



Kategale Limited

Proposed Strategic Housing Development, Northwood Crescent, Santry Demesne, Dublin 9

Screening for Appropriate Assessment

603510 R2 06

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RSK

RSK GENERAL NOTES

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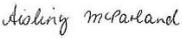
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Author	<u>Conor McKinney</u>	Technical and quality reviewer	<u>Mark Lang Associate Director</u>
Signature		Signature	
Date:	<u>23/08/2021</u>	Date:	<u>26/08/2021</u>
Project manager	<u>Aisling McParland</u>		
Signature			
Date:	<u>22/032022</u>		

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This work has been undertaken in accordance with the quality management system of RSK Ireland.



EXECUTIVE SUMMARY

This statement to inform a Screening for Appropriate Assessment report has been prepared by RSK Ireland on behalf of Kategale Limited. The report assesses a master plan for a Strategic Housing Development with a total application site area of c. 1.3 ha, on a site located at Northwood Crescent, Santry Demesne, Dublin 9.

In accordance with their obligations under the European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477/2011), the planning authority must assess whether the proposed masterplan could have 'likely significant effects' on any Natura 2000 sites. This document provides supporting information to assist the authority with an Appropriate Assessment screening exercise, including: a description of the plan, a review of the site's environmental setting, details of Natura 2000 sites within the potential zone of effect an appraisal of source-pathway-receptor relationships, and an assessment of potential impacts.

It is concluded that the master plan will not lead to direct or indirect impacts on any Natura 2000 sites, either alone or in combination with other plans or projects, so progression to a stage 2 Appropriate Assessment is not required.

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1.0 INTRODUCTION

1.1 Background to Appropriate Assessment

- 1.1.1 Approximately 10% of the land area of Ireland is included in the European Network of Natura 2000 sites, which includes Special Protection Areas (SPAs) to protect important areas for birds, and Special Areas of Conservation (SACs) to protect a range of habitats and species. Legislative protection for these sites is provided by the European Council *Birds Directive* (79/409/EEC) and E.C. *Habitats Directive* (92/43/EEC, as amended), which are jointly transposed into Irish law by the *European Communities (Birds and Natural Habitats) Regulations* 2011 (SI 477/2011, as amended).
- 1.1.2 Regulation 42 (1) states that: “*Screening for Appropriate Assessment of a plan or project for which an application for consent is received [...] shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on [any Natura 2000 sites].*” To ensure compliance with this regulation, public authorities must screen all land-use plans for potential impacts on Natura 2000 sites.
- 1.1.3 This document provides background information to support a ‘Screening for Appropriate Assessment’ exercise for the master plan outlining the construction of a Strategic Housing development at Northwood. It includes a description of the plan, a review of the site’s environmental setting, details of Natura 2000 sites within the potential zone of impact, an appraisal of source-pathway-receptor relationships, and an assessment of potential impacts.

1.2 Statement of authority

- 1.2.1 This report was written by Conor McKinney, senior ecologist with RSK Ireland. He has an MSc in Ecological Management and Conservation Biology Queens University Belfast and a BSc (Hons) in Environmental Science from University of Stirling.
- 1.2.2 He has fifteen years of professional experience, including five years as an ecological consultant, eight years as a conservation manager with a local conservation charity, and two years managing Natura 2000 sites with the Scottish Government. He provides ecological assessments for developments throughout the island of Ireland, including wind farms, infrastructural projects (roads, water pipelines, greenways, etc.), and a range of residential and commercial developments.
- 1.2.3 Technical and quality review has been undertaken by Mark Lang Associate Director with RSK with over 25 years as a consultant ecologist, he is a full member of the Chartered Institute of Ecology and Environmental Management and a Chartered Ecologist.

1.3 Methods

1.3.1 This report has been prepared with reference to the following guidelines:

- *Appropriate Assessment of Plans and Projects in Ireland (Department of the Environment, Heritage and Local Government, 2009)*
- *Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4), E.C., 2002.*
- *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal (Chartered Institute of Ecology and Environmental Management, 2019)*

In addition, this reports heeds recent case law (*Case C-323/17 People Over Wind and Sweetman*) which established that Appropriate Assessments cannot include standard site-management or mitigation procedures within the scope of the assessment.

