



REPORT

Appropriate Assessment Screening Report
Proposed Carmanhall Road SHD 2022

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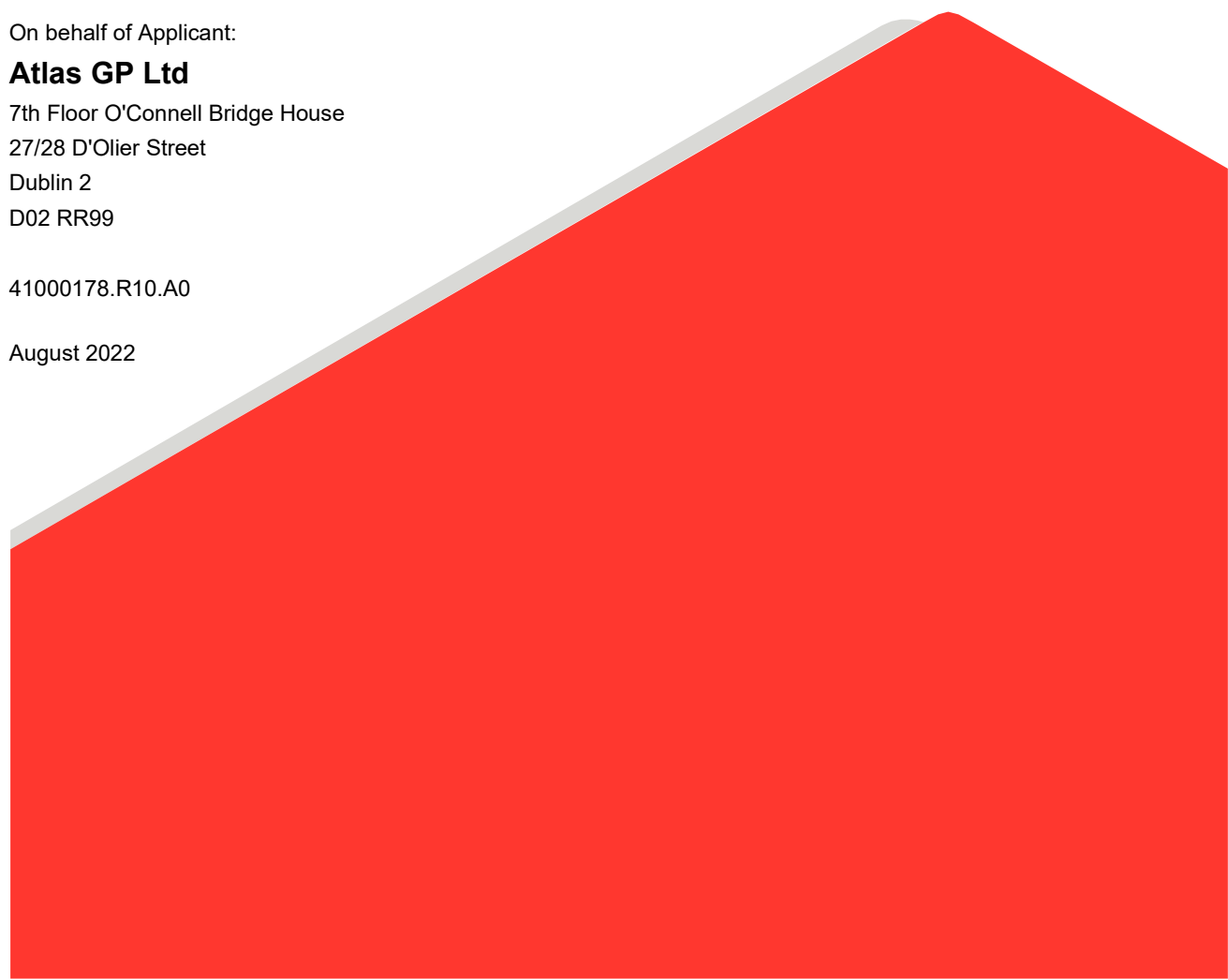
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41000178.R10.A0

August 2022



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1.0 INTRODUCTION

This evaluation presents a Stage 1 Screening for Appropriate Assessment (AA) to address an assessment of the potential effects that may occur to Natura 2000 Sites and associated qualifying habitats and species as a result of the proposed project (the Project) located at the Avid International Site, at the intersection of Carmanhall Road and Blackthorn Road in Sandyford Industrial Estate, Dublin 18 (hereafter referred to as the 'Site' or the 'Development').



