght University Hospital, Belgard Square North, Tallaght, Dublin 24        | GRANT PERMISSION | 2018-02-02 |
| SD17A/0418         | Change of use from previously permitted retail use on the ground and first floor of units D-03 and D-07 and associated circulation cores, to medical clinic use and internal modification to the circulation cores. This will extend the existing medical clinic as permitted under planning permission Ref. SD15A/0357.   | Units D03 & D07, Block D, Belgard Square West, Tallaght Town Centre, Dublin 24 | GRANT PERMISSION | 2018-01-29 |
| SD17A/0412         | Changes of use within the existing Tallaght Cross West development: from permitted crèche uses to residential (9 units) at first floor level; from permitted retail uses to crèche (414sq.m) at ground and mezzanine floor levels; from permitted retail management suite and plant room use to part residential (3 units) at mezzanine floor level; from permitted retail and food court uses to third level education (2228sq.m) at ground, mezzanine and first floor levels; from permitted gymnasium use to residential (7 units) at mezzanine level; from permitted retail to gymnasium use (1918sq.m) at ground and mezzanine floor levels and from permitted retail to medical use (2885sq.m) at ground floor level all on site bounded principally by Belgard Square West, Cookstown Way and the Luas Red Line | Belgard Square West, Tallaght, Dublin 24                                       | GRANT PERMISSION | 2018-01-23 |
| SD17A/0284         | Modifications to existing retail Unit 6 (previously approved plans (Reg Ref SD03A/0323, SD05A/0720), An Bord Pleanála Ref No. PL06S.204123)consisting of 467sq.m retail food store (to include Off Licence) with associated provision of seated dining, kitchen, wc, office and storage facilities; alteration to the front facade to introduce a new pedestrian entrance with new signage over and all ancillary site works and services.   | Unit 6, Belgard Square West, Tallaght, Dublin 24                               | GRANT PERMISSION | 2017-12-19 |
| SD17A/0257         | Change of use of the existing night club on the second floor of the Abberley Hotel into 12 new guest rooms/bedrooms including associated internal alterations.   | Abberley Court Hotel, Belgard Road, Tallaght, Dublin 24                        | GRANT PERMISSION | 2017-12-18 |
| SD17A/0209         | Construction of a retail warehouse unit with an overall height of 8.6m and a total GFA of 2,404 sq.m. to be located adjacent to Unit 7 in the northwest of Belgard Retail Park. This includes 1,409 sq.m. of retail warehouse floorspace at ground floor level and 995 sq.m. of retail warehouse/storage space at mezzanine level. The proposal includes signage for the unit and a service area to the rear. The development will also involve the demolition of the existing 16 sq.m. single storey access building to the below ground pumphouse room located beside the sprinkler tanks (to be retained) and its replacement with a new standalone above ground  | Belgard Retail Park, Belgard Road, Tallaght, Dublin 24                         | GRANT PERMISSION | 2017-12-04 |



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|                    | pumphouse along the eastern boundary of the site measuring 22sq.m. The proposal will result in the removal of 82 existing public and staff car parking spaces, the repositioning of 10 car parking spaces repositioned to the eastern boundary and the provision of 11 new car parking spaces located at the northern boundary to the rear of the proposed unit. The proposal includes cycle parking, landscaping and all associated site works. |   |                  |            |
| SD17A/0333         | 30KW of roof mounted solar PV panels on the student canteen roof.  | IT Tallaght, Old Blessington Road, Tallaght, Dublin 24.               | GRANT PERMISSION | 2017-11-09 |
| SD17A/0177         | (1) Temporary gas powered generation plant within a 2,850sq.m fenced yard containing 12 generator units and 2 back-up diesel generator units with associated flues (each 18m. high), attenuation screen (15m. high) and auxiliary installations, (2) gas meter and incoming gas stream reduction plant within a separate 40sq.m fenced yard and (3) sundry ancillary works.  | Former Jacobs/Allied Biscuits Site, Belgard Road, Tallaght, Dublin 24 | GRANT PERMISSION | 2017-09-04 |
| SD17A/0216         | Retention of: (1) first floor internal alterations, including the construction of office spaces on a mezzanine floor located over an existing shop floor; (2) alterations made to an existing advertising totem pole and all associated site works.  | Unit 1, Airton Business Park, Airton Road, Tallaght, Dublin 24.       | GRANT PERMISSION | 2017-08-28 |
| SD17A/0077         | (1) Change of use of part of existing warehouse to retail use at first floor (260sq.m), internal alterations; (2) new vehicular entrance on Airton Road, expanded parking capacity in one-way system, widening of access on Broomhill Road and all associated site works.  | Unit 31, Airton Road, Tallaght, Dublin 24.                            | GRANT PERMISSION | 2017-05-09 |

Based on a review of the planning applications above and associated supporting documentation and the details of the nature and scale of outlined works, there are no developments of significance proposed in proximity of the proposed development that during construction or operation could give rise to significant in combination effects with the proposed project.

Based on a review of the planning applications above and associated supporting documentation and the details of the nature and scale of outlined works, there are no developments of significance proposed in proximity of the proposed development that during construction or operation could give rise to significant in combination effects with the proposed project.

#### Ringsend WwTP

As outlined in the Hydrological and Hydrogeological Qualitative Risk Assessment Report *“The sewage discharge will be licensed by Irish Water, collected in the public sewer and treated at Irish Water’s WWTP at Ringsend prior to discharge to Dublin Bay. This WWTP is required to operate under an EPA licence (D0034-01) and to meet environmental legislative requirements. The plant has received planning permission (2019) and will be upgraded with increased treatment capacity over the next five years. The peak foul discharge calculated for the proposed development is well within the current capacity of the WWTP.*

*The 2019 planning permission facilitated upgrading works to meet nitrogen and phosphorus standards set out in the licence, which are temporarily exceeded currently. The design includes aerobic granular sludge which will result in treatment of sewage to a higher quality than current thereby ensuring effluent discharge to Dublin Bay will comply with the Water Framework Directive, Urban Wastewater Treatment Directive and Bathing Water Directive. It is understood at this point in time that the upgrade*

to use of aerobic granular sludge and other phased upgrades (excluding the proposed Clonsbaugh development) will result in the WWTP achieving a population equivalent of 2.4 million and are to be completed between by 2027 to 2028. The application for the upgrade of the WWTP in 2012 and the revised upgrade in 2018 was supported by a detailed EIAR. As outlined in the EIAR, modelling of water quality in Dublin Bay has shown that the upgrades (which are now currently underway) will result in improved water quality within Dublin Bay. The 2018 EIAR predicts that the improvement in effluent quality achieved by the upgrade will compensate for the increase in flow through the plant. The ABP inspectors report summarises the positive findings of the modelling for the post WWTP upgrade scenario on Dublin Bay water quality in sections 12.3.5 and 12.3.12 of his report and the overall positive impact for human health and the environment in his conclusions in section 12.9.1. Page 12 of the grant of permission (reference: ABP-301798-18) states the positive impact arising from the delivery of the project "...which would improve compliance with EU Directives and corresponding legislation and would be pivotal in supporting planning and economic growth in Dublin City and its region". The project is being progressed in stages to ensure that the plant continues to treat the wastewater (1.98 million population equivalent) to the current treatment levels throughout the delivery of the upgrade. The project comprises three key elements and underpinning these is a substantial programme of ancillary works:

- Provision of additional secondary treatment capacity with nutrient reduction (400,000 population equivalent);
- Upgrade of the 24 existing secondary treatment tanks to provide additional capacity and nutrient reduction, which is essential to protect the nutrient-sensitive Dublin Bay area; and
- Provision of a new phosphorous recovery process.

Irish Water recently completed work on an €80 million, 400,000 population equivalent upgrade to the Ringsend Wastewater Treatment Plant. These upgrades to the WWTP were scheduled to be completed in the first quarter of 2021 and were completed in Q4 2021. Ringsend is the largest wastewater treatment plant in Ireland and was built to treat the wastewater for the equivalent of 1.64 million people. Currently the plant services over 40% of the national population and is treating wastewater for the equivalent of 1.9 million people.

This newly completed upgrade will accommodate the current demand, support planned housing in the Dublin Region and will improve the quality of the treated wastewater discharged to the Liffey estuary. This capacity upgrade is one part of an overall investment of €400 million by Irish Water in the Ringsend Wastewater Treatment Plant Upgrade Project. Subject to planning permission, the overall upgrade project will enable full treatment of wastewater for the equivalent of 2.4 million people, meeting all foreseeable development needs to at least 2025.

The 2019 planning permission facilitated upgrading works to meet nitrogen and phosphorus standards set out in the licence, which are temporarily exceeded currently.

The application for the upgrade of the WWTP in 2012 and the revised upgrade in 2018 was supported by a detailed EIAR. As outlined in the EIAR, modelling of water quality in Dublin Bay has shown that the upgrades (which are now currently underway) will result in improved water quality within Dublin Bay. The 2018 EIAR predicts that the improvement in effluent quality achieved by the upgrade will compensate for the increase in flow through the plant. The ABP inspector's report summarises the positive findings of the modelling for the post WWTP upgrade scenario on Dublin Bay water quality in sections 12.3.5 and 12.3.12 of his report and the overall positive impact for human health and the environment in his conclusions in section 12.9.1.

Even without treatment at the Ringsend WWTP, the peak effluent discharge, calculated for the proposed development as 0.38 litres/sec (which would equate to 0.003% of the licensed discharge at Ringsend WWTP [peak hydraulic capacity]), would not impact on the overall water quality within Dublin Bay and therefore would not have an impact on the current Water Body Status (as defined within the Water Framework Directive). This assessment is supported by hydrodynamic and chemical modelling within Dublin Bay which has shown that there is significant dilution for contaminants of

concern (DIN and MRP) available quite close to the outfall for the treatment plant (Ringsend WWTP 2012 EIS, Ringsend WWTP 2018 EIAR). The most recent water quality assessment of Dublin Bay WFD Waterbody undertaken by the EPA (four yearly monitoring of trends for indicator parameters) also shows that Dublin Bay on the whole, currently has an 'Unpolluted' water quality status ([www.catchments.ie](http://www.catchments.ie)).

The assessment of the current proposal has also considered the effect of cumulative events, such as release of sediment laden water combined with a hydrocarbon leak on site. As there is adequate assimilation and dilution between the site and the Natura sites (Dublin Bay), it is concluded that no perceptible impact on water quality would occur at the Natura sites as a result of the construction or operation of this Proposed Development. It can also be concluded that the cumulative or in-combination effects of effluent arising from the Proposed Development with that of other permitted, proposed developments, or with development planned pursuant to statutory plans in the greater Dublin, Meath and Kildare areas, which will be discharged into Ringsend WWTP will not be significant having regard to the size of the calculated discharge from the Proposed Development and having regard to the following:

- Recent water quality assessment for Dublin Bay shows that Dublin Bay currently continues to meet the criteria for 'Unpolluted' water quality status (EPA, 2022).
- The Ringsend WWTP upgrade which is currently being constructed will result in improved water quality to ensure compliance with Water Framework Directive requirements.
- All new developments are required to comply with SuDS which ensures management of run-off rate within the catchment of Ringsend WWTP.
- The natural characteristics of Dublin Bay result in enriched water rapidly mixing and degrading such that the plume has no appreciable effect on water quality at Natura sites.

As the Proposed Development will have no additional stormwater run-off during a stormwater event over and above the current level, surface water run-off from the development in the operational phase will therefore have no impact on the water quality in any overflow situation apart from a minor contribution from foul sewage. It should be noted that the bathing status has no direct relevance to the water quality status of the Natura sites due to rapid mixing and dilution resulting in no measurable change in water quality within the overall water body."

As a result of the outlined information, it is considered that in combination effects with other existing and proposed developments would be unlikely, neutral, not significant and localised.

## European Sites

A further review of the Conservation Objectives and features of interest of the screened in sites is necessary.

### South Dublin Bay SAC (Site code: 0000210)

South Dublin Bay SAC is located 11.2 km from the proposed development site. There is potential for the proposed development to be hydrologically connected to South Dublin Bay SAC, via the surface water network from the site which discharges to the River Dodder and ultimately outfalls to the marine environment at Dublin Bay. In the absence of mitigation measures there is potential for pollutants and chemicals to enter the surface water, the River Dodder and ultimately the South Dublin Bay SAC, during the construction of the development and negatively impact on the features of interest or conservation objectives of the proposed development.

### Site-specific data

As outlined in the South Dublin Bay SAC Site Synopsis<sup>2</sup> (NPWS, Version date 10.12.2015):

*'This site lies south of the River Liffey in Co. Dublin, and extends from the South Wall to the west pier at Dun Laoghaire. It is an intertidal site with extensive areas of sand and mudflats. The sediments are predominantly sands but grade to sandy muds near the shore at Merrion Gates. The main channel which drains the area is Cockle Lake.*

*The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (\* = priority; numbers in brackets are Natura 2000 codes):*

*[1140] Tidal Mudflats and Sandflats*

*[1210] Annual vegetation of drift lines*

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

*[2110] Embryonic shifting dunes*

*The bed of Dward Eelgrass (*Zostera noltii*) found below Merrion Gates is the largest stand on the east coast. Green algae (*Enteromorpha* spp. and *Ulva lactuca*) are distributed throughout the area at a low density. Furoid algae occur on the rocky shore in the Maretimo to Dún Laoghaire area. Species include *Fucus spiralis*, *F. vesiculosus*, *F. serratus*, *Ascophyllum nodosum* and *Pelvetia canaliculata*.*

*Several small, sandy beaches with incipient dune formation occur in the northern and western sectors of the site, notably at Poolbeg, Irishtown and Merrion/ Booterstown. The formation at Booterstown is very recent. Drift line vegetation occurs in association with the embryonic and incipient fore dunes. Typically drift lines occur in a band approximately 5 m wide, though at Booterstown this zone is wider in places. The habitat occurs just above the High Water Mark and below the area of embryonic dune. Species present are Sea Rocket (*Cakile maritima*), Frosted Orache (*Atriplex laciniata*), Spear-leaved Orache (*A. prostrata*), Prickly Saltwort (*Salsola kali*) and Fat Hen (*Chenopodium album*). Also occurring is Sea Sandwort (*Honkenya peploides*), Sea Beet (*Beta vulgaris* subsp. *maritima*) and Annual Sea-blite (*Suaeda maritima*). A small area of pioneer saltmarsh now occurs in the lee of an embryonic sand dune just north of Booterstown Station. This early stage of saltmarsh development is here characterised by the presence of pioneer stands of glassworts (*Salicornia* spp.) occurring below an area of drift line vegetation. As this is of very recent origin, it covers a small area but ample areas of substrate and shelter are available for the further development of this habitat.*

*Lugworm (*Arenicola marina*), Cockles (*Cerastoderma edule*) and annelids and other bivalves are frequent throughout the site. The small gastropod *Hydrobia ulvae* occurs on the muddy sands off Merrion Gates.*

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<sup>2</sup> <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY000210.pdf>

*South Dublin Bay is an important site for waterfowl. Although birds regularly commute between the south bay and the north bay, recent studies have shown that certain populations which occur in the south bay spend most of their time there. The principal species are Oystercatcher (1215), Ringed Plover (120), Sanderling (344), Dunlin (2628) and Redshank (356) (average winter peaks 1996/97 and 1997/98). Up to 100 Turnstones are usual in the south bay during winter. Brent Goose regularly occur in numbers of international importance (average peak 299). Bar-tailed Godwit (565), a species listed on Annex I of the E.U. Birds Directive, also occur.*

*Large numbers of gulls roost in South Dublin Bay, e.g. 4,500 Black-headed Gulls in February 1990; 500 Common Gulls in February 1991. It is also an important tern roost in the autumn, regularly holding 2000-3000 terns including Roseate Terns, a species listed on Annex I of the E.U. Birds Directive. South Dublin Bay is largely protected as a Special Protection Area.*

*At low tide the inner parts of the south bay are used for amenity purposes. Baitdigging is a regular activity on the sandy flats. At high tide some areas have windsurfing and jet-skiing.*

*This site is a fine example of a coastal system, with extensive sand and mudflats, and incipient dune formations. South Dublin Bay is also an internationally important bird site.'*

The Natura 2000 Standard Data Form (2020)<sup>3</sup> states that:

*'This intertidal site extends from the South Wall at Dublin Port to the West Pier at Dun Laoghaire, a distance of c. 5 km. At their widest, the intertidal flats extend for almost 3 km. The seaward boundary is marked by the low tide mark, while the landward boundary is now almost entirely artificially embanked. Several permanent channels exist, the largest being Cockle Lake. A small sandy beach occurs at Merrion Gates, while some bedrock shore occurs near Dun Laoghaire. A number of small streams and drains flow into the site. The proximity of the site to Dublin City results in it being a very popular recreational area. It is also important for educational and research purposes.*

*Site possesses a fine and fairly extensive example of intertidal flats. Sediment type is predominantly sand, with muddy sands in the more sheltered areas. A typical macro-invertebrate fauna exists. Has the largest stand of Zostera on the east coast. Supports part of the important wintering waterfowl populations of Dublin Bay. Regularly has an internationally population of Branta bernicila hortae, plus nationally important numbers of at least a further 6 species, including Limosa lapponica. Regular autumn roosting ground for significant numbers of Sterna terns, including S. dougallii. The scientific interests of the site have been well documented.'*

As outlined in the Conservation objectives supporting document<sup>4</sup> (NPWS, 2013), it is an objective:

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

Target 1: *"The permanent habitat area is stable or increasing, subject to natural processes."*

Target 2: *"Maintain the extent of the Zostera-dominated community, subject to natural processes."*

Target 3: *"Conserve the high quality of the Zostera-dominated community, subject to natural processes."*