To quote the determination: **“Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an appropriate assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site”.**

1.3.2 In accordance with Section 3.2 of *Appropriate Assessment of Plans and Projects in Ireland*, the screening exercise was conducted using the following steps:

- Description of the plan and local site characteristics.
- Identification of relevant Natura 2000 sites, and compilation of information on their qualifying interests and conservation objectives.
- Assessment of potential impacts upon Natura 2000 sites, including:
 - Direct impacts (e.g. loss of habitat area, fragmentation).
 - Indirect impacts (e.g. disturbance of fauna, pollution of surface water).
 - Cumulative / ‘in-combination’ effects associated with other concurrent projects.
- Screening Statement with conclusions.

1.3.3 A desk-based study was carried out using data from the following sources:

- Details of the proposed masterplan.
- Qualifying interests / conservation objectives of Natura 2000 sites from www.npws.ie.
- Bedrock, soil, subsoil, surface water and ground water maps from the Geological Survey of Ireland webmapping service (www.gsi.ie/mapping.htm), the National Biodiversity Data Centre (<http://maps.biodiversityireland.ie/>), and the Environmental Protection Agency web viewer (<http://gis.epa.ie/Envision/>).
- The *Fingal Development Plan 2017 – 2023* and details of permitted or proposed developments from the local authority’s online planning records.

1.3.4 All web-based resources were accessed in August 2021.

1.4 Limitations

1.4.1 It is important to note that this screening exercise was carried out using desktop resources, including information from public sources (e.g. online mapping systems). The author did not visit the site, though a colleague did and input into the report. However, this is standard practice for Stage 1 of the Appropriate Assessment process, for which the purpose is to identify any risk of significant impacts. If such a risk is identified as part of this assessment, it would proceed to Stage 2 of the process, and a detailed site inspection would then be carried out.

2.0 DESCRIPTION OF THE PROJECT

2.1 Environmental setting

Site location and surroundings

- 2.1.1 The area at Northwood (hereafter referred to as “the site”) is located north of Dublin town centre. It currently contains a patchwork of undeveloped brownfield site, scrub and emergent woodland and hardstanding. The site is bounded by Northwood Crescent to the south and south-west; The Crescent Building to the north-west; Northwood Avenue to the north; and Northwood Road to the east.
- 2.1.2 The surrounding area includes a mixture of service providers including a gym and nursing home, academic institution and associated accommodation. The broader surrounds include a railway line, a sports ground and district park, hospital and private accommodation.

Geology and soils

- 2.1.3 The underlying bedrock comprises dark-grey to black, fine-grained, occasionally cherty, micritic limestones that weather paler, usually to pale grey. There are rare dark coarser grained calcarenitic limestones, sometimes graded, and interbedded dark-grey calcar (Geological Survey of Ireland). As the soil and bedrock are relatively well drained, it is expected that most rainwater falling on the site would percolate to groundwater rather than flowing over land.

Hydrology

- 2.1.4 The site is dissected by the Ballymun stream, a tributary of the Santry River which flows approximately 500m north of the proposed development area.
- 2.1.5 Under the Water Framework Directive Status assessments 2013 – 2018, the Ballymun stream is of Poor status, as is the main channel of the Santry River upstream and downstream of Northwood.

2.2 Description of the Plan

- 2.2.1 Kategale Limited intend to apply to An Bord Pleanála for permission for a Strategic Housing Development with a total application site area of c. 1.3 ha, on a site located at Northwood Crescent, Santry Demesne, Dublin 9. The site is bounded by Northwood Crescent to the south and south-west; The Crescent Building to the north-west; Northwood Avenue to the north; and Northwood Road to the east.
- 2.2.2 The development, with a total gross floor area of c. 27,904 sqm, will consist of the construction of 268 no. Build-to-Rent apartment units arranged over 2 no. blocks ranging in height from 5 to 11 storeys (Block A will comprise 54 no. 1-bedroom units and 44 no. 2-bedroom units; Block B will comprise 70 no. 1-bedroom units and 100 no. 2-bedroom units); Residential amenity facilities including a reception, post room and building management

office; lounge areas, shared workspace, multimedia/games room, meeting rooms and a single storey residents' gym at podium level (145 sqm); ancillary uses comprising a generator room; utilities room; bin stores; water tank rooms; sprinkler tank room; bicycle stores; storage rooms and plant rooms; the provision of all private and communal open space, including balconies/terraces to be provided for each apartment; and communal open space areas including a first-floor central podium garden connecting Blocks A and B and 2 no. rooftop terraces and a single storey 295 sqm crèche with dedicated outdoor play area.