Figure 1: Location of the Proposed Carmanhall Road Strategic Housing Development 2022

This Screening for Appropriate Assessment comprises an appraisal of potential impacts on European designated conservation Sites within a 15 km radius of the Site. This AA Screening has been prepared by Freddy Brookes MSc., MCIEEM – Senior Ecologist, WSP-Golder. The terms of reference of this report are set out below.

1.1 Terms of Reference

This screening has been undertaken in accordance with the requirements of the EU Habitats Directive (Directive 92/43/EEC). Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora – the 'Habitats Directive' - provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 - 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. Natura 2000 sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment:

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

Article 6(4) deals with the steps that should be taken when it is determined, as a result of Appropriate Assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case.

Article 6(4) states:

“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”

The requirements of Articles 6(3) and 6(4) of the Habitats Directive have been transposed into Irish legislation by means of the Habitats Regulations, 1997 (S.I. No. 94 of 1997) and the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011).

1.2 Approach and Planning Precedent

This stage 1 screening is presented with design parameters detailed in section 1.3 below. These measures are not intended to be interpreted as mitigations to address a likely significant effect to a Natura 2000 site. Planning precedent dictates that mitigation should only be presented as part of stage two in the appropriate assessment (AA) process if required to minimise likely significant effect.

1.3 Project Scope, Description and Design Parameters

The Project will facilitate the development of a total of 334 no. residential units, in four apartment blocks ranging from four storeys to a maximum height of a sixteen-storey tower to be provided within the north-east of the Site at the furthest proximity from adjoining sites (Figure 3.3).

The four proposed apartment blocks will comprise the following:

- Block D: 10 storey facing Carmanhall Road;
- Block E: 8–16 storey facing Carmanhall Road/Blackthorn Road;
- Block F: 8 storey facing Blackthorn Road; and
- Block G: 4–5 storey facing the former Tack packaging Site.

New active frontages will be provided to Blackthorn Road and Carmanhall Road. Landscaping plans include a central courtyard and a playground associated with the creche which is to be provided within the north-eastern portion of the Site. The south-east facing central courtyard will be set on a podium at ground floor level between the apartment blocks. It is intended to provide strong visual and physical connections between them. The apartment blocks are designed to be tallest facing the central courtyard and step down towards the Site boundaries.

Green roofs in the development have been designed to reduce storm water run-off and increase biodiversity potential. Rain gardens and Bio-retention Tree Pits have also been incorporated into the SuDS strategy.

Construction of the Carmanhall Road SHD 2022 is expected to last for approximately 24 months. The operational phase of the Proposed Development will follow and will be of a 'permanent' duration (i.e. lasting greater than 60 years).

Surface and Wastewater Design

Potable water, Foul water and Storm water will be managed on the Site by engineered networks with connections to existing infrastructure networks. Surface water runoff will be controlled using SuDs measures incorporating source and site control measures and managed in accordance with the Greater Dublin Strategic Drainage Strategy¹. Source and Site control measures potentially beneficial to local and regional biodiversity and ecology during operations include:

- Use of permeable asphalt to reduce storm water run-off rates (source control),
- Use of Green Roofs/ Green Podium to reduce surface water run-off rates (source control);
- Two petrol interceptors to filter out hydrocarbon pollutants from rainwater run-off (site control);
- Use of Attenuation Tank and Hydro-brake to facilitate controlled water release and avoidance of downstream impacts arising from release of temporarily storage water (site control); and
- Use of rain gardens and bio-retention tree pits.

General Design Parameters

Measures which follow generic environmental best design practice are proposed which will include:

- All Site construction will be undertaken in accordance with the CIRIA (2015) Environmental Good Practice on Site Guide (fourth edition); and
- New landscape planting will be provided as described in the accompanying Landscape Design Statement². This will promote net gain for biodiversity by undertaking additional tree planting to promote Carbon Sequestration, use of native trees, herbaceous planting and grass areas to promote the pollination plan, in addition to the provision of SuDS systems such as green roofs, rain gardens, and, bio-retention tree pits.