Target 4: *"Conserve the following community type in a natural condition: Fine sands with Angulus tenuis community complex.'*

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<sup>3</sup> <https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF000210.pdf>

<sup>4</sup>

[https://www.npws.ie/sites/default/files/publications/pdf/000210\\_South%20Dublin%20Bay%20SAC%20Marine%20Supporting%20Doc\\_V1.pdf](https://www.npws.ie/sites/default/files/publications/pdf/000210_South%20Dublin%20Bay%20SAC%20Marine%20Supporting%20Doc_V1.pdf)

**Figure 1. Extent of Mudflats and sandflats not covered by seawater at low tide in South Dublin Bay SAC**

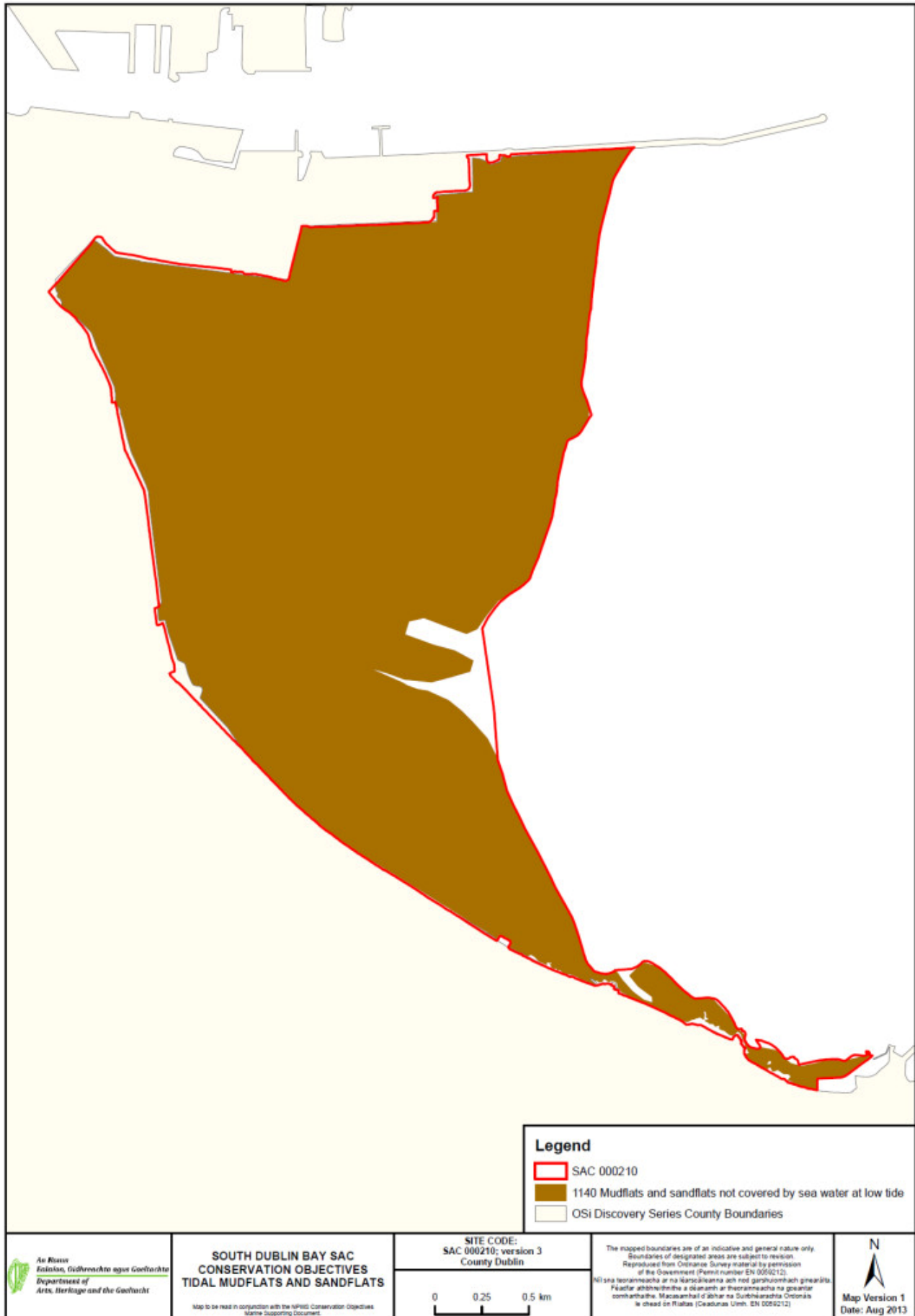
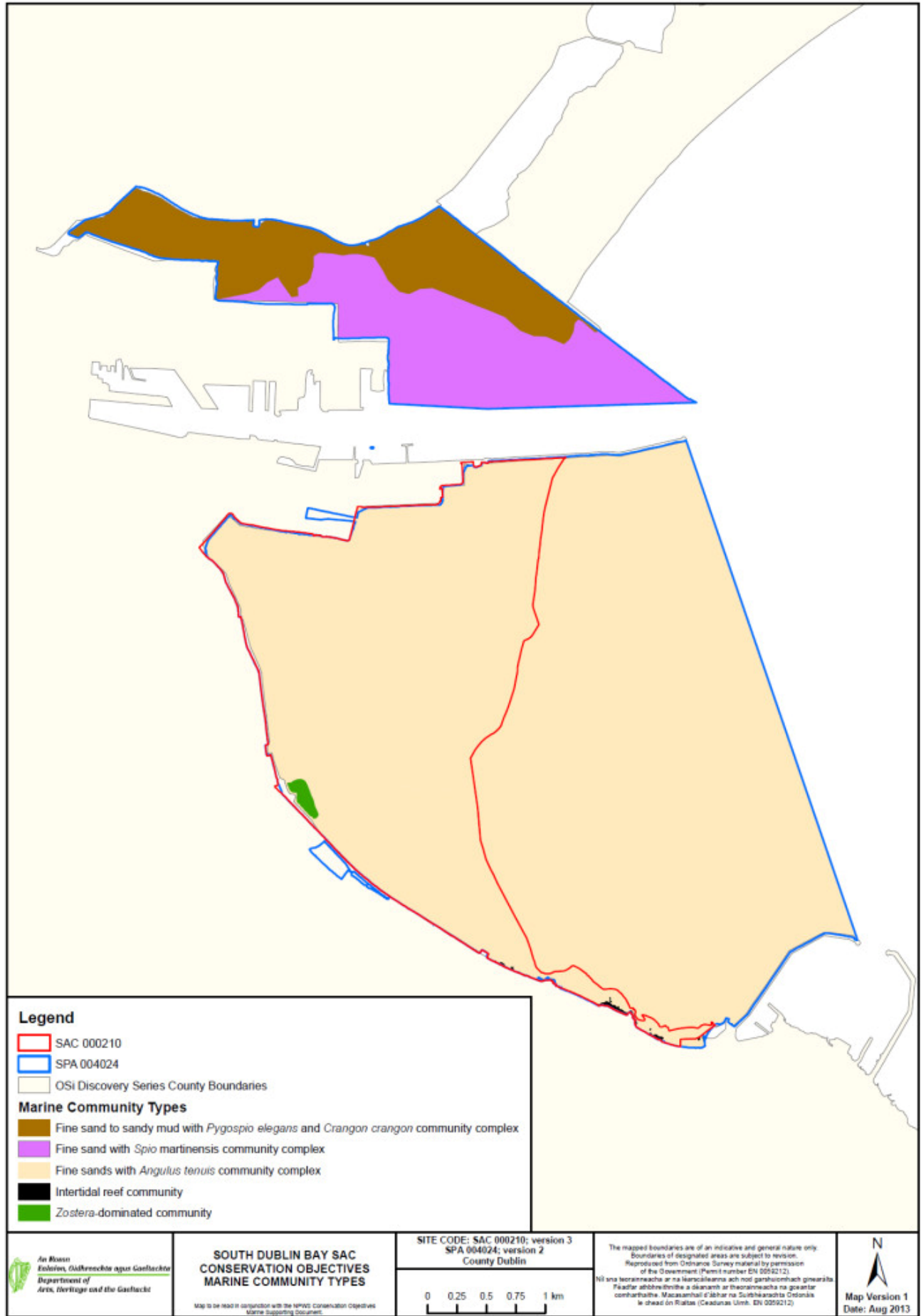


Figure 2. Distribution of community types in South Dublin Bay SAC



## North Dublin Bay SAC (Site code: 000206)

As outlined in the North Dublin Bay SAC Site Synopsis<sup>5</sup> (NPWS, version date 12.08.2013):

*'This site covers the inner part of north Dublin Bay, the seaward boundary extending from the Bull Wall lighthouse across to the Martello Tower at Howth Head. The North Bull Island is the focal point of this site.*

*The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (\* = priority; numbers in brackets are Natura 2000 codes):*

*[1140] Tidal Mudflats and Sandflats*

*[1210] Annual Vegetation of Drift Lines*

*[1310] Salicornia Mud*

*[1330] Atlantic Salt Meadows*

*[1410] Mediterranean Salt Meadows*

*[2110] Embryonic Shifting Dunes*

*[2120] Marram Dunes (White Dunes)*

*[2130] Fixed Dunes (Grey Dunes)\**

*[2190] Humid Dune Slacks*

*[1395] Petalwort (*Petalophyllum ralfsii*)*

*North Bull Island is a sandy spit which formed after the building of the South Wall and Bull Wall in the 18th and 19th centuries. It now extends for about 5 km in length and is up to 1 km wide in places. A well-developed and dynamic dune system stretches along the seaward side of the island. Various types of dunes occur, from fixed dune grassland to pioneer communities on foredunes. Marram Grass (*Ammophila arenaria*) is dominant on the outer dune ridges, with Lyme-grass (*Leymus arenarius*) and Sand Couch (*Elymus farctus*) on the foredunes. Behind the first dune ridge, plant diversity increases with the appearance of such species as Wild Pansy (*Viola tricolor*), Kidney Vetch (*Anthyllis vulneraria*), Common Bird's-foot-trefoil (*Lotus corniculatus*), Common Restharrow (*Ononis repens*), Yellow-rattle (*Rhinanthus minor*) and Pyramidal Orchid (*Anacamptis pyramidalis*). In these grassy areas and slacks, the scarce Bee Orchid (*Ophrys apifera*) occurs.*

*About 1 km from the tip of the island, a large dune slack with a rich flora occurs, usually referred to as the 'Alder Marsh' because of the presence of Alder trees (*Alnus glutinosa*). The water table is very near the surface and is only slightly brackish. Saltmarsh Rush (*Juncus maritimus*) is the dominant species, with Meadowsweet (*Filipendula ulmaria*) and Devil's-bit Scabious (*Succisa pratensis*) being frequent. The orchid flora is notable and includes Marsh Helleborine (*Epipactis palustris*), Common Twayblade (*Listera ovata*), Autumn Lady's-tresses (*Spiranthes spiralis*) and Marsh Orchids (*Dactylorhiza* spp.).*

*Saltmarsh extends along the length of the landward side of the island. The edge of the marsh is marked by an eroding edge which varies from 20 cm to 60 cm high. The marsh can be zoned into different levels according to the vegetation types present. On the lower marsh, Glasswort (*Salicornia europaea*), Common Saltmarsh-grass (*Puccinellia maritima*), Annual Sea-blite (*Suaeda maritima*) and Greater Sea-spurrey (*Spergularia media*) are the main species. Higher up in the middle marsh Sea Plantain (*Plantago maritima*), Sea Aster (*Aster tripolium*), Sea Arrowgrass (*Triglochin maritima*) and Thrift (*Armeria maritima*) appear. Above the mark of the normal high tide, species such as Common Scurvygrass (*Cochlearia officinalis*) and Sea Milkwort (*Glaux maritima*) are found, while on the extreme upper marsh, the rushes *Juncus**

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<sup>5</sup> <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY000206.pdf>



*maritimus* and *J. gerardi* are dominant. Towards the tip of the island, the saltmarsh grades naturally into fixed dune vegetation.

The habitat 'annual vegetation of drift lines' is found in places, along the length of Dollymount Strand, with species such as Sea Rocket (*Cakile maritima*), Oraches (*Atriplex* spp.) and Prickly Saltwort (*Salsola kali*).

The island shelters two intertidal lagoons which are divided by a solid causeway. The sediments of the lagoons are mainly sands with a small and varying mixture of silt and clay. The north lagoon has an area known as the "Salicornia flat", which is dominated by *Salicornia dolichostachya*, a pioneer glasswort species, and covers about 25 ha. Beaked Tasselweed (*Ruppia maritima*) occurs in this area, along with some Narrow-leaved Eelgrass (*Zostera angustifolia*). Dwarf Eelgrass (*Z. noltii*) also occurs in Sutton Creek. Common Cordgrass (*Spartina anglica*) occurs in places but its growth is controlled by management. Green algal mats (*Enteromorpha* spp., *Ulva lactuca*) cover large areas of the flats during summer. These sediments have a rich macrofauna, with high densities of Lugworms (*Arenicola marina*) in parts of the north lagoon. Mussels (*Mytilus edulis*) occur in places, along with bivalves such as *Cerastoderma edule*, *Macoma balthica* and *Scrobicularia plana*. The small gastropod *Hydrobia ulvae* occurs in high densities in places, while the crustaceans *Corophium volutator* and *Carcinus maenas* are common. The sediments on the seaward side of North Bull Island are mostly sands. The site extends below the low spring tide mark to include an area of the sublittoral zone.

Three rare plant species which are legally protected under the Flora (Protection) Order, 1999 have been recorded on the North Bull Island. These are Lesser Centaury (*Centaureum pulchellum*), Red Hemp-nettle (*Galeopsis angustifolia*) and Meadow Saxifrage (*Saxifraga granulata*). Two further species listed as threatened in the Red Data Book, Wild Clary/Sage (*Salvia verbenaca*) and Spring Vetch (*Vicia lathyroides*), have also been recorded. A rare liverwort, *Petalophyllum ralfsii*, was first recorded from the North Bull Island in 1874 and has recently been confirmed as still present. This species is of high conservation value as it is listed on Annex II of the E.U. Habitats Directive. The North Bull is the only known extant site for the species in Ireland away from the western seaboard.

North Dublin Bay is of international importance for waterfowl. During the 1994/95 to 1996/97 period the following species occurred in internationally important numbers (figures are average maxima): Brent Goose 2,333; Knot 4,423; Bar-tailed Godwit 1,586. A further 14 species occurred in nationally important concentrations - Shelduck 1505; Wigeon 1,166; Teal 1,512; Pintail 334; Shoveler 239; Oystercatcher 2,190; Ringed Plover 346; Grey Plover 816; Sanderling 357; Dunlin 6,238; Black-tailed Godwit 156; Curlew 1,193; Turnstone 197 and Redshank 1,175. Some of these species frequent South Dublin Bay and the River Tolka Estuary for feeding and/or roosting purposes (mostly Brent Goose, Oystercatcher, Ringed Plover, Sanderling and Dunlin).

The tip of the North Bull Island is a traditional nesting site for Little Tern. A high total of 88 pairs nested in 1987. However, nesting attempts have not been successful since the early 1990s. Ringed Plover, Shelduck, Mallard, Skylark, Meadow Pipit and Stonechat also nest. A well-known population of Irish Hare is resident on the island

The invertebrates of the North Bull Island have been studied and the island has been shown to contain at least seven species of regional or national importance in Ireland (from the Orders Diptera, Hymenoptera and Hemiptera).

The main land uses of this site are amenity activities and nature conservation. The North Bull Island is the main recreational beach in Co. Dublin and is used throughout the year. Much of the land surface of the island is taken up by two golf courses. Two separate Statutory Nature Reserves cover much of the island east of the Bull Wall and the surrounding intertidal flats. The site is used regularly for educational purposes. North Bull Island has been designated a Special Protection Area under the E.U. Birds Directive and it is also a statutory Wildfowl

Sanctuary, a Ramsar Convention site, a Biogenetic Reserve, a Biosphere Reserve and a Special Area Amenity Order site.