- 2.2.3 The development will also comprise the construction of a 3-storey office building with a total gross floor area of c.2,868 sqm, including ancillary uses comprising a reception/security area, staff amenities, bike stores, waste room and a plant room. The development will also include the provision of hard and soft landscaping, public realm improvements and amenity areas including public open space, a children's play area and a community outdoor dining area; the provision of internal roads and pathways; 142 no. undercroft car parking spaces at ground floor level, 8 no. crèche set down spaces, and 662 no. bicycle parking spaces at ground floor level and surface level.
- 2.2.4 The development will also include all associated ancillary development including 2 no. ESB switch rooms and 2 no. ESB substations; ground works and foul drainage; stormwater drainage; attenuation tank and related SUDS measures, water supply; service ducting and cabling; electric vehicle charging points; public lighting; boundary treatments; and all ancillary site development and excavation works above and below ground. Vehicular access is proposed via a new entrance on Northwood Road; Vehicular set down area for crèche with access/egress is located on Northwood Crescent. The provision of 2 no. pedestrian crossings on Northwood Crescent and Northwood Road.

2.3 Other nearby developments (potential in-combination effects)

- 2.3.1 Under the *Fingal County Council Development Plan 2017-2023*, the site has been zoned as a Metro-Economic Corridor. Zoning objectives include the facilitation of opportunities for high-density mixed-use employment generating activity and commercial development, and supporting the provision of an appropriate quantum of residential development within the Metro Economic Corridor.
- 2.3.2 Live and recently approved planning applications in the vicinity of the site were reviewed on the online planning records of Fingal County Council. Two planning applications were identified in the area in the last five years (F19A/0401 and F19A/0419) for a total of 183 units. A development of 198 residential units and office space with retail / café unit was granted permission in 2019 (planning reference F18A/0438 and F18A/0421) at a site <50m to the west of the site adjoining Northwood Crescent.
- 2.3.3 Construction of the mixed-use development to the west of the site is projected to initiate in 2022. This will be considered further in Section 4.3 of the impact assessment.

3.0 DESCRIPTION OF NATURA 2000 SITES

3.1 Identification of Natura 2000 sites within the zone of influence

3.1.1 There are no Natura 2000 sites within or adjacent to the site. Due to the scale of the development and the hydrological connectivity from the site to several Natura 2000 sites a zone of influence of 10 km was considered appropriate. This was based on application of the Source – Pathway – Receptor model to the project as well as a supplementary literature review of potential impacts of possible pollutants (e.g. *Wear 2021*). Descriptions of relevant sites are presented in Table 1, and their locations are shown in Figure 1.

Table 1: Natura 2000 sites of relevance to the site

Site name	Distance	Qualifying interests
South Dublin Bay and River Tolka Special Protection Area (SPA)(site code 4024)	5.1 km south-east	<p>Key habitats:</p> <p>Wetlands</p> <p>Special Conservation Interests:</p> <p>Ringed Plover (<i>Charadrius hiaticula</i>) [A137]</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>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</p> <p>Redshank (<i>Tringa totanus</i>) [A162]</p> <p>Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179]</p> <p>Roseate Tern (<i>Sterna dougallii</i>) [A192]</p> <p>Common Tern (<i>Sterna hirundo</i>) [A193]</p> <p>Arctic Tern (<i>Sterna paradisaea</i>) [A194]</p>
North Bull Island SPA (4006)	6.85 km south-east	<p>Key habitats:</p> <p>Wetlands</p> <p>Special Conservation Interests:</p> <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>

Site name	Distance	Qualifying interests
		<p>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</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]</p>
<p>North Dublin Bay Special Area for Conservation (SAC (206))</p>	<p>6.9 km south-east</p>	<p>Annex I habitats: Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190]</p> <p>Annex II species: Petalwort (<i>Petalophyllum ralfsii</i>) [1395]</p>
<p>South Dublin Bay SAC (210)</p>	<p>8 km south-east</p>	<p>Annex I habitats: Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Embryonic shifting dunes [2110]</p>