2.0 2.0 METHODS

2.1 Desktop Review and Data Collation

A desktop review was conducted in June 2022 of available published and unpublished information, including groundwater, bedrock, aquifer and waterbody status', and designated site data available from Geological Survey Ireland (GSI) and Environment Protection Agency (EPA). Desktop species and habitat data were sourced from

¹ SuDS are best practice design measures that are intended to be protective of water quality integral to the development design. SuDS design is not introduced as a specific mitigation measure to reduce potential effects from the development on a European Site.

² NMP (2022) Carmanhall Road 2022 SHD Residential Development, SHD Stage III Landscape Design Statement.

the NPWS, web-based databases. In addition, reports pertaining to Site operations including previous EIAR submissions and Natura Stage 1 screening assessments have been used as reference materials. These sources were consulted in order to give a comprehensive and thorough understanding of baseline conditions at the Site and to identify the presence and nature of ecological pathways with potential connectivity with the Natura 2000 sites within the designated zone of influence and the context of the Site.

2.2 Screening for Appropriate Assessment

This report has been prepared with reference to the following documents:

- European Communities (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6 (3) and (4) of the Habitats Directive 92/43/EEC;
- European Communities (2000) Managing Natura 2000 sites: the provisions of Article 6 of the 'Habitats Directive' 92/43/EC;
- Department of Environment Heritage and Local Government (2009, Revision Notes 2010). Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities;
- European Communities (2007) Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC; and
- Commission notice Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC (2018);
- Appropriate Assessment Screening for Development Management, OPR Practice Note PN01, Office of the Planning Regulator March 2021;
- Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission, 2021).

Appropriate Assessment is carried out in stages, as recommended by the above-referenced Guidance Documents. There are four stages as follows:

2.2.1 Stage 1: Screening

This initial stage aims to identify the likely impacts of the project on a Natura 2000 site, either alone or in combination with other projects or plans. The impacts are examined to establish whether these impacts are likely to be significant. Assessment of the significance of effects is carried out in consultation with the relevant nature agencies.

Screening for AA involves the following steps:

- Establish whether the plan or project is directly connected with or necessary for the management of a European site;
- Description of the plan or project and the description and characterisation of other projects or plans that in combination have the potential for having significant effects on the European site;
- Identification of European sites potentially affected;
- Identification and description of potential effects on the European site;
- Assessment of the likely significance of the effects identified on the European site; and
- Exclusion of sites where it can be objectively concluded that there will be no significant effects.

2.2.2 Stage 2: Appropriate Assessment

The aim of this stage is to identify the conservation objectives of the Site and to assess whether or not the project, either alone or in combination with other projects or plans will result in adverse effects on the integrity of the Site, as defined by the conservation objectives and status of the Site. Stage 2 is carried out in consultation with the relevant nature agencies. Where it cannot be demonstrated that there will be no adverse effects on the Site, it is necessary to devise mitigation measures to avoid, where possible, any adverse effects.

2.2.3 Stage 3: Assessment of Alternative Solutions

This stage examines alternative ways of implementing the project that, where possible, avoid any adverse impacts on the integrity of the Natura 2000 site. If alternative solutions have been identified that will either avoid any adverse impacts or result in less severe impacts on the Site, it will be necessary to assess their potential impact by recommencing the assessment at Stage One or Stage Two as appropriate. However, if it can be reasonably and objectively concluded that there is an absence of alternatives, it will be necessary to proceed to Stage Four of this assessment methodology.

2.2.4 Stage 4: Assessment where Adverse Impacts Remain

For sites that host priority habitats and species, it is necessary to consider whether or not there are human health or safety considerations or environmental benefits flowing from the project. If such considerations do exist, then it will be necessary to carry out the Stage Four assessments of compensatory measures. If no such considerations exist, then it is necessary to establish whether there are other imperative reasons of overriding public interest (IROPI) before carrying out the Stage Four assessments. Where IROPI exist, an assessment to consider whether compensatory measures will or will not effectively offset the damage to the Site will be necessary before the project or plan can proceed.

This report is for Screening (stage 1) for Appropriate Assessment only.

3.0 BASELINE AND HISTORIC SITE CONDITIONS

3.1 Baseline Conditions

3.1.1 Habitats

The Site setting is an existing built-up residential and commercial zone and is predominantly composed of artificial surfaces and general anthropogenic characteristics. The Site has been cleared to ground level and is currently vacant. Habitats recorded on Site during the Site survey of 18th January 2022 are listed in Table 1. The Site footprint is almost entirely comprised of hardstanding (Figure 2).