*This site is an excellent example of a coastal site with all the main habitats represented. The site holds good examples of nine habitats that are listed on Annex I of the E.U. Habitats Directive; one of these is listed with priority status. Several of the wintering bird species have populations of international importance, while some of the invertebrates are of national importance. The site contains a numbers of rare and scarce plants including some which are legally protected. Its proximity to the capital city makes North Dublin Bay an excellent site for educational studies and research.'*

The Natura 2000 Standard Data Form (2020)<sup>6</sup> states that:

*'The North Bull Island sand spit is a relatively recent depositional feature, formed as a result of improvements to Dublin Port during the 18th and 19th centuries. It is almost 5km long and 1km wide and runs parallel to the coast between Clontarf and Sutton. The sediment which forms the island is predominantly glacial in origin and siliceous in nature. Between the island and the mainland there occurs two sheltered intertidal areas which are separated by a solid causeway constructed in 1964. The seaward side of the island has a fine sandy beach. A substantial area of shallow marine water is included in the site. The interior of the island is excluded from the site as it has been converted to golf courses. The proximity of the North Bull Island to Dublin City results in it being a very popular recreational area. It is also very important for educational and research purposes. Nature conservation is a main landuse within the site.*

*Site possesses an excellent diversity of coastal habitats. The North Bull Island dune system is one of the most important systems on the east coast and is one of the few in Ireland that is actively accreting. It possesses extensive and mostly good quality examples of embryonic, shifting marram and fixed dunes, as well as excellent examples of humid dune slacks. Both Atlantic and Mediterranean salt marshes are well represented and a particularly good marsh zonation is shown. The salt marshes grade into mudflats and sandflats, some of which are dominated by annual *Salicornia* species. *Petalophyllum ralfsii* occurs at its only known station away from the western seaboard. The site has five Red Data Book vascular plant species and four Red Data Book bryophyte species. This is one of the most important sites for wintering waterfowl in Ireland, with internationally important populations of *Branta bernicla horta*, *Calidris canutus* and *Limosa lapponica*, plus nationally important numbers of a further 14 species. 20% of the national total of *Pluvialis squatarola* occurs here. Formerly it had important colony of *Sterna albifrons*. North Dublin Bay is nationally important for three insect species. The scientific interests of the site have been well documented and future prospects are good owing to the various designations assigned to site.'*

As outlined in the Conservation objectives supporting document (NPWS, 2013):

*'North Dublin Bay SAC (site code: 206) is designated for a range of coastal habitats, including mudflats and salt flats, saltmarsh and sand dunes. The following eight coastal habitats are included in the qualifying interests for the site (\* denotes a priority habitat):*

- *Salicornia and other annuals colonising mud and sand (1310)*
- *Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) (ASM) (1330)*
- *Mediterranean salt meadows (*Juncetalia maritimi*) (MSM) (1410)*
- *Annual vegetation of drift lines (1210)*
- *Embryonic shifting dunes (2110)*
- *Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) (2120)*
- *Fixed coastal dunes with herbaceous vegetation (grey dunes) (2130)\**
- *Humid dune slacks (2190)*

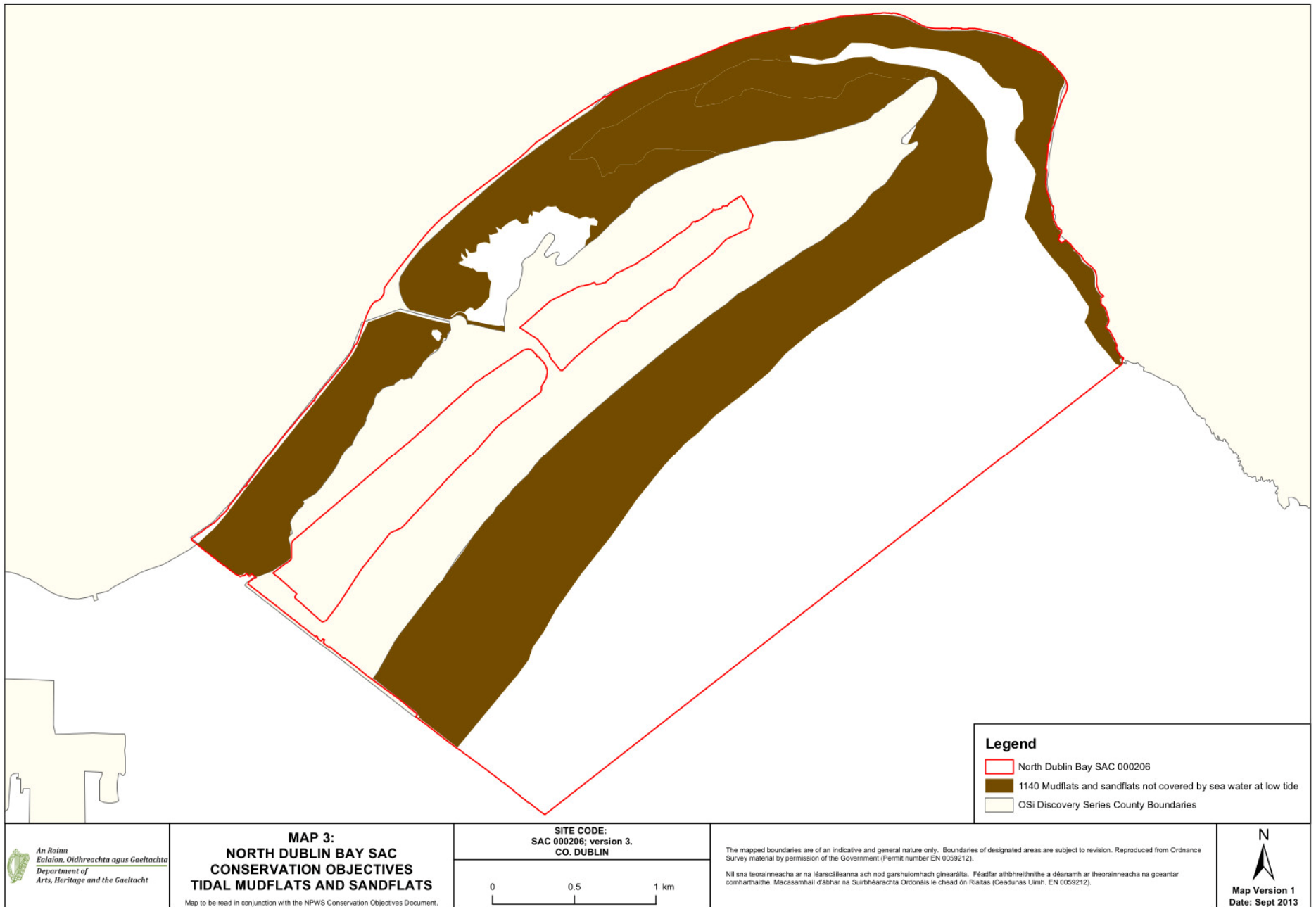
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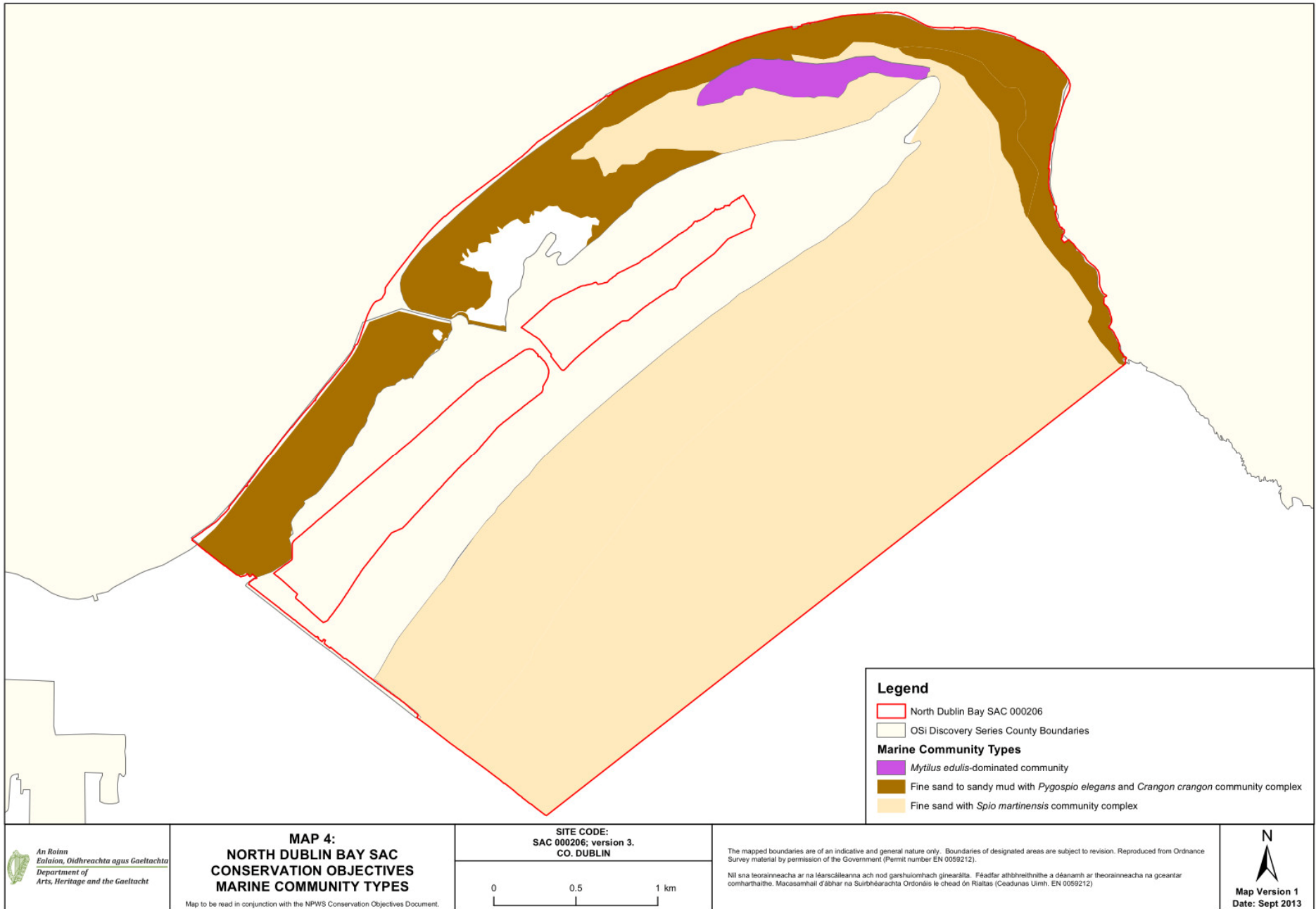
<sup>6</sup> <https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF000206.pdf>

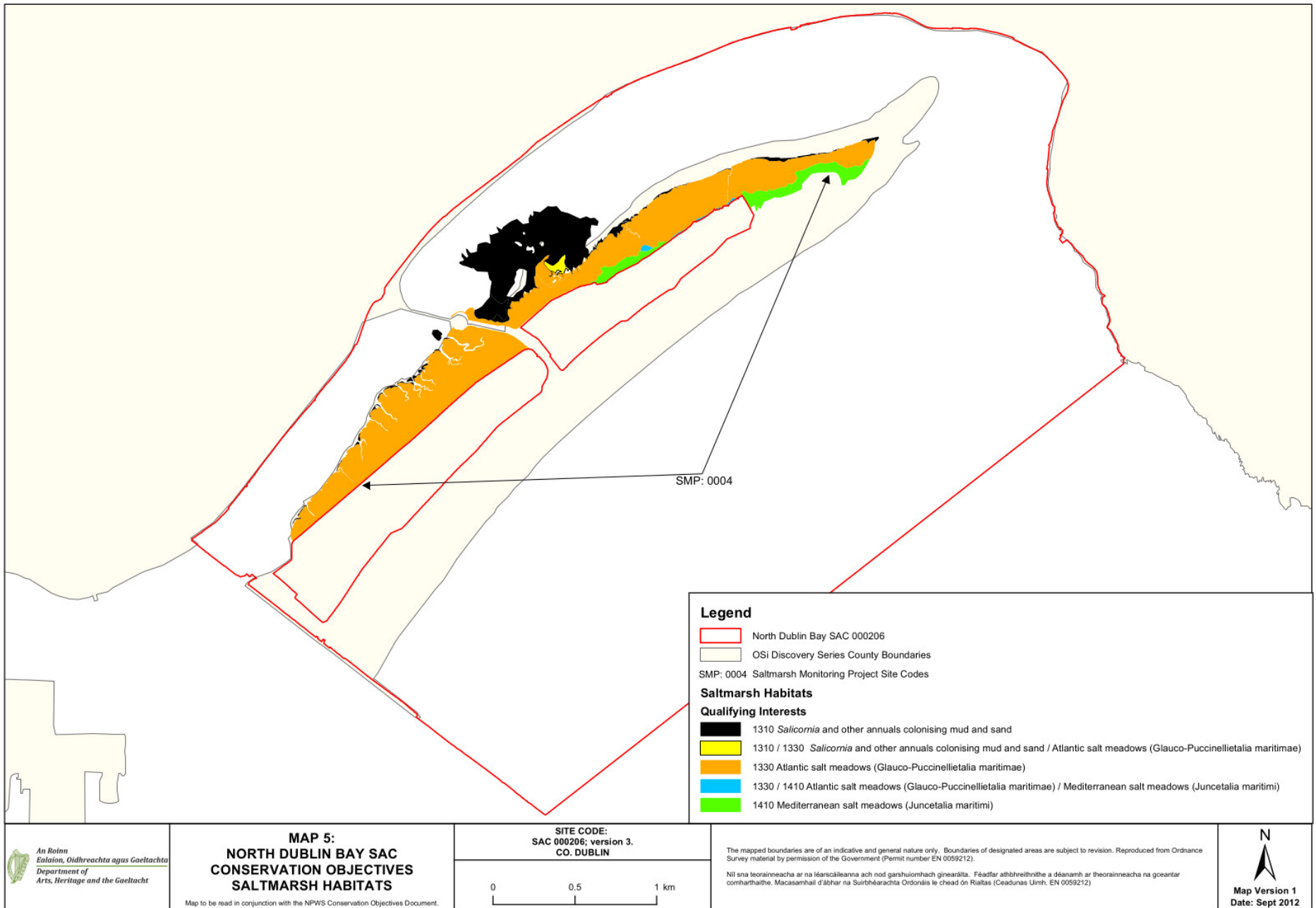
*The first three are saltmarsh habitats and the last five are associated with sand dune systems, although all eight of these habitats are found in close association with each other (McCorry, 2007; Ryle et al., 2009; Delaney et al., 2013).*

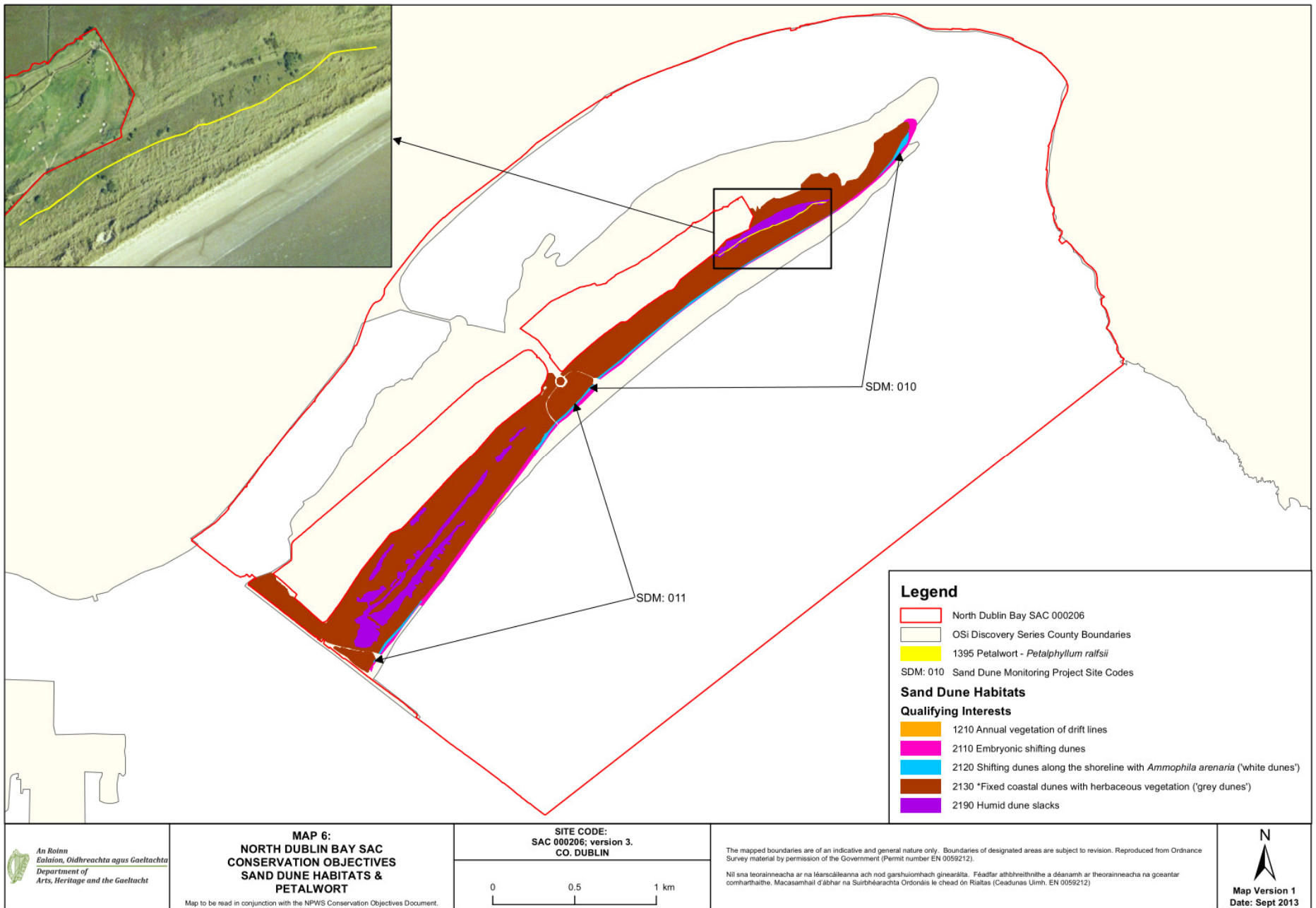
*This backing document sets out the conservation objectives for the eight coastal habitats listed above in North Dublin Bay SAC, which are defined by a list of parameters, attributes and targets. The main parameters are (a) Range (b) Area and (c) Structure and Functions, the last of which is broken down into a number of attributes, including physical structure, vegetation structure and vegetation composition.*

*The targets set for the saltmarsh habitats are based primarily on the results of the Saltmarsh Monitoring Project (SMP) (McCorry, 2007; McCorry & Ryle, 2009) and this document should be read in conjunction with those reports.'*









## South Dublin Bay and River Tolka (Site code: 004024)

As outlined in the *South Dublin Bay and River Tolka Estuary SPA Site Synopsis*<sup>7</sup>. (NPWS, version date 30.05.2015):

*'The South Dublin Bay and River Tolka Estuary SPA comprises a substantial part of Dublin Bay. It includes the intertidal area between the River Liffey and Dun Laoghaire, and the estuary of the River Tolka to the north of the River Liffey, as well as Booterstown Marsh. A portion of the shallow marine waters of the bay is also included.*