Site name	Distance	Qualifying interests
		<p>Annex II species:</p> <p>None.</p>
Baldoyle Bay SAC (199)	8.15 km east	<p>Annex I habitats:</p> <p>Mudflats and sandflats not covered by seawater at low tide [1140]</p> <p>Salicornia and other annuals colonising mud and sand [1310]</p> <p>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]</p> <p>Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</p> <p>Annex II species:</p> <p>None.</p>
Baldoyle Bay SPA (4016)	8.15 km east	<p>Key habitats:</p> <p>Wetlands.</p> <p>Special Conservation Interests:</p> <p>Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046]</p> <p>Shelduck (<i>Tadorna tadorna</i>) [A048]</p> <p>Ringed Plover (<i>Charadrius hiaticula</i>) [A137]</p> <p>Golden Plover (<i>Pluvialis apricaria</i>) [A140]</p> <p>Grey Plover (<i>Pluvialis squatarola</i>) [A141]</p> <p>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]</p>
Malahide SAC (205)	8.2 km north-east	<p>Annex I habitats:</p> <p>Mudflats and sandflats not covered by seawater at low tide [1140]</p> <p>Salicornia and other annuals colonising mud and sand [1310]</p> <p>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]</p> <p>Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</p> <p>Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]</p> <p>Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]</p> <p>Annex II species:</p>

Site name	Distance	Qualifying interests
		None.
Malahide Estuary SPA (4025)	8.2 km north-east	<p>Key habitats: Wetlands.</p> <p>Special Conservation Interests: Great Crested Grebe (<i>Podiceps cristatus</i>) [A005] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Shelduck (<i>Tadorna tadorna</i>) [A048] Pintail (<i>Anas acuta</i>) [A054] Goldeneye (<i>Bucephala clangula</i>) [A067] Red-breasted Merganser (<i>Mergus serrator</i>) [A069] 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] Dunlin (<i>Calidris alpina</i>) [A149] Black-tailed Godwit (<i>Limosa limosa</i>) [A156] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Redshank (<i>Tringa totanus</i>) [A162]</p>