Table 1: Habitats Recorded on site (Fossitt, 2000)

Habitat	Habitat Code
Building and Artificial Surfaces	BL3
Recolonising Bare Ground	ED3
Spoil and Bare Ground	ED2
Hedgerow	WL1
Treeline	WL2
Ornamental/ Non-native Shrub	WS3



Figure 2: The Site is predominately dominated by artificial surface (hard).

Building and Artificial Surfaces – BL3

Artificial surfaces comprise the majority of the area within the Site boundary (see Figure 2). Vegetation cover is significantly less than 50% in these areas and most of the land is covered in artificial surfaces, primarily hard surfaces. Some occasional plants occur within BL3 habitats including invasive species such as occasional immature *Cotoneaster sp.* plants and *Buddleja sp.* which frequently occurs in the disturbed habitats found on the east of the Site.

Recolonising Bare Ground – ED3

ED3 is found in the eastern portion of the Site and occurs in mosaic with BL3 and ED2. Vegetation cover here is greater than 50%. A large stand of invasive Butterfly Bush (*Buddleja spp.*) is found within this habitat. Other plants typical of ED3 such as Willowherbs (*Epilobium spp.*), Spear Thistle (*Cirsium vulgare*), Ragworts (*Senecio spp.*) and Umbellifers are present.

Spoil and Bare Ground – ED2

The spoil and rubble heaps located on the east of the Site constitute the ED2 habitats in the area within the Site boundary³. Vegetation cover is less than 50% in these areas, with mostly ruderal weed species such as Dandelions (*Taraxacum officinallis*) and Bittercress (*Cardamine hirsuta*). Several Butterfly Bush (*Buddleja davidii*) plants are also found in these ED2 areas.

³ In Figure 2 the area within the site boundary is the area within the planning application boundary that excludes areas designated as 'DLRCC verges'.

Hedgerow – WL1

Hedgerow (WL1) habitat on Site consists mostly of the non-native shrub Cherry Laurel (*Prunus laurocerasus*) growing in mosaic between trees (Silver Birch (*Jacquemon tii*), Norway Maple (*Acer platanoides*) Sycamore (*Acer pseudoplatanus*), and Lime (*Tilia spp.*) on the western boundary of the Site. Understory species include Ivy (*Hedera helix*) and Himalayan Ivy (*Hedera nepalensis*). The eastern boundary of the Site (including the DLRCC verges) contain laurel shrubs and Silver Birch trees.

Treeline – WL2

This habitat type is characterised by the presence of a single or narrow line of trees greater than 5m in height, less than 4m in width, often occurring along the edges of property lines (small portion of the western edge with regards to this Site). Treelines (WL2) were formed of species such as Silver Birch (*Jacquemon tii*), Norway Maple (*Acer platanoides*) Sycamore (*Acer pseudoplatanus*), and Lime (*Tilia spp.*).

Ornamental/Non-native Shrub – WS3

A small area of non-native Laurel (*Prunus spp.*) shrubs is located on the north western boundary of the Site. Some juvenile Silver Birch (*Betula pendula*) trees are planted between the shrubs here. Another area of WS3 habitat is situated in the laneway centrally within the Site with Honeysuckle (*Lonicera spp.*) varieties growing in a small ornamental bed.

3.1.2 Aquatic Habitats and Receptors

The assessment considers the potential for hydrological connectivity between the Site and surface water features, and also considers what effects could arise to aquatic fauna and habitat receptors. There are no watercourses present on the Site. Desk based assessment indicates that the following waterbodies occur in the vicinity of the Site:

- The Stillorgan Reservoirs are located ca. 200 m to the North of the Site.
- Carrickmines Stream/Racecourse Stream is located ca. 600 m to the south and appears to be partially culverted under the industrial estate, but is mapped at the surface in an open, vegetated area to the south of the M50 motorway (EPA, 2022). It flows towards the south-east to become Carrickmines River; eventually converging with the Loughlinstown River (North) to the east of the Site (near the N11 road and Loughlinstown) and discharging, as the Shanganah River, into the Irish Sea between Loughlinstown and Shankhill.
- Brewery Stream/Carysfort Maretimo Stream is mapped at the surface approximately 800 m northeast of the Site (EPA, 2022). This stream, which is extensively culverted in the area of the Site, originates in the Tree Rock Mountains and flows under the M50 and across the heavily urbanised areas of Sandyford, Leopardstown and Stillorgan before discharging into Dublin Bay/the Irish Sea at Blackrock.