*In the south bay, the intertidal flats extend for almost 3 km at their widest. The sediments are predominantly well-aerated sands. Several permanent channels exist, the largest being Cockle Lake. A small sandy beach occurs at Merrion Gates, while some bedrock shore occurs near Dun Laoghaire. The landward boundary is now almost entirely artificially embanked. There is a bed of Dwarf Eelgrass (*Zostera noltii*) below Merrion Gates which is the largest stand on the east coast. Green algae (*Ulva* spp.) are distributed throughout the area at a low density. The macroinvertebrate fauna is well-developed, and is characterised by annelids such as Lugworm (*Arenicola marina*), Nephthys spp. and Sand Mason (*Lanice conchilega*), and bivalves, especially Cockle (*Cerastoderma edule*) and Baltic Tellin (*Macoma balthica*). The small gastropod Spire Shell (*Hydrobia ulvae*) occurs on the muddy sands off Merrion Gates, along with the crustacean *Corophium volutator*. Sediments in the Tolka Estuary vary from soft thixotropic muds with a high organic content in the inner estuary to exposed, well-aerated sands off the Bull Wall. The site includes Booterstown Marsh, an enclosed area of saltmarsh and muds that is cut off from the sea by the Dublin/Wexford railway line, being linked only by a channel to the east, the Nutley stream. Sea water incursions into the marsh occur along this stream at high tide. An area of grassland at Poolbeg, north of Irishtown Nature Park, is also included in the site.*

*The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Light-bellied Brent Goose, Oystercatcher, Ringed Plover, Grey Plover, Knot, Sanderling, Dunlin, Bar-tailed Godwit, Redshank, Black-headed Gull, Roseate Tern, Common Tern and Arctic Tern. The E.U. Birds Directive pays particular attention to wetlands, and as these form part of the SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.*

*The site is an important site for wintering waterfowl, being an integral part of the internationally important Dublin Bay complex – all counts for wintering waterbirds are five year mean peaks for the period 1995/96 to 1999/2000. Although birds regularly commute between the south bay and the north bay, recent studies have shown that certain populations which occur in the south bay spend most of their time there. An internationally important population of Light-bellied Brent Goose (368) occurs regularly and newly arrived birds in the autumn feed on the Eelgrass bed at Merrion. At the time of designation the site supported nationally important numbers of a further nine species: Oystercatcher (1,145), Ringed Plover (161), Grey Plover (45), Knot (548), Sanderling (321), Dunlin (1,923), Bar-tailed Godwit (766), Redshank (260) and Black-headed Gull (3,040). Other species occurring in smaller numbers include Great Crested Grebe (21), Curlew (127) and Turnstone (52). Little Egret, a species which has recently colonised Ireland, also occurs at this site.*

*South Dublin Bay is a significant site for wintering gulls, with a nationally important population of Black-headed Gull, but also Common Gull (330) and Herring Gull (348). Mediterranean Gull is also recorded from here, occurring through much of the year, but especially in late winter/spring and again in late summer into winter.*

*Both Common Tern and Arctic Tern breed in Dublin Docks, on a man-made mooring structure known as the E.S.B. dolphin – this is included within the site. Small numbers of Common Tern and Arctic Tern were recorded nesting on this dolphin in the 1980s. A survey in 1995 recorded nationally important numbers of Common Tern nesting here (52 pairs). The breeding population of Common Tern at this site has increased, with 216 pairs recorded in 2000. This increase was largely due to the ongoing management of the site for breeding terns. More recent data highlights this site as one of the most important Common Tern sites in the country with over 400 pairs recorded here in 2007.*

*South Dublin Bay is an important staging/passage site for a number of tern species in the autumn (mostly late July to September). The origin of many of the birds is likely to be the Dublin breeding sites (Rockabill and the*

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<sup>7</sup> <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004024.pdf>



Dublin Docks) though numbers suggest that the site is also used by birds from other sites, perhaps outside the state. This site is selected for designation for its autumn tern populations: Roseate Tern (2,000 in 1999), Common Tern (5,000 in 1999) and Arctic Tern (20,000 in 1996).

The South Dublin Bay and River Tolka Estuary SPA is of ornithological importance as it supports an internationally important population of Light-bellied Brent Goose and nationally important populations of a further nine wintering species. Furthermore, the site supports a nationally important colony of breeding Common Tern and is an internationally important passage/staging site for three tern species. It is of note that four of the species that regularly occur at this site are listed on Annex I of the E.U. Birds Directive, i.e. Bar-tailed Godwit, Common Tern, Arctic Tern and Roseate Tern. Sandymount Strand/Tolka Estuary is also a Ramsar Convention site.'

The Natura 2000 Standard Data Form (2020)<sup>8</sup> states that:

'This site comprises a substantial part of Dublin Bay. It includes virtually all of the intertidal area in the south bay, as well as much of the Tolka Estuary to the north of the River Liffey. A portion of the shallow bay waters is also included. In the south bay, the intertidal flats extend for almost 3 km at their widest. The sediments are predominantly well-aerated sands. The sands support the largest stand of *Zostera noltii* on the East Coast. Several permanent channels exist, the largest being Cockle Lake. A small sandy beach occurs at Merrion Gates, while some bedrock shore occurs near Dun Laoghaire. The landward boundary is now almost entirely artificially embanked. Sediments in the Tolka Estuary vary from soft thixotropic muds with a high organic content in the inner estuary to exposed, well aerated sands off the Bull Wall. The proximity of the site to Dublin City results in it being a very popular recreational area. It is also important for educational and research purposes.

The site possesses extensive intertidal flats which support wintering waterfowl which are part of the overall Dublin Bay population. It regularly has an internationally important population of *Branta bernicla hrota*, which feeds on *Zostera noltii* in the autumn. It has nationally important numbers of a further 6 species: *Haematopus ostralegus*, *Charadrius hiaticula*, *Calidris canutus*, *Calidris alba*, *Calidris alpina* and *Limosa lapponica*. It is an important site for wintering gulls, especially *Larus ridibundus* and *Larus canus*. South Dublin Bay is the premier site in Ireland for *Larus melanocephalus*, with up to 20 birds present at times. Is a regular autumn roosting ground for significant numbers of terns, including *Sterna dougallii*, *S. hirundo* and *S. paradisaea*.'

According to the conservation Objectives Supporting Document<sup>9</sup> (NPWS 2014) for the South Dublin Bay and River Tolka Estuary SPA:

'The overarching Conservation Objective for North Bull Island Special Protection Area, and for South Dublin Bay and River Tolka Estuary Special Protection Area, is to ensure that waterbird populations and their wetland habitats are maintained at, or restored to, favourable conservation condition. This includes, as an integral part, the need to avoid deterioration of habitats and significant disturbance; thereby ensuring the persistence of site integrity.

The site should contribute to the maintenance and improvement where necessary, of the overall favourable status of the national resource of waterbird species, and continuation of their long-term survival across their natural range.

Conservation Objectives for North Bull Island Special Protection Area, and for South Dublin Bay and River Tolka Estuary Special Protection Area, based on the principles of favourable conservation status, are described below and summarised in Table 3.1. Note that these objectives should be read and interpreted in the context of information and advice provided in additional sections of this report.

Objective 1: To maintain the favourable conservation condition of the non-breeding waterbird Special Conservation Interest species listed for North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA.

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<sup>8</sup> <https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF004024.pdf>

<sup>9</sup> Note that 'population' refers to site population (numbers wintering at the site) rather than the species biogeographic population.

[https://www.npws.ie/sites/default/files/publications/pdf/South%20Dublin%20Bay%20and%20River%20Tolka%20Estuar%20SPA%20\(004024\)%20Conservation%20objectives%20supporting%20document%20-%20\[Version%201\].pdf](https://www.npws.ie/sites/default/files/publications/pdf/South%20Dublin%20Bay%20and%20River%20Tolka%20Estuar%20SPA%20(004024)%20Conservation%20objectives%20supporting%20document%20-%20[Version%201].pdf)

*This objective is defined by the following attributes and targets:*

- *To be favourable, the long term population trend for each waterbird Special Conservation Interest species should be stable or increasing. Waterbird populations are deemed to be unfavourable when they have declined by 25% or more, as assessed by the most recent population trend analysis.*
- *To be favourable, there should be no significant decrease in the range, timing or intensity of use of areas by the waterbird species of Special Conservation Interest, other than that occurring from natural patterns of variation.*

*Factors that can adversely effect the achievement of Objective 1 include:*

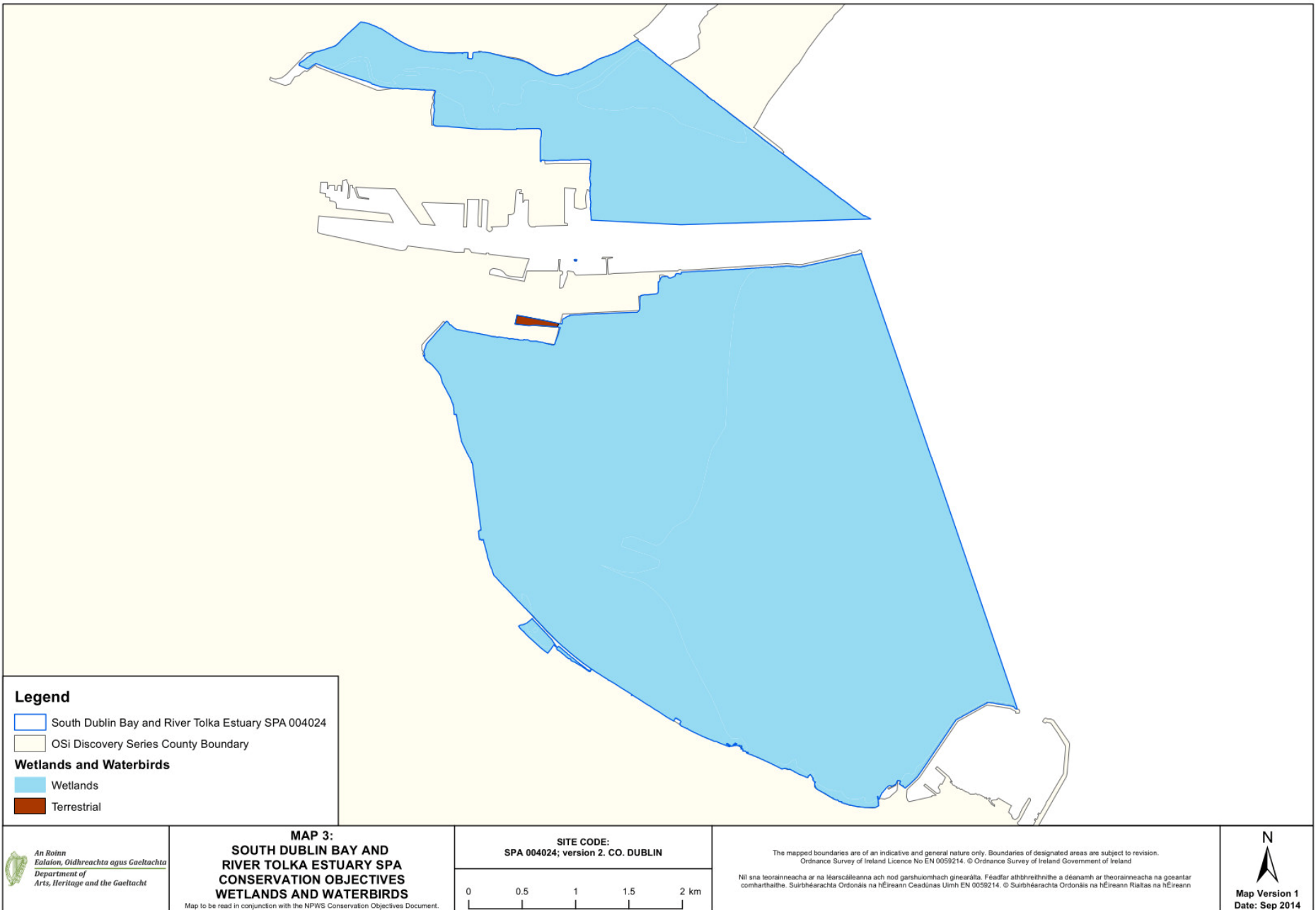
- *Habitat modification: activities that modify discreet areas or the overall habitat(s) within the SPA in terms of how one or more of the listed species use the site (e.g. as a feeding resource) could result in the displacement of these species from areas within the SPA and/or a reduction in their numbers (for further discussion on this topic please refer to Section 5.4).*
- *Disturbance: anthropogenic disturbance that occurs in or near the site and is either singular or cumulative in nature could result in the displacement of one or more of the listed waterbird species from areas within the SPA, and/or a reduction in their numbers (for further discussion on this topic please refer to Section 5.4).*
- *Ex-situ factors: several of the listed waterbird species may at times use habitats situated within the immediate hinterland of the SPA or in areas ecologically connected to it. The reliance on these habitats will vary from species to species and from site to site. Significant habitat change or increased levels of disturbance within these areas could result in the displacement of one or more of the listed waterbird species from areas within the SPA, and/or a reduction in their numbers (for further information on this topic please refer to Section 5.2).*

*Objective 2. To maintain the favourable conservation condition of the wetland habitat at North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA as a resource for the regularly-occurring migratory waterbirds that utilise these areas.*

*This objective is defined by the following attributes and targets:*

- *To be favourable, the permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 3,904 ha, other than that occurring from natural patterns of variation.*

*This objective seeks to maintain the permanent extent of the wetland habitats that are contained within the boundary of these two SPAs, and which constitute an important resource for regularly-occurring migratory waterbirds (note that the total designated area also contains some non-wetland habitat).'*



## North Bull Island SPA (Site code: 004006)

As outlined in the North Bull Island SPA Site Synopsis<sup>10</sup> (NPWS, version date 25.03.2014)

*'This site covers all of the inner part of north Dublin Bay, with the seaward boundary extending from the Bull Wall lighthouse across to Drumleck Point at Howth Head. The North Bull Island sand spit is a relatively recent depositional feature, formed as a result of improvements to Dublin Port during the 18th and 19th centuries. It is almost 5 km long and 1 km wide and runs parallel to the coast between Clontarf and Sutton. Part of the interior of the island has been converted to golf courses.*

*Saltmarsh extends along the length of the landward side of the island and provides the main roost site for wintering birds in Dublin Bay. The island shelters two intertidal lagoons which are divided by a solid causeway. These lagoons provide the main feeding grounds for the wintering waterfowl. The sediments of the lagoons are mainly sands with a small and varying mixture of silt and clay. Green algal mats (*Ulva* spp.) are a feature of the flats during summer. These sediments have a rich macro-invertebrate fauna, with high densities of Lugworm (*Arenicola marina*) and Ragworm (*Hediste diversicolor*).*

*The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Light-bellied Brent Goose, Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Golden Plover, Grey Plover, Knot, Sanderling, Dunlin, Black-tailed Godwit, Bar-tailed Godwit, Curlew, Redshank, Turnstone and Black-headed Gull. The site is also of special conservation interest for holding an assemblage of over 20,000 wintering waterbirds. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.*

*The North Bull Island SPA is of international importance for waterfowl on the basis that it regularly supports in excess of 20,000 waterfowl. The site supports internationally important populations of three species, Light-bellied Brent Goose (1,548), Black-tailed Godwit (367) and Bar-tailed Godwit (1,529) - all figures are mean peaks for the five winters between 1995/96 and 1999/2000. The site is one of the most important in the country for Light-bellied Brent Goose. A further 14 species have populations of national importance – Shelduck (1,259), Teal (953), Pintail (233), Shoveler (141), Oystercatcher (1,784), Grey Plover (517), Golden Plover (2,033), Knot (2,837), Sanderling (141), Dunlin (4,146), Curlew (937), Redshank (1,431), Turnstone (157) and Black-headed Gull (2,196). The populations of Pintail and Knot are of particular note as they comprise 14% and 10% respectively of the all-Ireland population totals. Other species that occur regularly in winter include Grey Heron, Little Egret, Cormorant, Wigeon, Goldeneye, Red-breasted Merganser, Ringed Plover and Greenshank. Gulls are a feature of the site during winter and, along with the nationally important population of Black-headed Gull (2,196), other species that occur include Common Gull (332) and Herring Gull (331). While some of the birds also frequent South Dublin Bay and the River Tolka Estuary for feeding and/or roosting purposes, the majority remain within the site for much of the winter. The wintering bird populations have been monitored more or less continuously since the late 1960s and the site is now surveyed each winter as part of the larger Dublin Bay complex.*

*The North Bull Island SPA is a regular site for passage waders, especially Ruff, Curlew Sandpiper and Spotted Redshank. These are mostly observed in single figures in autumn but occasionally in spring or winter.*

*The site formerly had an important colony of Little Tern but breeding has not occurred in recent years. Several pairs of Ringed Plover breed, along with Shelduck in some years. Breeding passerines include Skylark, Meadow Pipit, Stonechat and Reed Bunting. The island is a regular wintering site for Short-eared Owl, with up to 5 present in some winters.*

*The North Bull Island SPA is an excellent example of an estuarine complex and is one of the top sites in Ireland for wintering waterfowl. It is of international importance on account of both the total number of waterfowl and the individual populations of Light-bellied Brent Goose, Black-tailed Godwit and Bar-tailed Godwit that use it. Also of significance is the regular presence of several species that are listed on Annex I of the E.U. Birds Directive, notably Golden Plover and Bar-tailed Godwit, but also Ruff and Short-eared Owl. North Bull Island is a Ramsar Convention site, and part of the North Bull Island SPA is a Statutory Nature Reserve and a Wildfowl Sanctuary.'*

The Natura 2000 Standard Data Form (2020)<sup>11</sup> states that:

*'The North Bull Island sand spit is a relatively recent depositional feature, formed as a result of improvements to Dublin Port during the 18th and 19th centuries. It is almost 5km long and 1km wide and runs parallel to the*

<sup>10</sup> <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004006.pdf>

<sup>11</sup> <https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF004006.pdf>

coast between Clontarf and Sutton. The sediment which forms the island is predominantly glacial in origin and siliceous in nature. A well-developed dune system runs the length of the island, with good examples of embryonic, shifting marram and fixed dunes, as well as excellent examples of humid dune slacks. Extensive salt marshes also occur. Between the island and the mainland occur two sheltered intertidal areas which are separated by a solid causeway constructed in 1964. The seaward side of the island has a fine sandy beach. A substantial area of shallow marine water is included in the site. Part of the interior of the island has been converted to golf courses. The proximity of the North Bull Island to Dublin City results in it being a very popular recreational area. It is also very important for educational and research purposes. Nature conservation is a main landuse within the site.