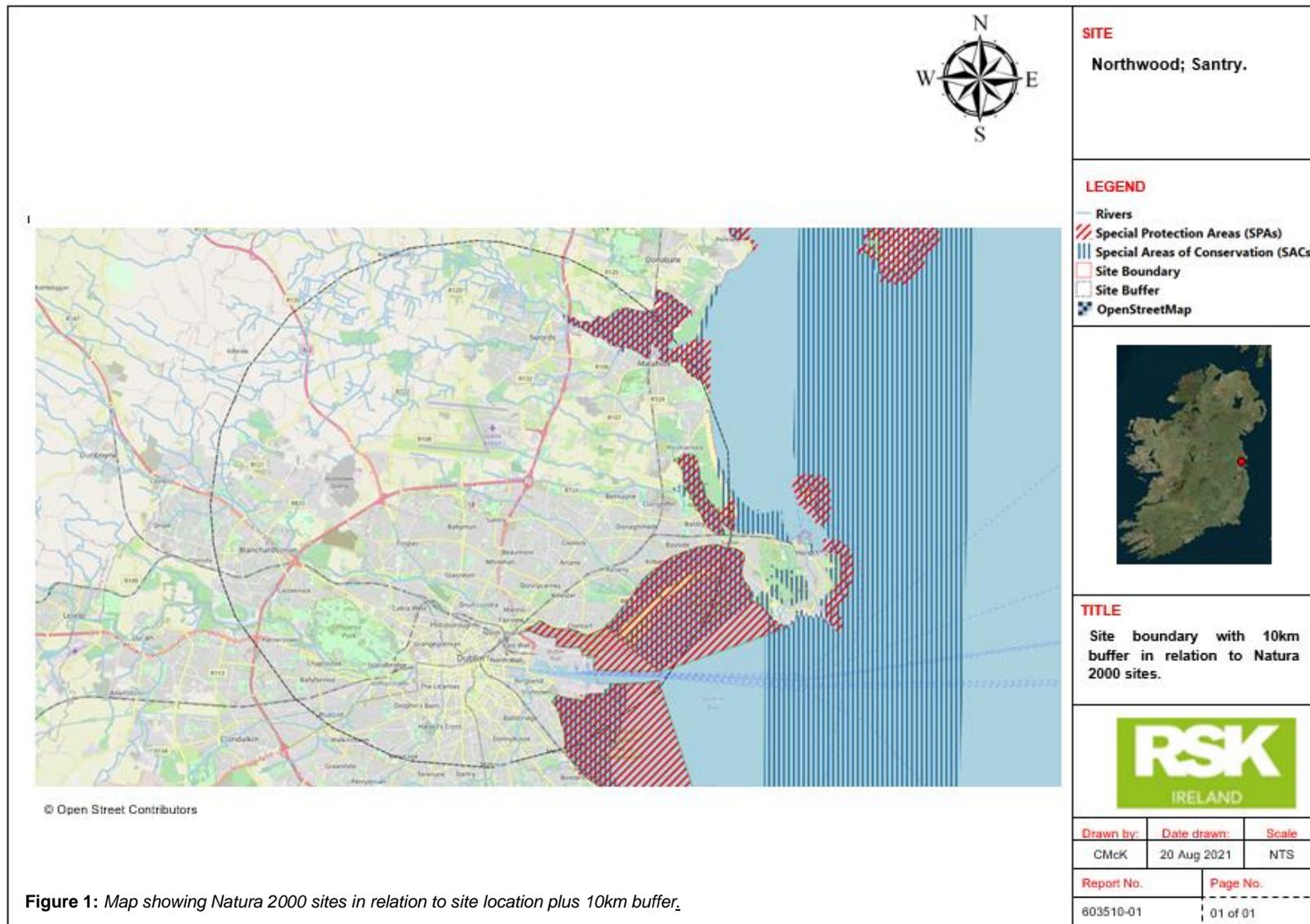


Figure 1: Map showing Natura 2000 sites in relation to site location plus 10km buffer.

3.2 Identification of potential pathways for indirect impacts

- 3.2.1 Indirect impacts can occur if there is a viable pathway between the source (the site) and the receptor (the habitats and species for which a Natura 2000 site has been designated). The most common pathway for impacts is surface water, e.g. if a pollutant reaches a river and is carried downstream into a Natura 2000 site. Other potential pathways are groundwater, air (e.g. airborne dust or sound waves), or land (e.g. flow of liquids, vibration). The zone of effect for hydrological impacts can be several kilometres, but for air and land it is considered to rarely be more than one hundred metres. An appraisal of potential pathways for impacts on Natura 2000 sites is provided below.
- 3.2.2 The closest Natura 2000 sites to the site is the, *South Dublin Bay and River Tolka SPA*, which is approx. 5 km to the south-east. This SPA has been designated for over-wintering migratory birds and some breeding species. There is no viable surface water pathway to this SPA and distances are too long for a viable pathway via groundwater and land. Aerosol pathways exist from traffic emissions for Nitrogen deposition and are considered.
- 3.2.3 The *North Bull Island SPA and North Dublin Bay SAC* lie approximately 6.8 km to the south-east of the site and has been designated for a range of coastal habitats including wetland, salt meadows and mobile and fixed sand dunes as well as overwintering birds with some breeding species. Surface-water offers a viable pathway to this SPA and SAC. A stream dissects the site and flows into a major river, the Santry River, which offers a viable pathway, albeit over a substantial distance. The distances involved are too great for pathways via groundwater, land or air. Therefore, a viable pathway exists between the site and the *South Dublin Bay and River Tolka SPA and North Bull Island SAC* via surface-water but not for groundwater or land. Aerosol pathways exist from traffic emissions for Nitrogen deposition and are considered.
- 3.2.4 The *South Dublin Bay SAC* is approx. 8 km to the south-east of the site. The SAC has been designated for a range of coastal habitats in particular shifting dunes, mudflats and sandflats. There is no surface water connection between the site and *South Dublin Bay SAC*. The distances involved are too great for pathways via groundwater or land. Aerosol pathways exist from traffic emissions for Nitrogen deposition and are considered.
- 3.2.5 *Baldoye Bay SPA and SAC* is approx. 8.15 km to the east of the site. This SPA and closely overlapped SAC are designated for a range of coastal habitats including wetland, salt meadows and mobile and fixed sand dunes as well as overwintering birds with some breeding species. There is no surface water connection between the site and *Baldoye Bay SPA and SAC*. The distances involved are too great for pathways via groundwater, or land. Aerosol pathways exist from traffic emissions for Nitrogen deposition and are considered.
- 3.2.6 *Malahide SAC and Malahide Estuary SPA* is located 8.2 km north-east of the site and has been designated for the protection of a range of coastal habitats including wetland, Atlantic and Mediterranean salt meadows and mobile and fixed sand dunes as well as overwintering birds with some breeding species. There is no surface water connection between the site and the *Malahide SAC and Malahide Estuary SPA* and the distances involved are too great for pathways via groundwater or land. Aerosol pathways exist from traffic emissions for Nitrogen deposition and are considered.