3.1.3 Identification of relevant European Sites

In order to identify the European Sites that potentially lie within the Zone of Influence (ZOI) of the Proposed Development, a Source-Path-Receptor method (S-P-R) was adopted, as described in 'OPR Practice Note PN01 - Appropriate Assessment Screening for Development Management' (OPR, 2021), a practice note produced by the Office of the Planning Regulator, Dublin.

The guidance document published by the Department of Housing, Planning and Local Government (then DEHLG) 'Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities' (2009) recommends a distance of 15km as the precautionary ZOI for a plan or project being assessed for likely significant effects on European Sites, although it is acknowledged that this distance must be evaluated on a

case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in combination effects.

As such, the 15km ZOI is used in this report as an initial starting point for collating European sites for AA screening.

3.2 Natura 2000 Sites

Sites of international importance, including Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), are collectively known as Natura 2000 sites. These sites contain examples of some of the most important natural and semi-natural ecosystems in Europe. The Site is not located within or directly adjacent to any Natura 2000 sites. The designated zone of influence was 15 km from the Site for Natura 2000 sites (Table 2 and Figure 3 and below). All ecological pathways are considered in the context of the Site and connectivity with the Natura 2000 sites e.g. terrestrial and hydrological. However, no Likely Significant Effect is predicted owing to inherent design parameters.

Table 2: Natura 2000 Sites within 15 km

Natura 2000 Site	SAC/SPA (Truncated Key qualifying features) numbers in brackets are Natura 2000 codes:	Approximate distance to Site (km)	Connections (Source – pathway – receptor)
South Dublin Bay and River Tolka Estuary SPA	SPA - 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 Brent goose (<i>Bernicla hrota</i>), which feeds on eel grasses (<i>Zostera noltii</i>) in the autumn.	3.6	In a highly unlikely scenario, surface water (rainfall) – may move terrestrially from the Site (and surrounding vicinity) into the Brewery stream (over 800m away from the Site) which discharges at Blackrock into this SPA. However, the surface water runoff will be attributed to stormwater and subject to dilution. Therefore, likely significant effects to the Natura 2000 Site is considered highly unlikely.
South Dublin Bay SAC	SAC - Qualifying Interests mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Embryonic shifting dunes [2110]	3.6	In a highly unlikely scenario, surface water (rainfall) – may move terrestrially from the Site and surrounding vicinity into the Brewery stream (over 800m away from the Site) which discharges at Blackrock into this SAC.
Wicklow Mountains SAC	SAC - Selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive [3160] Dystrophic Lakes; [4010] Wet Heath;	6.4	None – There is either no hydrological nor terrestrial connection between the Site and the SAC.

Natura 2000 Site	SAC/SPA (Truncated Key qualifying features) numbers in brackets are Natura 2000 codes:	Approximate distance to Site (km)	Connections (Source – pathway – receptor)
	[4030] Dry Heath; [4060] Alpine and Subalpine Heaths; [6130] Calaminarian Grassland; [6230] Species-rich Nardus Grassland*; [7130] Blanket Bogs (Active)*; [8110] Siliceous Scree; [8210] Calcareous Rocky Slopes; [8220] Siliceous Rocky Slopes; [91A0] Old Oak Woodlands; and [1355] Otter (<i>Lutra lutra</i>).		In addition, the intervening distances between the Site and the SAC are sufficient to exclude the possibility of significant effects on the SAC.
Wicklow Mountains SPA	SPA - The site is designated under the E.U. Birds Directive, of special conservation interest for the following species: Merlin and Peregrine.	6.7	None – There is either no hydrological nor terrestrial connection between the Site and the SPA. In addition, the intervening distances between the Site and the SPA are sufficient to exclude the possibility of significant effects on the SPA.
Knocksink Wood SAC	SAC - Qualifying Interests Petrifying springs with tufa formation (Cratoneurion) [7220] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, Alnion incanae, Salicion albae) [91E0]	7.0	None – There is either no hydrological nor terrestrial connection between the Site and the SAC. In addition, the intervening distances between the Site and the SAC are sufficient to exclude the possibility of significant effects on the SAC.
Dalkey Islands SPA	SPA - Qualifying Interests, Roseate Tern (<i>Sterna dougallii</i>) [A192] Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194]	7.5	None – There is either no hydrological nor terrestrial connection between the Site and the SPA. In addition, the intervening distances between the Site and the SPA are sufficient to exclude the possibility of significant effects on the SPA.
Rockabill to Dalkey Island SAC	SAC - Qualifying Interests, Reefs [1170] <i>Phocoena phocoena</i> (Harbour Porpoise) [1351]	7.9	None – There is either no hydrological nor terrestrial connection