The site is among the top ten sites for wintering waterfowl in the country. It supports internationally important populations of *Branta bernicla hrota* and *Limosa lapponica* and is the top site in the country for both of these species. A further 14 species have populations of national importance, with particular notable numbers of *Tadorna tadorna* (8.5% of national total), *Anas acuta* (11.6% of national total), *Pluvialis squatarola* (6.9% of national total), *Calidris canutus* (10.5% of national total). North Bull Island SPA is a regular site for passage waders such as *Philomachus pugnax*, *Calidris ferruginea* and *Tringa erythropus*. The site supports *Asio flammeus* in winter. Formerly the site had an important colony of *Sterna albifrons* but breeding has not occurred in recent years. The site provides both feeding and roosting areas for the waterfowl species. Habitat quality for most of the estuarine habitats is very good. The site has a population of the rare *Petalophyllum ralfsii* which is the only known station away from the western seaboard as well as five Red Data Book vascular plant species and four bryophyte species. It is nationally important for three insect species. Wintering bird populations have been monitored more or less continuously since the late 1960s, and the other scientific interests of the site have also been well documented. Future prospects are good owing to various designations assigned to site.'

The North Bull Island SPA Conservation Objectives Supporting Document<sup>12</sup> (NPWS, 2014) states the following:

*'North Bull Island lies roughly parallel to the shore and is a low-lying sandy spit, about 4.85 km long and 0.70 km wide (McCorry & Ryle, 2009a). It is a relatively recent geomorphological feature having emerged as a result of the build up of sediment over the last 200 years following the construction of the South and North Bull walls during the 18th and 19th centuries. The North Bull Wall marks the southern boundary of the island and is connected to the mainland by a wooden bridge. The island is actively accreting (Ryle et al. 2009a). A sandy beach, Dollymount Strand, occurs on the seaward side of the island and intertidal mudflats occur on the inner (mainland side) fringed by saltmarsh. A causeway built in 1965 provides the main access to the island and divides the intertidal flats into two areas known as the North and South Bull lagoons. Both of these are covered completely by most tides and are drained by permanent channels; the southern lagoon fills and empties beneath Bull Bridge, while water in the northern lagoon is channelled in and out through Sutton Creek (Harris, 1977). These lagoons provide the main feeding grounds for the wintering waterfowl while the fringing saltmarsh provides the main roost site for wintering birds in Dublin Bay. Macroalgal mats of filamentous *Ulva* spp. (formerly *Enteromorpha* spp.) 1 are prevalent.*

*North Bull Island is one of the finest sand dune systems in Ireland and is internationally important in terms of conservation value (McCorry & Ryle, 2009a). It has several high quality examples of rare and threatened coastal habitats and a wealth of biodiversity, which includes several habitats and species listed in Annexes I and II of the EU Habitats Directive. As a consequence, North Bull Island is afforded several other nature conservation designations alongside its status as a Special Protection Area. It was designated as an official bird sanctuary under the Wild Bird Protection Act, 1931, the first bird sanctuary in Ireland (McCorry & Ryle, 2009a), and was established as a National Nature Reserve in 1988 (two parts covered by S.I. 231 and S. I. 232 of 1988). The site has been designated as part of a Special Area of Conservation (North Dublin Bay SAC - NPWS site code 000206). North Bull Island is also a Biogenetic Reserve (Council of Europe) and a UNESCO World Biosphere Reserve.'*

The following objectives have been identified:

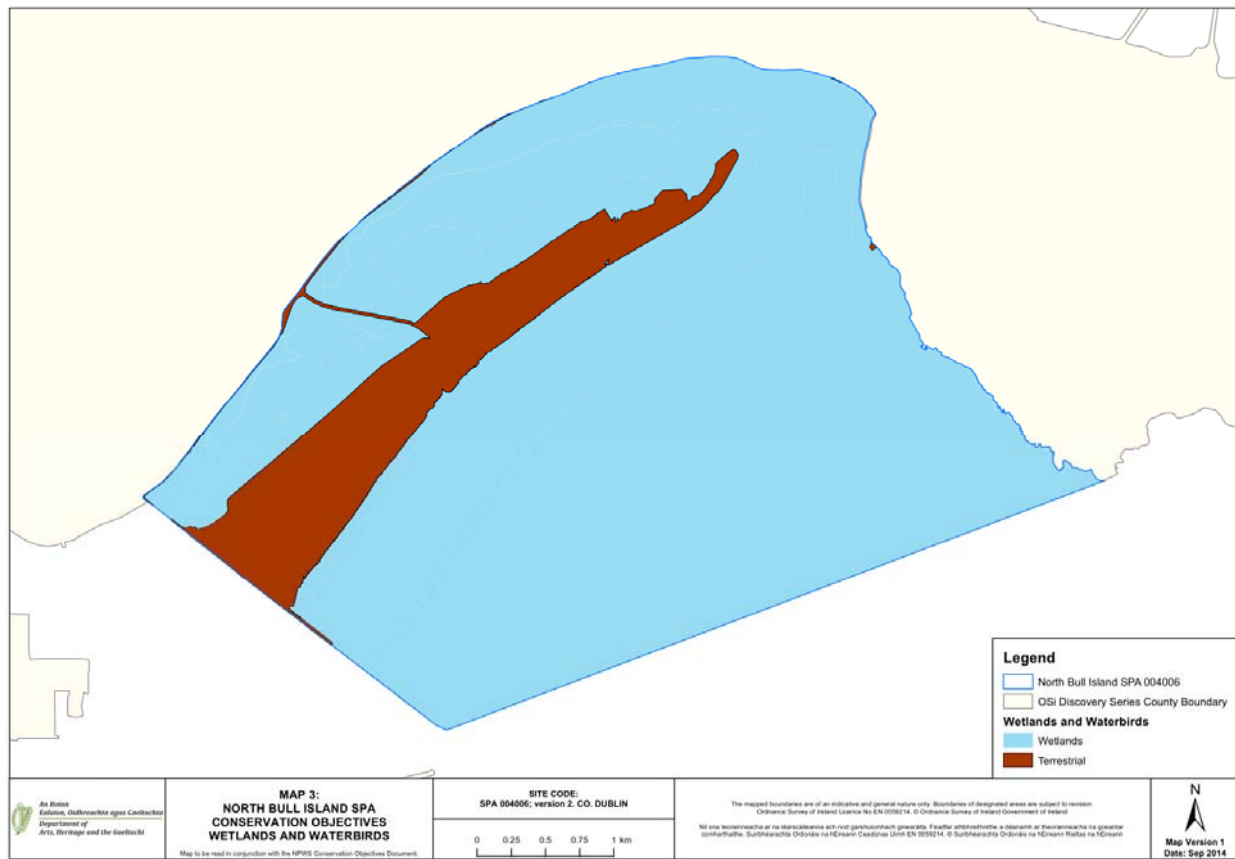
*'Objective 1: To maintain the favourable conservation condition of the non-breeding waterbird Special Conservation Interest species listed for North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA*

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[https://www.npws.ie/sites/default/files/publications/pdf/North%20Bull%20Island%20SPA%20\(004006\)%20Conservation%20objectives%20supporting%20document%20-%20\[Version%201\].pdf](https://www.npws.ie/sites/default/files/publications/pdf/North%20Bull%20Island%20SPA%20(004006)%20Conservation%20objectives%20supporting%20document%20-%20[Version%201].pdf)

Objective 2: To maintain the favourable conservation condition of the wetland habitat at North Bull Island SPA and South Dublin Bay and River Tolka Estuary SPA as a resource for the regularly-occurring migratory waterbirds that utilise these areas.'



The Qualifying Interests (QI) (Features of Interest), Special Conservation Interests (SCIs) for the SAC and SPA sites and the National conservation status of the Natura 2000 sites subject to the NIS are seen in Table 4. The site specific conservation Objectives for Natura 2000 sites are seen in Table 5.

**Table 4.** Qualifying Interests, Conservation Status, Management Objectives, Conditions underpinning site integrity for Natura 2000 sites

| Qualifying Interests, Conservation Status, Management Objectives, Conditions underpinning site integrity for relevant European sites |   |   |
|--|---|---|
| Natura 2000 Site Name & Code   | Qualifying Interests  | Current Conservation Status & Trend   |
| Special Areas of Conservation (SAC)  |   |   |
| <b>South Dublin Bay SAC (000210)</b>   | Mudflats and sandflats not covered by seawater at low tide [1140]<br>Annual vegetation of drift lines [1210]<br>Salicornia and other annuals colonising mud and sand [1310]<br>Embryonic shifting dunes [2110]  | Inadequate<br>Inadequate<br>Favourable<br>Inadequate  |
| <b>North Dublin Bay SAC (000206)</b>   | Mudflats and sandflats not covered by seawater at low tide [1140]<br>Annual vegetation of drift lines [1210]<br>Salicornia and other annuals colonising mud and sand [1310]<br>Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritima</i> ) [1330]<br>Mediterranean salt meadows ( <i>Juncetalia maritimi</i> ) [1410]<br>Embryonic shifting dunes [2110]<br>Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]<br>Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]<br>Humid dune slacks [2190]<br>Petalwort ( <i>Petalophyllum ralfsii</i> ) [1395]   | Inadequate<br>Inadequate<br>Favourable<br>Inadequate<br>Inadequate<br>Inadequate<br>Inadequate<br>Bad<br>Inadequate<br>Favourable |
| Special Protection Areas (SPA)   |   |   |
| <b>South Dublin Bay and River Tolka Estuary SPA (004024)</b>   | Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046]<br>Oystercatcher ( <i>Haematopus ostralegus</i> ) [A130]<br>Ringed Plover ( <i>Charadrius hiaticula</i> ) [A137]<br>Grey Plover ( <i>Pluvialis squatarola</i> ) [A141]<br>Knot ( <i>Calidris canutus</i> ) [A143]<br>Sanderling ( <i>Calidris alba</i> ) [A144]<br>Dunlin ( <i>Calidris alpina</i> ) [A149]<br>Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157]<br>Redshank ( <i>Tringa totanus</i> ) [A162]<br>Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179]<br>Roseate Tern ( <i>Sterna dougallii</i> ) [A192]<br>Common Tern ( <i>Sterna hirundo</i> ) [A193]<br>Arctic Tern ( <i>Sterna paradisaea</i> ) [A194]<br>Wetland and Waterbirds [A999] | Amber<br>Amber<br>Green<br>Amber<br>Amber<br>Green<br>Red<br>Amber<br>Red<br>Red<br>Red<br>Amber<br>Amber<br>Amber<br>N/A         |

| Qualifying Interests, Conservation Status, Management Objectives, Conditions underpinning site integrity for relevant European sites |   |                                     |
|--|---|-------------------------------------|
| Natura 2000 Site Name & Code   | Qualifying Interests  | Current Conservation Status & Trend |
| <b>North Bull Island SPA (004006)</b>  | Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046] | Amber                               |
|  | Shelduck ( <i>Tadorna tadorna</i> ) [A048]                        | Amber                               |
|  | Teal ( <i>Anas crecca</i> ) [A052]                                | Amber                               |
|  | Pintail ( <i>Anas acuta</i> ) [A054]                              | Red                                 |
|  | Shoveler ( <i>Anas clypeata</i> ) [A056]                          | Red                                 |
|  | Oystercatcher ( <i>Haematopus ostralegus</i> ) [A130]             | Amber                               |
|  | Golden Plover ( <i>Pluvialis apricaria</i> ) [A140]               | Red                                 |
|  | Grey Plover ( <i>Pluvialis squatarola</i> ) [A141]                | Amber                               |
|  | Knot ( <i>Calidris canutus</i> ) [A143]                           | Amber                               |
|  | Sanderling ( <i>Calidris alba</i> ) [A144]                        | Green                               |
|  | Dunlin ( <i>Calidris alpina</i> ) [A149]                          | Red                                 |
|  | Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156]               | Amber                               |
|  | Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157]              | Amber                               |
|  | Curlew ( <i>Numenius arquata</i> ) [A160]                         | Red                                 |
|  | Redshank ( <i>Tringa totanus</i> ) [A162]                         | Red                                 |
| Turnstone ( <i>Arenaria interpres</i> ) [A169]   | Green   |                                     |
| Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179]   | Red   |                                     |
| Wetland and Waterbirds [A999]  | N/A   |                                     |

Table 5. Site specific conservation objectives for Natura 2000 sites

| South Dublin Bay SAC (000210)   |                       |  |
|---|-----------------------|--|
| Attribute   | Measure               | Target   |
| Mudflats and sandflats not covered by water at low tide [1140] (Maintain the favourable conservation condition) |                       |  |
| Habitat area  | Hectares              | The permanent habitat area is stable or increasing, subject to natural processes                                       |
| Community extent  | Hectares              | Maintain the extent of the <i>Zostera</i> -dominated community, subject to natural processes                           |
| Community structure: <i>Zostera</i> density   | Shoots/m <sup>2</sup> | Conserve the high quality of the <i>Zostera</i> -dominated community, subject to natural processes                     |
| Community distribution  | Hectares              | Conserve the following community types in a natural condition: Fine sands with <i>Angulus tenuis</i> community complex |



| North Dublin Bay SAC (000206)   |   |  |
|---|---|--|
| Attribute   | Measure   | Target   |
| Mudflats and sandflats not covered by water at low tide [1140] (Maintain the favourable conservation condition)   |   |  |
| Habitat area  | Hectares  | The permanent habitat area is stable or increasing, subject to natural processes   |
| Community extent  | Hectares  | Maintain the extent of the <i>Mytilus edulis</i> -dominated community, subject to natural processes  |
| Community structure: <i>Mytilus edulis</i> density  | Individuals/m <sup>2</sup>                                      | Conserve the high quality of the <i>Mytilus edulis</i> -dominated community, subject to natural processes  |
| Community distribution  | Hectares  | Conserve the following community types in a natural condition: Fine sand to sandy mud with <i>Pygospio elegans</i> and <i>Crangon crangon</i> community complex; Fine sand with <i>Spio martinensis</i> community complex                |
| Annual vegetation of drift lines [1210] (Restore the favourable conservation condition)   |   |  |
| Habitat area  | Hectares  | Area increasing, subject to natural processes, including erosion and succession  |
| Habitat distribution  | Occurrence  | No decline, or change in habitat distribution, subject to natural processes  |
| Physical structure: functionality and sediment supply   | Presence/ absence of physical barriers                          | Maintain the natural circulation of sediment and organic matter, without any physical obstructions   |
| Vegetation structure: zonation  | Occurrence  | Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession   |
| Vegetation composition: typical species and subcommunities  | Percentage cover at a representative number of monitoring stops | Maintain the presence of species-poor communities with typical species: sea rocket ( <i>Cakile maritima</i> ), sea sandwort ( <i>Honckenya peploides</i> ), prickly saltwort ( <i>Salsola kali</i> ) and oraches ( <i>Atriplex</i> spp.) |
| Vegetation composition: negative indicator species  | Percentage cover  | Negative indicator species (including non-natives) to represent less than 5% cover   |
| Salicornia and other annuals colonizing mud and sand [1310] (Restore the favourable conservation condition of Salicornia and other annuals colonizing mud and sand) |   |  |
| Habitat area  | Hectares  | Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: North Bull Island 29.10 ha.  |
| Habitat distribution  | Occurrence  | No decline, or change in habitat distribution, subject to natural processes  |
| Physical structure: sediment supply   | Presence/ absence of physical barriers                          | Maintain, or where necessary restore, natural circulation of sediment and organic matter, without any physical obstructions  |
| Physical structure: creeks and pans   | Occurrence  | Maintain creek and pan structure, subject to natural processes, including erosion and succession   |

| North Dublin Bay SAC (000206)   |   |  |
|---|---|--|
| Attribute   | Measure   | Target   |
| Physical structure: flooding regime   | Hectares flooded; frequency                                     | Maintain natural tidal regime  |
| Vegetation structure: zonation  | Occurrence  | Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession         |
| Vegetation structure: vegetation height                                       | Centimetres   | Maintain structural vegetation with sward  |
| Vegetation structure: vegetation cover  | Percentage cover at a representative number of monitoring stops | Maintain more than 90% of area outside creeks vegetated  |
| Vegetation composition: typical species and sub-communities                   | Percentage cover  | Maintain the presence of species-poor communities listed in SMP (McCorry and Ryle, 2009)   |
| Vegetation structure: negative indicator species – <i>Spartina anglica</i>    | Hectares  | No significant expansion of common cordgrass ( <i>Spartina anglica</i> ), with an annual spread of less than 1%.                           |
| Atlantic salt meadows [1330] (Maintain the favourable conservation condition) |   |  |
| Habitat area  | Hectares  | Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: North Bull Island 81.84ha. |
| Habitat distribution  | Occurrence  | No decline, or change in habitat distribution, subject to natural processes  |
| Physical structure: sediment supply   | Presence/ absence of physical barriers                          | Maintain natural circulation of sediments and organic matter, without any physical obstructions  |
| Physical structure: creeks and pans   | Occurrence  | Maintain creek and pan structure, subject to natural processes, including erosion and succession   |
| Physical structure: flooding regime   | Hectares flooded; frequency                                     | Maintain natural tidal regime  |
| Vegetation structure: zonation  | Occurrence  | Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession         |
| Vegetation structure: vegetation height                                       | Centimetres   | Maintain structural vegetation with sward  |
| Vegetation structure: vegetation cover  | Percentage cover at a representative number of monitoring stops | Maintain more than 90% of area outside creeks vegetated  |