3.2.7 In summary, a viable pathway was identified between the site and the *North Bull Island SPA and North Dublin Bay SAC* via surface water and viable nitrogen deposition pathways were identified for all Natura 2000 sites.

3.3 Conservation objectives

3.3.1 The standard conservation objective for all SACs and SPAs in Ireland is “*to maintain or restore the favourable conservation condition of the qualifying interests for which the SAC / SPA has been selected*”. In addition, the Department of Culture, Heritage and the Gaeltacht has produced detailed conservation objectives for the sites listed in Table 1. They can be viewed on the website of the National Parks and Wildlife Service (<http://www.npws.ie/protected-sites>), but are not reproduced here in the interests of brevity.

4.0 ASSESSMENT OF POTENTIAL IMPACTS

4.1 Direct impacts

- 4.1.1 The site is not located within or adjacent to any Natura 2000 sites, so there is no risk of habitat loss, fragmentation or any other direct impacts.

4.2 Indirect impacts

Potential changes in water quality (construction phase)

- 4.2.1 Construction works typically generate fine sediments, and may occasionally cause accidental spills of oil or other toxic chemicals, which can be harmful to aquatic / marine habitats and species. As outlined in Section 3.2, there is one viable surface-water pathway between the site and *North Bull Island SPA and North Dublin Bay SAC*.
- 4.2.2 In the absence of mitigation this pathway would be vulnerable to a number of pollutants including oil and petroleum products, silt and effluent from cement and concrete.
- 4.2.3 Oil and related substances account for around 25% of all reported pollution events in Britain (NRA, 1994a) and the pattern is likely not much different in the rest of the world. Oil and petroleum products are often complex mixtures of alkanes with low water solubility and low densities allowing the majority spilled to a river to float. Short-term impacts of oil and petroleum product spills to rivers have been known to result in severe short-term impacts on macroinvertebrate fauna and fish discernible up to 4km though ecological effects were felt for more than 10km (Smith et al 2010). Fish and invertebrates are important dietary items for the designated features of the *North Bull Island SPA* although the distance of over 10km to any potential pollution event with the associated dilution would lessen impact and risk to the SPA's designated features to near negligibility.
- 4.2.4 Construction activities such as earth and break out works and movement of plant increases the burden of dust and exposes soil to erosion. Dust burden and soil erosion increases the concentration of suspended solids such as silt in waterbodies which can interfere with filter feeding mechanisms of invertebrates and the feeding of fish that locate their prey visually (Abel, 2002). This can affect invertebrate distribution patterns with knock on consequences for species groups that rely on them such as birds, fish and otters.
- 4.2.5 Otters are an Annex II species under the Habitats Directive and while neither the *North Bull Island SPA* and *North Dublin SAC* name Otter (*Lutra lutra*) as a designated feature both Natura 2000 sites are likely to be valuable foraging habitat to the species. As such any Appropriate Assessment is required to consider the impact that a plan or project might have on the species. Otter home ranges can be as large as 35km (Kruuk, 2006) as such a pollution incident at the site of either significant sedimentation or a spill of oil or related substances would have the potential to have an impact on Otter foraging habitat within the Santry River. Given the extent of other suitable foraging habitat in the area as well as the likely short-term nature of any spill it is not considered that there will be a likely significant effect on this Annex II species.

- 4.2.6 The designated SPA and SAC features for which the Santry River offers a direct pathway for indirect impacts are primarily the designated mudflat habitat. Given the distance of the features from the site, the potential dilution over this distance and the nature of mudflat habitat it is deemed that the project is not likely to have a significant impact.

Potential changes in water quality (operational phase)

- 4.2.7 The detailed foul water drainage design was submitted for review to Irish Water in January 2022 and a statement of design acceptance was received on 09 March 2022 and is included in Appendix F of The Engineering report. It is proposed that foul water drainage from the site will be discharged to a private sewer and treated in the Ringsend Water Treatment Works (WWTW). The 2019 Annual Environmental Report for the WWTW was reviewed on the Environmental Protection Agency website, and it was operating outwith its emission limit values. The plant is to be upgraded in recent years to increase network capacity by 50% by 2023¹ which is projected to occur prior to an anticipated start date for the construction phase of this project.
- 4.2.8 The WWTW will be upgraded in 2023 prior to the completion of the proposed development and pollution of Dublin Bay and it's associated Natura 2000 sites at the discharge point is not considered likely.
- 4.2.9 In addition, as the receptor habitat types most likely to receive this effluent are the mudflat and sandflat habitats not covered at low tide. Mud flats are nutrient rich habitats and an increase in nutrients may increase prey availability for bird species. Therefore, it is not likely that these overloading events will have a significant effect on these habitats, or it's associated ornithological features of interest.
- 4.2.10 Consequently, it is concluded that foul water drainage and surface water drainage discharges from developments within the site area would not cause likely significant impacts on the designated features of interest for the adjacent Natura 2000 sites.