| North Dublin Bay SAC (000206)  |   |  |
|--|---|--|
| Attribute  | Measure   | Target   |
| Vegetation composition: typical species and sub-communities                        | Percentage cover at a representative number of monitoring stops | Maintain range of sub-communities with typical species listed in SMP (McCorry and Ryle, 2009)  |
| Vegetation structure: negative indicator species – <i>Spartina anglica</i>         | Hectares  | No significant expansion of common cordgrass ( <i>Spartina anglica</i> ), with an annual spread of less than 1%.   |
| Mediterranean salt meadows [1410] (Maintain the favourable conservation condition) |   |  |
| Habitat area   | Hectares  | Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: North Bull Island – 7.98ha.                      |
| Habitat distribution   | Occurrence  | No decline, or change in habitat distribution, subject to natural processes  |
| Physical structure: sediment supply  | Presence/ absence of physical barriers                          | Maintain/restore natural circulation of sediments and organic matter, without any physical obstructions  |
| Physical structure: creeks and pans  | Occurrence  | Maintain creek and pan structure, subject to natural processes, including erosion and succession   |
| Physical structure: flooding regime  | Hectares flooded; frequency                                     | Maintain natural tidal regime  |
| Vegetation structure: zonation   | Occurrence  | Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession                                   |
| Vegetation structure: vegetation height  | Centimetres   | Maintain structural vegetation with sward  |
| Vegetation structure: vegetation cover   | Percentage cover at a representative number of monitoring stops | Maintain more than 90% of area outside creeks vegetated  |
| Vegetation composition: typical species and sub-communities                        | Percentage cover at a representative number of monitoring stops | Maintain range of sub-communities with typical species listed in SMP (McCorry and Ryle, 2009)  |
| Vegetation structure: negative indicator species – <i>Spartina anglica</i>         | Hectares  | No significant expansion of common cordgrass ( <i>Spartina anglica</i> ), with an annual spread of less than 1%.   |
| Embryonic shifting dunes [2110] (Restore the favourable conservation condition)    |   |  |
| Habitat area   | Hectares  | Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: North Bull Island – 2.64ha; South Bull – 3.43ha. |

| North Dublin Bay SAC (000206)  |   |  |
|--|---|--|
| Attribute  | Measure   | Target   |
| Habitat distribution   | Occurrence  | No decline, or change in habitat distribution, subject to natural processes  |
| Physical structure: functionality and sediment supply  | Presence/ absence of physical barriers                          | Maintain the natural circulation of sediment and organic matter, without any physical obstructions   |
| Vegetation structure: zonation   | Occurrence  | Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession   |
| Vegetation composition: plant health of foredune grasses   | Percentage Cover  | More than 95% of sand couch ( <i>Elytrigia juncea</i> ) and/or lyme grass ( <i>Leymus arenarius</i> ) should be healthy (i.e., green plant parts above ground and flowering heads present) |
| Vegetation composition: typical species and sub-communities  | Percentage cover at a representative number of monitoring stops | Maintain the presence of species-poor communities with typical species: sand couch ( <i>Elytrigia juncea</i> ) and/or lyme grass ( <i>Leymus arenarius</i> )                               |
| Vegetation structure: negative indicator species   | Percentage Cover  | Negative indicator species (including non-native species) to represent less than 5% cover  |
| Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] (Restore the favourable conservation condition) |   |  |
| Habitat area   | Hectares  | Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: North Bull Island – 2.20ha; South Bull – 0.97ha.                           |
| Habitat distribution   | Occurrence  | No decline, or change in habitat distribution, subject to natural processes  |
| Physical structure: functionality and sediment supply  | Presence/ absence of physical barriers                          | Maintain the natural circulation of sediment and organic matter, without any physical obstructions   |
| Vegetation structure: zonation   | Occurrence  | Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession   |
| Vegetation composition: plant health of dune grasses   | Percentage Cover  | 95% of marram grass ( <i>Ammophila arenaria</i> ) and/or lyme-grass ( <i>Leymus arenarius</i> ) should be healthy (i.e. green plant parts above ground and flowering heads present)        |
| Vegetation composition: typical species and sub-communities  | Percentage cover at a representative number of monitoring stops | Maintain the presence of species-poor communities dominated by marram grass ( <i>Ammophila arenaria</i> ) and/or lyme-grass ( <i>Leymus arenarius</i> )                                    |
| Vegetation structure: negative indicator species   | Percentage Cover  | Negative indicator species (including non-native species) to represent less than 5% cover  |
| Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] (Restore the favourable conservation condition)                     |   |  |

| North Dublin Bay SAC (000206)   |   |   |
|---|---|---|
| Attribute   | Measure   | Target  |
| Habitat area  | Hectares  | Area stable or increasing, subject to natural processes, including erosion and succession. For sub-site mapped: North Bull – 40.29ha; South Bull – 64.56ha. |
| Habitat distribution  | Occurrence  | No decline, or change in habitat distribution, subject to natural processes   |
| Physical structure: functionality and sediment supply                                       | Presence/ absence of physical barriers                          | Maintain the natural circulation of sediment and organic matter, without any physical obstructions  |
| Vegetation structure: zonation  | Occurrence  | Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession                              |
| Vegetation structure: bare ground   | Percentage cover  | Bare ground should not exceed 10% of fixed dune habitat, subject to natural processes   |
| Vegetation structure: sward height  | Centimetres   | Maintain structural variation within sward  |
| Vegetation composition: typical species and sub-communities                                 | Percentage cover at a representative number of monitoring stops | Maintain range of sub-communities with typical species listed in Delaney et. al. (2013)   |
| Vegetation composition: negative indicator species (including <i>Hippophae rhamnoides</i> ) | Percentage Cover  | Negative indicator species (including non-native species) to represent less than 5% cover   |
| Vegetation composition: scrub/trees   | Percentage Cover  | No more than 5% cover or under control  |
| Humid dune slacks [2190] (Restore the favourable conservation condition)                    |   |   |
| Habitat area  | Hectares  | Area increasing, subject to natural processes, including erosion and succession. For sub-sites mapped: North Bull – 3.96ha; South Bull – 9.15ha.            |
| Habitat distribution  | Occurrence  | No decline, or change in habitat distribution, subject to natural processes   |
| Physical structure: functionality and sediment supply                                       | Presence/ absence of physical barriers                          | Maintain the natural circulation of sediment and organic matter, without any physical obstructions  |
| Physical structure: hydrological and flooding regime  | Water table levels; groundwater fluctuations (metres)           | Maintain natural hydrological regime  |
| Vegetation structure: zonation  | Occurrence  | Maintain range of coastal habitats including transitional zones, subject to natural processes including erosion and succession                              |
| Vegetation structure: bare ground   | Percentage cover  | Bare ground should not exceed 5% of dune slack habitat, with the exception of pioneer slacks which can have up to 20% bare ground                           |

| North Dublin Bay SAC (000206)  |   |  |
|--|---|--|
| Attribute  | Measure   | Target   |
| Vegetation structure: vegetation height  | Centimetres   | Maintain structural variation within sward   |
| Vegetation composition: typical species and sub-communities  | Percentage cover at a representative number of monitoring stops | Maintain range of sub-communities with typical species listed in Delaney et. al. (2013)  |
| Vegetation composition: cover of <i>Salix repens</i>   | Percentage cover; centimetres                                   | Maintain less than 40% cover of creeping willow ( <i>Salix repens</i> )  |
| Vegetation composition: negative indicator species   | Percentage Cover  | Negative indicator species (including non-native species) to represent less than 5% cover  |
| Vegetation composition: scrub/trees  | Percentage Cover  | No more than 5% cover or under control   |
| Petalwort ( <i>Petalophyllum ralfsii</i> ) [1395] (Maintain the favourable conservation condition) |   |  |
| Distribution of populations  | Number and geographical spread of populations                   | No decline   |
| Population size  | Number of individuals   | No decline   |
| Age of suitable habitat  | Hectares  | No decline   |
| Hydrological conditions: soil moisture   | Occurrence  | Maintain hydrological conditions so that substrate is kept moist and damp throughout the year, but not subject to prolonged inundation by flooding in winter |
| Vegetation structure: height and cover   | Centimetres and percentage                                      | Maintain open, low vegetation with a high percentage of bryophytes (small acrocarps and liverwort turf) and bare ground                                      |

| South Dublin Bay and River Tolka Estuary SPA (004024)   |                   |   |
|---|-------------------|---|
| Attribute   | Measure           | Target  |
| Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046], Oystercatcher ( <i>Haematopus ostralegus</i> ) [A130], Ringed Plover ( <i>Charadrius hiaticula</i> ) [A137], Knot ( <i>Calidris canutus</i> ) [A143], Sanderling ( <i>Calidris alba</i> ) [A144], Dunlin ( <i>Calidris alpina alpina</i> ) [A149], Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157], Redshank ( <i>Tringa totanus</i> ) [A162], Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179] (Maintain the favourable conservation condition)<br>Note: Grey Plover ( <i>Pluvialis squatarola</i> ) [A141] is proposed for removal from the list of SCI's for the site so no site specific conservation objective is included for the species |                   |   |
| Population Trend  | Percentage Change | Long term population trend stable or increasing |

| South Dublin Bay and River Tolka Estuary SPA (004024)           |   |  |
|---|---|--|
| Attribute   | Measure   | Target   |
| Distribution  | Range, timing and intensity of use of areas                     | No significant decrease in the range, timing and intensity of use of areas by all of the above named species, other than that occurring from natural patterns of variation |
| Roseate Tern <i>Sterna dougallii</i> [A192]                     |   |  |
| Passage population: individuals                                 | Passage population: individuals                                 | Passage population: individuals  |
| Distribution: roosting areas                                    | Distribution: roosting areas                                    | Distribution: roosting areas   |
| Prey biomass available  | Prey biomass available  | Prey biomass available   |
| Barriers to connectivity  | Barriers to connectivity  | Barriers to connectivity   |
| Disturbance at roosting site                                    | Disturbance at roosting site                                    | Disturbance at roosting site   |
| Common Tern <i>Sterna hirundo</i> [A193]                        |   |  |
| Breeding population abundance: apparently occupied nests (AONs) | Breeding population abundance: apparently occupied nests (AONs) | Breeding population abundance: apparently occupied nests (AONs)  |
| Productivity rate: fledged young per breeding pair              | Productivity rate: fledged young per breeding pair              | Productivity rate: fledged young per breeding pair   |
| Passage population: individuals                                 | Passage population: individuals                                 | Passage population: individuals  |
| Distribution: breeding colonies                                 | Distribution: breeding colonies                                 | Distribution: breeding colonies  |
| Distribution: roosting areas                                    | Number; location; area (hectares)                               | No significant decline   |
| Prey biomass available  | Kilogrammes   | No significant decline   |
| Barriers to connectivity  | Number; location; shape; area (hectares)                        | No significant increase  |
| Disturbance at breeding site                                    | Level of impact   | Human activities should occur at levels that do not adversely affect the breeding common tern population   |
| Disturbance at roosting site                                    | Level of impact   | Human activities should occur at levels that do not adversely affect the numbers of common tern among the post-breeding aggregation of terns                               |
| Arctic Tern <i>Sterna paradisaea</i> [A194]                     |   |  |
| Passage population: individuals                                 | Number  | No significant decline   |
| Distribution: roosting areas                                    | Number; location; area (hectares)                               | No significant decline   |
| Prey biomass available  | Kilogrammes   | No significant decline   |
| Barriers to connectivity  | Number; location; shape; area (hectares)                        | No significant increase  |

| South Dublin Bay and River Tolka Estuary SPA (004024)   |   |   |
|---|---|---|
| Attribute   | Measure                                     | Target  |
| Disturbance at roosting site  | Level of impact                             | Human activities should occur at levels that do not adversely affect the numbers of Arctic tern among the post-breeding aggregation of terns  |
| A999 Wetlands - To maintain the favourable conservation condition of the wetland habitat  |   |   |
| Habitat Area  | Hectares                                    | The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,192ha, other than that occurring from natural patterns of variation |
| North Bull Island SPA (004006)  |   |   |
| Attribute   | Measure                                     | Target  |
| Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046], Shelduck ( <i>Tadorna tadorna</i> ) [A048], Teal ( <i>Anas crecca</i> ) [A052], Pintail ( <i>Anas acuta</i> ) [A054], Shoveler ( <i>Anas clypeata</i> ) [A056], Oystercatcher ( <i>Haematopus ostralegus</i> ) [A130], Golden Plover ( <i>Pluvialis apricaria</i> ) [A140], Grey Plover ( <i>Pluvialis squatarola</i> ) [A141], Knot ( <i>Calidris canutus</i> ) [A143], Sanderling ( <i>Calidris alba</i> ) [A144], Dunlin ( <i>Calidris alpina alpina</i> ) [A149], Black-tailed Godwit ( <i>Limosa limosa</i> ) [A156], Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157], Curlew ( <i>Numenius arquata</i> ) [A160], Redshank ( <i>Tringa totanus</i> ) [A162], Turnstone ( <i>Arenaria interpres</i> ) [A169], Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179] (Maintain the favourable conservation condition) |   |   |
| Population Trend  | Percentage Change                           | Long term population trend stable or increasing   |
| Distribution  | Range, timing and intensity of use of areas | No significant decrease in the range, timing and intensity of use of areas by all of the above named species, other than that occurring from natural patterns of variation            |
| A999 Wetlands - To maintain the favourable conservation condition of the wetland habitat  |   |   |
| Habitat Area  | Hectares                                    | The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 1,713ha, other than that occurring from natural patterns of variation |



## Analysis of the Potential Impacts on Natura 2000 Sites.

The proposed development site is located at the ABB Site, Belgard Road, Tallaght, Dublin 24.

The site of c.0.898 ha is located at the former ABB Site, Belgard Road, Tallaght, Dublin 24, D24 KD78. The site is bound by Belgard Road (R113) to the east, Belgard Square North to the North and Belgard Square East to the west and Clarity House to the south.

The proposed development will consist of:

1. Demolition of all existing structures on site (with a combined gross floor area of c. 3625 sqm)
2. The construction of a mixed-use residential development set out in 3 No. blocks including a podium over a basement, ranging in height from 2 to 13 storeys (with core access above to roof terrace), comprising:
  - 334 no. residential units of which 118 No. will be Build to Rent (BTR) residential units, with associated amenities and facilities across the development,
  - 4 No. retail/café/restaurant units and 3 no. commercial spaces associated with the 3 no. live-work units (723 sqm combined),
  - Childcare facility (144 sq.m.),
  - 670 No. bicycle parking spaces including 186 visitor spaces; 117 car parking spaces (including 6 disabled spaces) are provided at ground floor and basement level.
  - The overall development has a Gross Floor Area of 29,784 sq.m.
  - Two (2) podium residential courtyards and three (3) public accessible pocket parks, two (2) to the North & one (1) to the South.
  - Linear Park (as a provision of the Tallaght Town Centre LAP) providing safe public pedestrian and cycling access between Belgard Rd and Belgard Square East
3. Of the total 334 residential units proposed, unit types comprise:

### *Block A (Build-to-Rent)*

- 91 no. 1 bed units
- 1 no. 2 bed 3 person units
- 26 no. 2 bed 4 person units

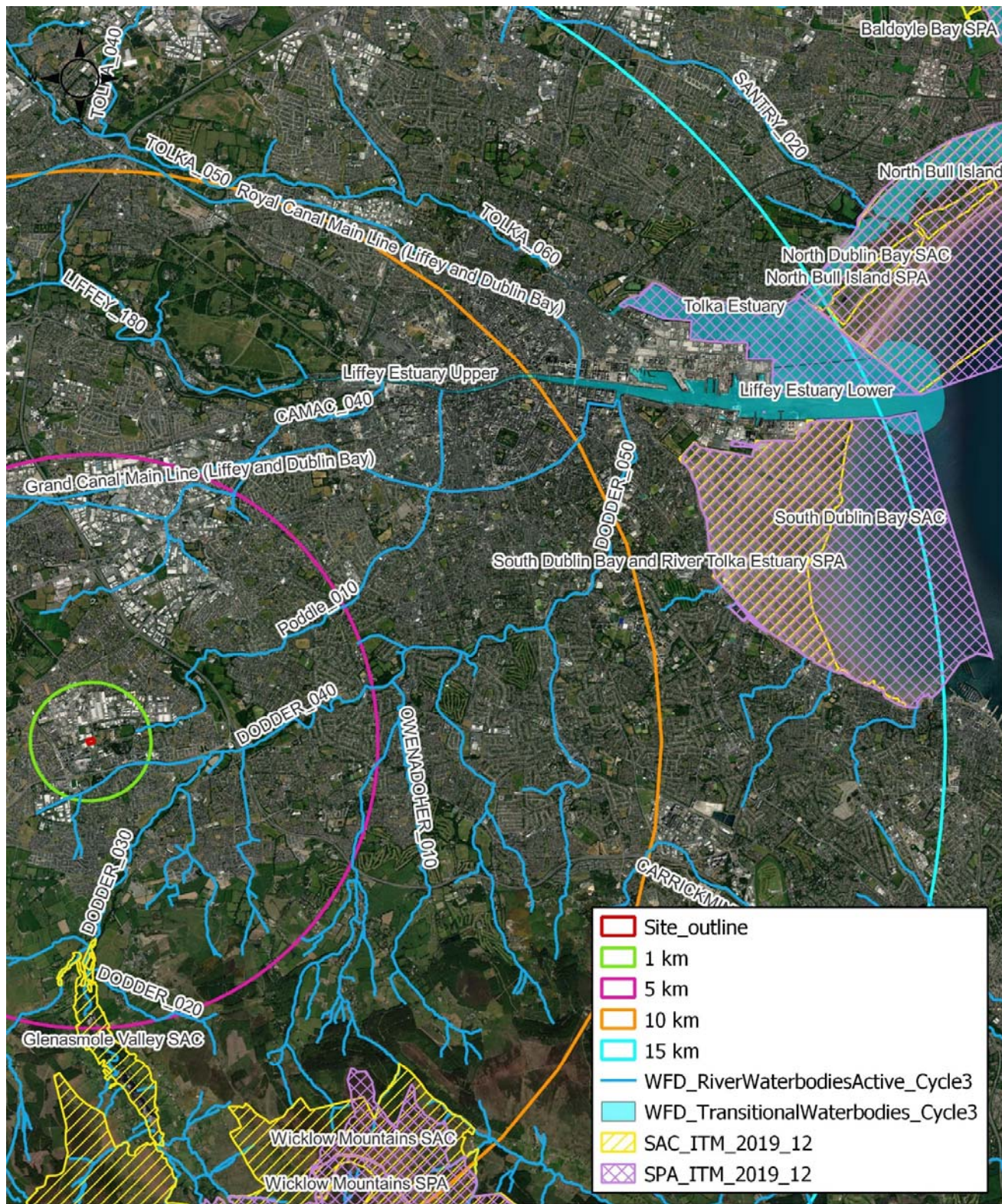
### *Blocks B & C*

- 2 no. live-work studio units
- 102 no. 1-bed units
- 12 no. 2-bed 3 person units
- 88 no. 2-bed 4 person units including 5 no. duplex units
- 1 no. 2-bed 4 person live-work unit
- 11 no. 3-bed units

4. All associated works, plant, services, utilities, PV panels and site hoarding during construction

The proposed site location and layout plan is seen in Figures 1-3.

The closest watercourse to the development is the Jobstown Stream/River Dodder, which is located approximately 689 m south of the proposed development. The River Poddle is located approximately 775 m to the east of the proposed development (Figure 13). There is potential for pollutants, during construction and operation of the proposed development, to enter the surface water run off network. The surface water from the site will be discharged to the River Dodder, which ultimately outfalls to the marine environment at Dublin Bay. There is, therefore, potential for the surface water discharge from the proposed development site to impact the conservation objectives of the South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA.



Project: Belgard Road  
 Location: Talaght, Dublin 24, Co. Dublin  
 Date: 08th December 2021  
 Drawn By: Bryan Deegan (Altemar)

**ALTEMAR**  
 Marine & Environmental Consultancy



Figure 13. Watercourses and potential pathways to designated European sites at Dublin Bay.

## Construction Impacts

In the absence of mitigation measures the construction of the proposed development would impact on the existing ecology of the site, the surrounding area, the Jobstown Stream/River Dodder and the downstream designated European sites (South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA), via the surface water network leading to Dublin Bay. The proposed development involves the demolition of all existing structures on site, re-profiling, groundworks and the construction of a mixed-use residential development, with the potential for runoff, dust, light and noise impacts that could impact on trees proximate to the site, and other biodiversity due to potential for downstream impacts. Out of an abundance of caution it is considered that there is potential for effects on the qualifying interests of the designated sites in the absence of mitigation measures. Construction phase mitigation measures are required on site in relation to the protection and monitoring of the water quality entering the Jobstown Stream/River Dodder, via the surface water discharge. There is potential for silt laden runoff, dust, or contamination to enter the River Dodder and surface water network, with potential for impacts on South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA.

### *Designated European Sites*

The proposed development is not within a designated conservation site. However, there is potential for pollutants to enter the surface water network, which discharges to the Jobstown Stream/River Dodder. The River Dodder ultimately outfalls to the marine environment at Dublin Bay. Therefore, there is an indirect hydrological pathway from the proposed development to the designated European sites at Dublin Bay (South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA).

The construction of the proposed development and the proposal to discharge surface water from the site to the River Dodder would potentially impact on the watercourse through silt laden runoff and pollution. These potential construction impacts on the European site are seen in Table 6. Mitigation measures are required to ensure that the proposed development will not adversely affect the integrity of the European Sites on the conservation objectives of the European site.

## Operational Impacts

Once the proposed development is complete and in the operational phase, the surface water runoff will discharge to the River Dodder, after on site attenuation and at a restricted rate. The foul water from the site will ultimately be discharged to Ringsend WwTP, where it will be treated.

### *Designated European Sites.*

The proposed development is not within a designated conservation site. However, there is potential for pollutants to enter the surface water network, which discharges to the Jobstown Stream/ River Dodder. The River Dodder ultimately outfalls to the marine environment at Dublin Bay. Therefore, there is an indirect hydrological pathway from the proposed development to the designated European sites at Dublin Bay (South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA). Mitigation measures are required to ensure that the proposed development will not adversely affect the integrity of the European Sites.

**Table 6. Potential for adverse effects on the qualifying interests and conservation objectives of European sites.**

| Natura 2000 Site & Site Code       | Qualifying Interests  | Potential for Adverse Effects   |
|------------------------------------|---|---|
| <p><b>South Dublin Bay SAC</b></p> | <p>Mudflats and sandflats not covered by seawater at low tide [1140]<br/>                     Annual vegetation of drift lines [1210]<br/>                     Salicornia and other annuals colonising mud and sand [1310]<br/>                     Embryonic shifting dunes [2110]</p> | <p>Unmitigated works have the potential for downstream impacts on aquatic biodiversity and habitats of conservation importance through the introduction of silt and pollution. Demolition, site reprofiling, storage of topsoil or construction works in the vicinity of drains leading to the River Dodder could lead to dust, soil, pollution, or silt laden runoff entering the Jobstown Stream/River Dodder with potential downstream impacts. Contaminated surface water runoff on site during construction or operation may lead to silt, cement or contaminated materials from the site entering the Jobstown Stream/River Dodder with downstream impacts on the SAC. If on-site concrete production is required or cement works are carried out in the vicinity of Jobstown Stream/River Dodder, there is potential for contamination of Jobstown Stream/River Dodder. The use of plant and machinery, as well as the associated temporary storage of construction materials, oils, fuels and chemicals could lead to pollution on site or of the surface water leading to the River Dodder.</p> <p>Given the nature of the works, all of these effects would be expected to be localised in nature and restricted to the vicinity of the site. However, as the surface water run off from the site will discharge to the River Dodder and ultimately the marine environment at Dublin Bay and the surrounding European sites, without the presence of mitigation measures there is a potential for downstream effects if significant quantities of pollution or silt were introduced into the watercourse with potential for downstream impacts on South Dublin Bay SAC.</p> <p>Impacts on the SAC from upstream sources have the potential to directly impact on the qualifying interests of the SAC in the absence of mitigation measures. In the absence of mitigation measures there is the potential to impact on the distribution number and range of the following qualifying interests:</p> <ul style="list-style-type: none"> <li>• Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>• Annual vegetation of drift lines [1210]</li> <li>• Salicornia and other annuals colonising mud and sand [1310]</li> <li>• Embryonic shifting dunes [2110]</li> </ul> <p>Mitigation measures are required to remove the potential of adverse effects on the integrity of this SAC from in direct pathways via the surface water drainage network.</p> |

**Table 6. Potential for adverse effects on the qualifying interests and conservation objectives of European sites.**

| Natura 2000 Site & Site Code       | Qualifying Interests   | Potential for Adverse Effects   |
|------------------------------------|--|---|
| <p><b>North Dublin Bay SAC</b></p> | <p>Mudflats and sandflats not covered by seawater at low tide [1140]<br/>                     Annual vegetation of drift lines [1210]<br/>                     Salicornia and other annuals colonising mud and sand [1310]<br/>                     Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]<br/>                     Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]<br/>                     Embryonic shifting dunes [2110]<br/>                     Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]<br/>                     Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]<br/>                     Humid dune slacks [2190]<br/>                     Petalwort (<i>Petalophyllum ralfsii</i>) [1395]</p> | <p>Unmitigated works have the potential for downstream impacts on aquatic biodiversity and habitats of conservation importance through the introduction of silt and pollution. Demolition, site reprofiling, storage of topsoil or construction works in the vicinity of drains leading to the River Dodder could lead to dust, soil, pollution, or silt laden runoff entering the Jobstown Stream/River Dodder with potential downstream impacts. Contaminated surface water runoff on site during construction or operation may lead to silt, cement or contaminated materials from the site entering the Jobstown Stream/River Dodder with downstream impacts on the SAC. If on-site concrete production is required or cement works are carried out in the vicinity of Jobstown Stream/River Dodder, there is potential for contamination of Jobstown Stream/River Dodder. The use of plant and machinery, as well as the associated temporary storage of construction materials, oils, fuels and chemicals could lead to pollution on site or of the surface water leading to the River Dodder.</p> <p>Given the nature of the works, all of these effects would be expected to be localised in nature and restricted to the vicinity of the site. However, as the surface water run off from the site will discharge to the River Dodder and ultimately the marine environment at Dublin Bay and the surrounding European sites, without the presence of mitigation measures there is a potential for downstream effects if significant quantities of pollution or silt were introduced into the watercourse with potential for downstream impacts on the North Dublin Bay SAC. Impacts on the SAC from upstream sources have the potential to directly impact on the qualifying interests of the SAC in the absence of mitigation measures. In the absence of mitigation measures there is the potential to impact on the distribution number and range of the following qualifying interests:</p> <ul style="list-style-type: none"> <li>• Mudflats and sandflats not covered by seawater at low tide [1140]</li> <li>• Annual vegetation of drift lines [1210]</li> <li>• Salicornia and other annuals colonising mud and sand [1310]</li> <li>• Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]</li> <li>• Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</li> <li>• Embryonic shifting dunes [2110]</li> <li>• Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]</li> <li>• Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</li> <li>• Humid dune slacks [2190]</li> <li>• Petalwort (<i>Petalophyllum ralfsii</i>) [1395]</li> </ul> <p>Mitigation measures are required to remove the potential for adverse effects on the integrity of this SAC from indirect pathways via the surface water drainage network.</p> |

**Table 6. Potential for adverse effects on the qualifying interests and conservation objectives of European sites.**

| Natura 2000 Site & Site Code                        | Qualifying Interests  | Potential for Adverse Effects   |
|---|---|---|
| <b>South Dublin Bay and River Tolka Estuary SPA</b> | Light-bellied Brent Goose ( <i>Branta bernicla hrota</i> ) [A046]<br>Oystercatcher ( <i>Haematopus ostralegus</i> ) [A130]<br>Ringed Plover ( <i>Charadrius hiaticula</i> ) [A137]<br>Grey Plover ( <i>Pluvialis squatarola</i> ) [A141]<br>Knot ( <i>Calidris canutus</i> ) [A143]<br>Sanderling ( <i>Calidris alba</i> ) [A144]<br>Dunlin ( <i>Calidris alpina</i> ) [A149]<br>Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157]<br>Redshank ( <i>Tringa totanus</i> ) [A162]<br>Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179]<br>Roseate Tern ( <i>Sterna dougallii</i> ) [A192]<br>Common Tern ( <i>Sterna hirundo</i> ) [A193]<br>Arctic Tern ( <i>Sterna paradisaea</i> ) [A194]<br>Wetland and Waterbirds [A999] | <p>Unmitigated works have the potential for downstream impacts on aquatic biodiversity and habitats of conservation importance through the introduction of silt and pollution. Demolition, site reprofiling, storage of topsoil or construction works in the vicinity of drains leading to the River Dodder could lead to dust, soil, pollution, or silt laden runoff entering the Jobstown Stream/River Dodder with potential downstream impacts. Contaminated surface water runoff on site during construction or operation may lead to silt, cement or contaminated materials from the site entering the Jobstown Stream/River Dodder with downstream impacts on the SAC. If on-site concrete production is required or cement works are carried out in the vicinity of Jobstown Stream/River Dodder, there is potential for contamination of Jobstown Stream/River Dodder. The use of plant and machinery, as well as the associated temporary storage of construction materials, oils, fuels and chemicals could lead to pollution on site or of the surface water leading to the River Dodder.</p> <p>Given the nature of the works, all of these effects would be expected to be localised in nature and restricted to the vicinity of the site. However, as the surface water run off from the site will discharge to the River Dodder and ultimately the marine environment at Dublin Bay and the surrounding European sites, without the presence of mitigation measures there is a potential for downstream effects if significant quantities of pollution or silt were introduced into the watercourse with potential for downstream impacts on the South Dublin Bay and River Tolka Estuary SPA.</p> <p>Impacts on the SPA from upstream sources have the potential to adversely affect the integrity of the qualifying interests of the SPA In the absence of mitigation measures and there is the potential to impact on the distribution number and range of the following qualifying interests:</p> <ul style="list-style-type: none"> <li>• Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</li> <li>• Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</li> <li>• Ringed Plover (<i>Charadrius hiaticula</i>) [A137]</li> <li>• Grey Plover (<i>Pluvialis squatarola</i>) [A141]</li> <li>• Knot (<i>Calidris canutus</i>) [A143]</li> <li>• Sanderling (<i>Calidris alba</i>) [A144]</li> <li>• Dunlin (<i>Calidris alpina</i>) [A149]</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</li> <li>• Redshank (<i>Tringa totanus</i>) [A162]</li> <li>• Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</li> </ul> |

**Table 6. Potential for adverse effects on the qualifying interests and conservation objectives of European sites.**

| Natura 2000 Site & Site Code | Qualifying Interests   | Potential for Adverse Effects   |
|------------------------------|--|---|
|                              |  | <ul style="list-style-type: none"> <li>• Roseate Tern (<i>Sterna dougallii</i>) [A192]</li> <li>• Common Tern (<i>Sterna hirundo</i>) [A193]</li> <li>• Arctic Tern (<i>Sterna paradisaea</i>) [A194]</li> </ul> <p>In addition, wetlands could potentially be impacted through the introduction of silt and pollution. Mitigation measures are required to remove the potential of adverse effects on the integrity of this SPA from indirect pathways via the surface water drainage network.</p>   |
| <b>North Bull Island SPA</b> | <p>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</p> <p>Shelduck (<i>Tadorna tadorna</i>) [A048]</p> <p>Teal (<i>Anas crecca</i>) [A052]</p> <p>Pintail (<i>Anas acuta</i>) [A054]</p> <p>Shoveler (<i>Anas clypeata</i>) [A056]</p> <p>Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</p> <p>Golden Plover (<i>Pluvialis apricaria</i>) [A140]</p> <p>Grey Plover (<i>Pluvialis squatarola</i>) [A141]</p> <p>Knot (<i>Calidris canutus</i>) [A143]</p> <p>Sanderling (<i>Calidris alba</i>) [A144]</p> <p>Dunlin (<i>Calidris alpina</i>) [A149]</p> <p>Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</p> | <p>Unmitigated works have the potential for downstream impacts on aquatic biodiversity and habitats of conservation importance through the introduction of silt and pollution. Demolition, site reprofiling, storage of topsoil or construction works in the vicinity of drains leading to the River Dodder could lead to dust, soil, pollution, or silt laden runoff entering the Jobstown Stream/River Dodder with potential downstream impacts. Contaminated surface water runoff on site during construction or operation may lead to silt, cement or contaminated materials from the site entering the Jobstown Stream/River Dodder with downstream impacts on the SAC. If on-site concrete production is required or cement works are carried out in the vicinity of Jobstown Stream/River Dodder, there is potential for contamination of Jobstown Stream/River Dodder. The use of plant and machinery, as well as the associated temporary storage of construction materials, oils, fuels and chemicals could lead to pollution on site or of the surface water leading to the River Dodder.</p> <p>Given the nature of the works, all of these effects would be expected to be localised in nature and restricted to the vicinity of the site. However, as the surface water run off from the site will discharge to the River Dodder and ultimately the marine environment at Dublin Bay and the surrounding European sites, without the presence of mitigation measures there is a potential for downstream effects if significant quantities of pollution or silt were introduced into the watercourse with potential for downstream impacts on the North Bull Island SPA. Impacts on the SPA from upstream sources have the potential to directly impact on the qualifying interests of the SPA in the absence of mitigation measures. In the absence of mitigation measures there is the potential to impact on the distribution number and range of the following qualifying interests:</p> <ul style="list-style-type: none"> <li>• Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</li> <li>• Shelduck (<i>Tadorna tadorna</i>) [A048]</li> <li>• Teal (<i>Anas crecca</i>) [A052]</li> <li>• Pintail (<i>Anas acuta</i>) [A054]</li> <li>• Shoveler (<i>Anas clypeata</i>) [A056]</li> <li>• Oystercatcher (<i>Haematopus ostralegus</i>) [A130]</li> </ul> |