Potential changes in air quality (construction phase)

- 4.2.11 Nitrogen deposition, resulting from agriculture but also from traffic emissions, is an ever increasing threat to Natura 2000 sites and nitrogen drift can occur over large distances (*Felix et al 2014*). Nitrogen can lead to the eutrophication of waterways or a decline in the species richness of habitats favouring more vigorous plant species. In the context of the surrounding Natura 2000 sites it can lead to the fixing of shifting sand-dune systems as coarse vegetation establishes and declining botanical diversity of salt meadows. The number of vehicles involved in the construction of the project is not anticipated to result in likely significant effects when considered against background nitrogen emission in the area.

Potential changes in air quality (operational phase)

- 4.2.12 The operational phase of the development predicts an addition 339 peak vehicle movements per day as a result of the development. Traffic management data²

¹ <https://www.water-technology.net/projects/ringsend-wastewater-treatment-plant-upgrade-project/>

² https://www.epa.ie/publications/monitoring--assessment/air/Technical_report_NO2_modelling_Dublin.pdf

demonstrates certain roads in Dublin support over 75,000 annual average daily total (AADT) traffic flows alone. Given the distance of the site to the Natura 2000 sites and negligibility of the growth in comparison to background traffic emission it is not deemed likely that the development will have a significant effect on nitrogen deposition rates and therefore on the integrity of the surrounding Natura 2000 sites.

4.3 Potential in-combination effects

- 4.3.1 The proposed development will occur after the development of 198 units in a neighbouring site adjoining Northwood Crescent and 268 units on the proposed site and therefore works should not overlap.
- 4.3.2 Designated habitats most at risk from an overloaded WWTW at Ringsend are the sandflats and mudflats exposed at low tide. The main conservation issues to these habitats are pollution from agricultural, forestry and wastewater sources, as well as impacts associated with marine aquaculture, particularly the Pacific oyster (*Magallana gigas*) (NPWS 2019)³.
- 4.3.3 Sewage effluent could not be considered to pose a direct threat to these habitats. Firstly, on the grounds that the extent of seawater would likely lead to a substantial dilution effect that will pose little risk considering the habitat type and the distance from the WWTW. Secondly on the grounds that additional nutrients could promote algae growth and fish numbers which would benefit the ornithological features of the site.
- 4.3.4 However, the upgrade of the Ringsend WWTW which is projected to be completed in 2023, will have the capacity post completion to treat foul water drainage from both developments and therefore overloading of the WWTW from the developments is not considered likely.
- 4.3.5 In conclusion, it is considered there are no foreseen potential impact pathways associated with the other developments which could give rise to adverse in-combination effects with the proposed development.

³ [NPWS 2019 Vol1 Summary Article17.pdf](#)

5.0 SCREENING STATEMENT

5.1.1 In Section 3.2.5 of Appropriate Assessment of Plans and Projects in Ireland (NPWS 2010), it is stated that the first stage of the AA process can have three possible conclusions:

- **AA is not required**

Screening, followed by consultation and agreement with the NPWS, establishes that the plan or project is directly connected with or necessary to the nature conservation management of the site

- **No potential for significant effects / AA is not required**

Screening establishes that there is no potential for significant effects and the project or plan can proceed as proposed.

- **Significant effects are certain, likely or uncertain**

The plan or project must either proceed to Stage 2 (AA), or be rejected.

5.1.2 Notwithstanding all of the above the construction site would implement standard pollution prevention control measures with a CEMP likely so further reducing potential for significant effects. These measures represent best practice construction management.

5.1.3 Having considered the indicative proposals, we conclude that this application meets the second conclusion, because there is no risk of likely significant effects on any Natura 2000 sites. Therefore, with regard to Article 42 (7) of the *European Communities (Birds and Natural Habitats) Regulations 2011*, it can be excluded on the basis of objective scientific information following screening, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site. Consequently, we conclude that Appropriate Assessment is not required.

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