**Table 6. Potential for adverse effects on the qualifying interests and conservation objectives of European sites.**

| Natura 2000 Site & Site Code | Qualifying Interests  | Potential for Adverse Effects   |
|------------------------------|---|---|
|                              | Bar-tailed Godwit ( <i>Limosa lapponica</i> ) [A157]<br>Curlew ( <i>Numenius arquata</i> ) [A160]<br>Redshank ( <i>Tringa totanus</i> ) [A162]<br>Turnstone ( <i>Arenaria interpres</i> ) [A169]<br>Black-headed Gull ( <i>Chroicocephalus ridibundus</i> ) [A179]<br>Wetland and Waterbirds [A999] | <ul style="list-style-type: none"> <li>• Golden Plover (<i>Pluvialis apricaria</i>) [A140]</li> <li>• Grey Plover (<i>Pluvialis squatarola</i>) [A141]</li> <li>• Knot (<i>Calidris canutus</i>) [A143]</li> <li>• Sanderling (<i>Calidris alba</i>) [A144]</li> <li>• Dunlin (<i>Calidris alpina</i>) [A149]</li> <li>• Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</li> <li>• Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</li> <li>• Curlew (<i>Numenius arquata</i>) [A160]</li> <li>• Redshank (<i>Tringa totanus</i>) [A162]</li> <li>• Turnstone (<i>Arenaria interpres</i>) [A169]</li> <li>• Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</li> <li>• Wetland and Waterbirds [A999]</li> </ul> <p>Mitigation measures are required to remove the potential of adverse effects on the integrity of this SPA from indirect pathways via the surface water drainage network.</p> |



Table 7. Mitigation Measures to prevent impacts on European sites.

| Sensitive Receptors  | Potential Impacts on European Sites   | Mitigation Measures to Prevent Impacts on Natura 2000 sites  |
|----------------------|---|--|
| South Dublin Bay SAC | <ul style="list-style-type: none"> <li>• Habitat degradation</li> <li>• Dust deposition</li> <li>• Pollution</li> <li>• Silt ingress from site runoff</li> <li>• Downstream impacts</li> <li>• Negative impacts on the aquatic environment, habitats, aquatic species, bird fauna, and qualifying interests.</li> </ul> | <p>The accompanying EclA and OCMP outline the required mitigation measures in detail. These measures will be carried out. It should be noted that no additional measures other than those outlined in the EclA and OCMP are deemed necessary in the context of this Stage II AA. The outlined mitigation measures and ecological supervision and monitoring will prevent impacts on the River Dodder which would be seen as the pathway for potential impacts on European sites.</p> <p style="text-align: center;"><b>EclA</b></p> <p><b>Construction Phase Mitigation</b></p> <ul style="list-style-type: none"> <li>• <i>A project ecologist will be appointed to oversee all enabling and construction works.</i></li> <li>• <i>Confirmatory mammal surveys will be carried out pre-construction.</i></li> <li>• <i>Local watercourses (River Dodder) and drains will be protected from dust, silt and surface water throughout the works.</i></li> <li>• <i>Mitigation measures on site include dust control, stockpiling away from drains leading to public surface water networks</i></li> <li>• <i>Stockpiles and runoff areas following clearance will have suitable barriers to prevent runoff of fines into the drainage system and watercourses.</i></li> <li>• <i>Fuel, oil and chemical storage will be sited within a bunded area. Bunds will be kept clean and spills within the bund area will be cleaned immediately to prevent groundwater contamination. Any water-filled excavations that require pumping will not directly discharge to the surface water network. Prior to discharge of water from excavations adequate filtration will be provided to ensure no deterioration of water quality.</i></li> </ul> |
| North Dublin Bay SAC | <ul style="list-style-type: none"> <li>• Habitat degradation</li> <li>• Dust deposition</li> <li>• Pollution</li> <li>• Silt ingress from site runoff</li> <li>• Downstream impacts</li> <li>• Negative impacts on the aquatic environment, habitats, aquatic species, bird fauna, and qualifying interests.</li> </ul> | <ul style="list-style-type: none"> <li>• <i>Stockpiles and runoff areas following clearance will have suitable barriers to prevent runoff of fines into the drainage system</i></li> <li>• <i>Petrochemical interception and bunds in refuelling area</i></li> <li>• <i>Maintenance of any drainage structures (e.g. de-silting operations) will not result in the release of contaminated water to the surface water network.</i></li> <li>• <i>Sufficient onsite cleaning of vehicles prior to leaving the site and on nearby roads, will be carried out, particularly during groundworks.</i></li> <li>• <i>The Site Manager will be responsible for the pollution prevention programme and will ensure that at least daily checks are carried out to ensure compliance. A record of these checks will be maintained.</i></li> <li>• <i>The site compound will include a dedicated bund for the storage of dangerous substances including fuels, oils etc. Refuelling of vehicles/machinery will only be carried out within the bunded area.</i></li> <li>• <i>A project ecologist will be appointed and be consulted in relation to all onsite drainage during construction works.</i></li> <li>• <i>Concrete trucks, cement mixers or drums/bins are only permitted to wash out in designated wash out area greater than 50m from sensitive receptors including drains and drainage ditches.</i></li> <li>• <i>Spill containment equipment shall be available for use in the event of an emergency. The spill containment equipment shall be replenished if used and shall be checked on a scheduled basis.</i></li> </ul>  |

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| <p>South Dublin Bay and River Tolka Estuary SPA</p> | <ul style="list-style-type: none"> <li>• Habitat degradation</li> <li>• Dust deposition</li> <li>• Pollution</li> <li>• Silt ingress from site runoff</li> <li>• Downstream impacts</li> <li>• Negative impacts on the aquatic environment, habitats, aquatic species, bird fauna, and qualifying interests.</li> </ul> | <ul style="list-style-type: none"> <li>• <i>All site personnel will be trained in the importance of good environmental practices including reporting to the site manager when pollution, or the potential for pollution, is suspected. All persons working on-site will receive work specific induction in relation to surface water management and run off controls. Daily environmental toolbox talks / briefing sessions will be conducted to outline the relevant environmental control measures and to identify any environment risk areas/works.</i></li> <li>• <i>Environmental risks due to construction and operation of the proposed development do potentially exist, particularly in relation runoff from sloping site, drains that could lead to the watercourse. Ecological supervision will be required during excavation and enabling works stages.</i></li> <li>• <i>All oils, fuels and other hazardous liquid materials shall be clearly labelled and stored in an upright position in an enclosed bunded area within the proposed development site compound. The capacity of the bunded area shall conform with EPA Guidelines – hold 110% of the contents or 110% of the largest container whichever is greater;</i></li> <li>• <i>Drip trays will be turned upside down if not in use to prevent the collection of rainwater. Waters collected in drip trays will be assessed prior to discharge. If classified as contaminated, they shall be disposed by a permitted waste contractor in accordance with current waste management legal and regulatory requirements;</i></li> <li>• <i>Plant and equipment to be used during works, will be in good working order, fit for purpose, regularly serviced/maintained and have no evidence of leaks or drips;</i></li> <li>• <i>No plant used shall cause a public nuisance due to fumes, noise, and leakage or by causing an obstruction;</i></li> <li>• <i>Re-fuelling of machinery, plant or equipment will be carried out in the site compound as per the appointed Construction Contractor re-fuelling controls;</i></li> <li>• <i>The appointed Construction Contractor EERP will be implemented in the event of a material spillage;</i></li> <li>• <i>All persons working will receive work specific induction in relation to material storage arrangements and actions to be taken in the event of an accidental spillage. Daily environmental toolbox talks / briefing sessions will be conducted for all persons working to outline the relevant environmental control measures and to identify any environment risk areas/works.</i></li> </ul> |
| <p>North Bull Island SPA</p>                        | <ul style="list-style-type: none"> <li>• Habitat degradation</li> <li>• Dust deposition</li> <li>• Pollution</li> <li>• Silt ingress from site runoff</li> <li>• Downstream impacts</li> <li>• Negative impacts on the aquatic environment, habitats, aquatic species, bird fauna, and qualifying interests.</li> </ul> | <p><b>Operational Phase Mitigation</b></p> <ul style="list-style-type: none"> <li>• <i>A project ecologist will be appointed to oversee completion of all landscape and drainage works.</i></li> <li>• <i>Petrochemical interception will be inspected by the project ecologist.</i></li> </ul> <p style="text-align: center;"><i>OCMP</i></p> <p><i>As detailed in the Outline Construction Management Plan (prepared by CS Consulting to accompany this application), the following mitigation in relation to surface water will be in place:</i></p> <p><i>5.0 Environmental Management</i></p>  |

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|  |  | <p><i>'The contractor will establish guidelines and controls for all activities that may significantly negatively impact on the surrounding environment for the duration of the works, including; air, water, land, natural resources, flora, fauna, humans, and their interrelation.</i></p> <p><i>The project is to be developed to enable to all personnel with the means to understand their responsibilities and to meet the contractor's statutory, contractual and procedural obligations relating to environmental management.</i></p> <p><i>For each activity, the environmental aspects and associated actual and potential impacts are to be identified as they relate to the following environmental elements:</i></p> <ul style="list-style-type: none"> <li><i>• emissions to air;</i></li> <li><i>• releases to water;</i></li> <li><i>• releases to land;</i></li> <li><i>• use of raw materials &amp; natural resources;</i></li> <li><i>• use of energy;</i></li> <li><i>• waste and by-products;</i></li> <li><i>• community &amp; neighbours;</i></li> <li><i>• flora &amp; fauna;</i></li> <li><i>• heritage &amp; cultural.'</i></li> </ul> <p><i>5.1 Materials and Decontamination</i></p> <p><i>'Excavation works will each address the requirements of this investigation report and verify the treatment and removal to appropriately authorised facilities of all materials and contamination encountered during the works.'</i></p> <p><i>5.4 Migrating Dust &amp; Dirt Pollution</i></p> <p><i>'The following measures will form part of the contractor's dust management strategy:</i></p> <ul style="list-style-type: none"> <li><i>• A regime of "wet" road sweeping will be set up to ensure the roads around the immediate site are as clean and free from dirt/dust arising from the site, as is reasonably practicable.</i></li> <li><i>• Footpaths immediately around the site will be cleaned by hand regularly, with damping as necessary.</i></li> <li><i>• Scaffolding to be cleaned regularly. Netting will be provided to enclose scaffolding at sensitive areas of the site.</i></li> <li><i>• Vehicle waiting areas or hard standings will be regularly inspected and kept clean.</i></li> <li><i>• Vehicle and wheel washing facilities will be provided at the site exit where practicable. If necessary, vehicles can be washed down before exiting the site.</i></li> <li><i>• Internal combustion plant will not be left running unnecessarily.</i></li> <li><i>• Where possible fixed plant such as generators will be located as far as practicable away from residential areas.</i></li> </ul> |
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|  |  | <ul style="list-style-type: none"> <li>• <i>The number of handling operations for material will be kept to a minimum in order to ensure that dusty material is not moved or handled unnecessarily.</i></li> <li>• <i>The transport of dusty materials and aggregates will be carried out using covered/sheeted lorries.</i></li> <li>• <i>Vehicles loading will be dampened down and drop heights for material to be kept to a minimum.</i></li> <li>• <i>Dust dispersal over the site boundary will be minimised using static sprinklers or other watering methods necessary.</i></li> <li>• <i>Stockpiles of material will be kept to a minimum and will be sheeted or watered down when appropriate. These will be located away from sensitive boundaries.</i></li> <li>• <i>Equipment and techniques for cutting/grinding/sawing/sanding etc., which minimise dust emissions and which have the best available dust suppression measures, will be employed.</i></li> <li>• <i>Where possible pre-mixed plasters and masonry compounds will be used to minimise dust arising from on-site mixing.</i></li> </ul> <p><i>Prior to commencement, the main contractor will identify the construction operations which are likely to generate dust and to draw up action plans to minimise emissions. Furthermore, the main contractor will prepare environmental risk assessments for all dust generating processes, which are envisaged.</i></p> <p><i>The main contractor will allocate suitably qualified personnel to be responsible for ensuring the generation of dust is minimised and effectively controlled.</i></p> <p><i>Tallaght Hospital is located ca. 600metres from the development site and the Main Contractor shall consider any and all implications of their works methods in respect to this.'</i></p> <p><i>5.5 Harmful Materials</i></p> <p><i>'Hazardous materials (gas and fuels, etc) will be stored on site for use in connection with the construction works only. These materials will be stored in a controlled manner. Where on-site facilities are used there will be a bunded filling area using double bunded steel tank at a minimum.'</i></p> <p><i>7.5 Public Roads</i></p> <p><i>'The following measures will be taken to ensure that the site, public roads and surroundings are kept clean and tidy:</i></p> <ul style="list-style-type: none"> <li>• <i>a regular program of site tidying will be established to ensure a safe and orderly site;</i></li> <li>• <i>scaffolding will have debris netting attached to prevent materials and equipment being scattered by the wind;</i></li> <li>• <i>food waste will be strictly controlled on all parts of the site;</i></li> <li>• <i>mud spillages on roads and footpaths outside the site will be cleaned regularly and will not be allowed to accumulate;</i></li> <li>• <i>wheel wash facilities will be provided for vehicles exiting the site;</i></li> <li>• <i>in the event of any fugitive solid waste escaping the site, it will be collected immediately and removed.'</i></li> </ul> |
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## Conclusion

A robust series of mitigation measures will be carried out. These have been developed by a multidisciplinary project team. These would ensure that no significant pollution enters the surface water network and that the water entering the surface water system and the Jobstown Stream/River Dodder is clean and uncontaminated. Early implementation of ecological supervision on site at initial mobilisation and enabling works is seen as an important element to the project.

With the successful implementation of the outlined mitigation measures, the proposed development either alone or in combination with other plans and projects will not adversely affect the integrity of the Natura 2000 sites. The construction mitigation proposed for the development satisfactorily addresses the potential for significant effects on South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA, through the application of the standard construction and operational phase controls as outlined above. In particular, the mitigation measures to prevent silt and pollution entering the River Dodder, via the surface water network, will satisfactorily address the potential for adverse effects on the integrity of European sites within Dublin Bay. No significant adverse effects on the integrity of European Sites are likely following the implementation of the mitigation measures outlined above.

In a strict application of the precautionary principle, it has been concluded that significant effects are likely on South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA from the proposed project in the absence of mitigation measures, as a result of the proposal to discharge surface water from the development to the surface water network which enters the River Dodder catchment, which ultimately outfalls to the marine environment at Dublin Bay.

For this reason, a NIS was prepared which contains the information required for the competent authority to determine whether or not the proposed development, either alone or in combination with other plans or projects, in view of best scientific knowledge and in view of the sites' conservation objectives, will adversely affect the integrity of South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA. All other European sites (Natura 2000 sites) were screened out at initial screening.

Mitigation measures will be in place to ensure that there will be no significant impacts on the water quality of the River Dodder, which is the receiving environment for the surface water run off from the proposed development, which ultimately outfalls to the marine environment at Dublin Bay and the adjacent European sites (South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA). The implementation of mitigation measures outlined in the NIS, which will be followed, will be sufficient to prevent adverse effects on the integrity of the European sites at Dublin Bay.

Following the implementation of the mitigation measures outline, the construction and presence of this development, alone or in combination with other plans and projects, would not result in adverse effects on the integrity of the European sites, South Dublin Bay SAC, North Dublin Bay SAC, South Dublin Bay and River Tolka Estuary SPA and North Bull Island SPA.

## References

The following references were used in the preparation of this AA/NIS screening report.

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2. Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government 2009; [http://www.npws.ie/publications/archive/NPWS\\_2009\\_AA\\_Guidance.pdf](http://www.npws.ie/publications/archive/NPWS_2009_AA_Guidance.pdf)
3. Managing NATURA 2000 Sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC, European Commission 2000; [http://ec.europa.eu/environment/nature/Natura2000/management/docs/art6/provision\\_of\\_art6\\_en.pdf](http://ec.europa.eu/environment/nature/Natura2000/management/docs/art6/provision_of_art6_en.pdf)
4. 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; [http://ec.europa.eu/environment/nature/Natura2000management/docs/art6/Natura\\_2000\\_asses\\_s\\_en.pdf](http://ec.europa.eu/environment/nature/Natura2000management/docs/art6/Natura_2000_asses_s_en.pdf)
5. Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission; [http://ec.europa.eu/environment/nature/Natura2000/management/docs/art6/guidance\\_art6\\_4\\_en.pdf](http://ec.europa.eu/environment/nature/Natura2000/management/docs/art6/guidance_art6_4_en.pdf)
6. Guidance document on the implementation of the birds and habitats directive in estuaries and coastal zones with particular attention to port development and dredging; [http://ec.europa.eu/environment/nature/Natura2000/management/docs/guidance\\_doc.pdf](http://ec.europa.eu/environment/nature/Natura2000/management/docs/guidance_doc.pdf)
7. The Status of EU Protected Habitats and Species in Ireland. [http://www.npws.ie/publications/euconservationstatus/NPWS\\_2007\\_Conservation\\_Status\\_Report.pdf](http://www.npws.ie/publications/euconservationstatus/NPWS_2007_Conservation_Status_Report.pdf)
8. NPWS (2013) Conservation Objectives: South Dublin Bay SAC 000210. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
9. NPWS (2013) Conservation Objectives: North Dublin Bay SAC 000206. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
10. NPWS (2021) Conservation Objectives: Glenasmole Valley SAC 001209. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
11. NPWS (2017) Conservation Objectives: Wicklow Mountains SAC 002122. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs.
12. NPWS (2021) Conservation Objectives: Rye Water Valley/Carton SAC 001398. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
13. NPWS (2021) Conservation Objectives: Knocksink Wood SAC 000725. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
14. NPWS (2019) Conservation Objectives: Red Bog, Kildare SAC 000397. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.
15. NPWS (2019) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
16. NPWS (2019) Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
17. NPWS (2022) Conservation objectives for Wicklow Mountains SPA [004040]. Generic Version 9.0. Department of Housing, Local Government and Heritage.
18. NPWS (2022) Conservation objectives for Poulaphouca Reservoir SPA [004063]. Generic Version 9.0. Department of Housing, Local Government and Heritage.