Natura 2000 Site	SAC/SPA (Truncated Key qualifying features) numbers in brackets are Natura 2000 codes:	Approximate distance to Site (km)	Connections (Source – pathway – receptor)
			between the Site and the SAC. In addition, the intervening distances between the Site and the SAC are sufficient to exclude the possibility of significant effects on the SAC.
Ballyman Glen SAC	SAC - Qualifying Interests, Petrifying springs with tufa formation (Cratoneurion) [7220] Alkaline fens [7230]	8.0	None – There is either no hydrological nor terrestrial connection between the Site and the SAC. In addition, the intervening distances between the Site and the SAC are sufficient to exclude the possibility of significant effects on the SAC.
North Bull Island SPA	SPA - 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.	8.6	None – There is either no hydrological nor terrestrial connection between the Site and the SPA. In addition, the intervening distances between the Site and the SPA are sufficient to exclude the possibility of significant effects on the SPA.
North Dublin Bay SAC	SAC - Qualifying Interests, Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</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] <i>Petalophyllum ralfsii</i> (Petalwort) [1395]	8.7	None – There is either no hydrological nor terrestrial connection between the Site and the SAC. In addition, the intervening distances between the Site and the SAC are sufficient to exclude the possibility of significant effects on the SAC.
Glenasmole Valley SAC	SAC - Qualifying Interests, Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210]	10.4	None – There is either no hydrological nor terrestrial connection

Natura 2000 Site	SAC/SPA (Truncated Key qualifying features) numbers in brackets are Natura 2000 codes:	Approximate distance to Site (km)	Connections (Source – pathway – receptor)
	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Petrifying springs with tufa formation (Cratoneurion) [7220]		between the Site and the SAC. In addition, the intervening distances between the Site and the SAC are sufficient to exclude the possibility of significant effects on the SAC.
Bray Head SAC	SAC - Qualifying Interests, Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030]	11.9	None – There is either no hydrological nor terrestrial connection between the Site and the SAC. In addition, the intervening distances between the Site and the SAC are sufficient to exclude the possibility of significant effects on the SAC.
Howth Head SAC	SAC - Qualifying Interests, Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] European dry heaths [4030]	12.6	None – There is either no hydrological nor terrestrial connection between the Site and the SAC. In addition, the intervening distances between the Site and the SAC are sufficient to exclude the possibility of significant effects on the SAC.
Howth Head Coast SPA	SPA - Qualifying Interests Kittiwake (<i>Rissa tridactyla</i>) [A188]	14	None – There is either no hydrological nor terrestrial connection between the Site and the SPA. In addition, the intervening distances between the Site and the SPA are sufficient to exclude the possibility of significant effects on the SPA.
Baldoyle Bay SPA	SPA - Qualifying Interests, Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Shelduck (<i>Tadorna tadorna</i>) [A048] Ringed Plover (<i>Charadrius hiaticula</i>) [A137] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Grey Plover (<i>Pluvialis squatarola</i>) [A141]	14.3	None – There is either no hydrological nor terrestrial connection between the Site and the SPA.

Natura Site	2000	SAC/SPA (Truncated Key qualifying features) numbers in brackets are Natura 2000 codes:	Approximate distance to Site (km)	Connections (Source – pathway – receptor)
		Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Wetland and Waterbirds [A999]		In addition, the intervening distances between the Site and the SPA are sufficient to exclude the possibility of significant effects on the SPA.
Baldoyle Bay SAC	Bay	SAC - Qualifying Interests Mudflats and sandflats not covered by seawater at low tide [1140] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]	14.3	None – There is either no hydrological nor terrestrial connection between the Site and the SAC. In addition, the intervening distances between the Site and the SAC are sufficient to exclude the possibility of significant effects on the SAC.

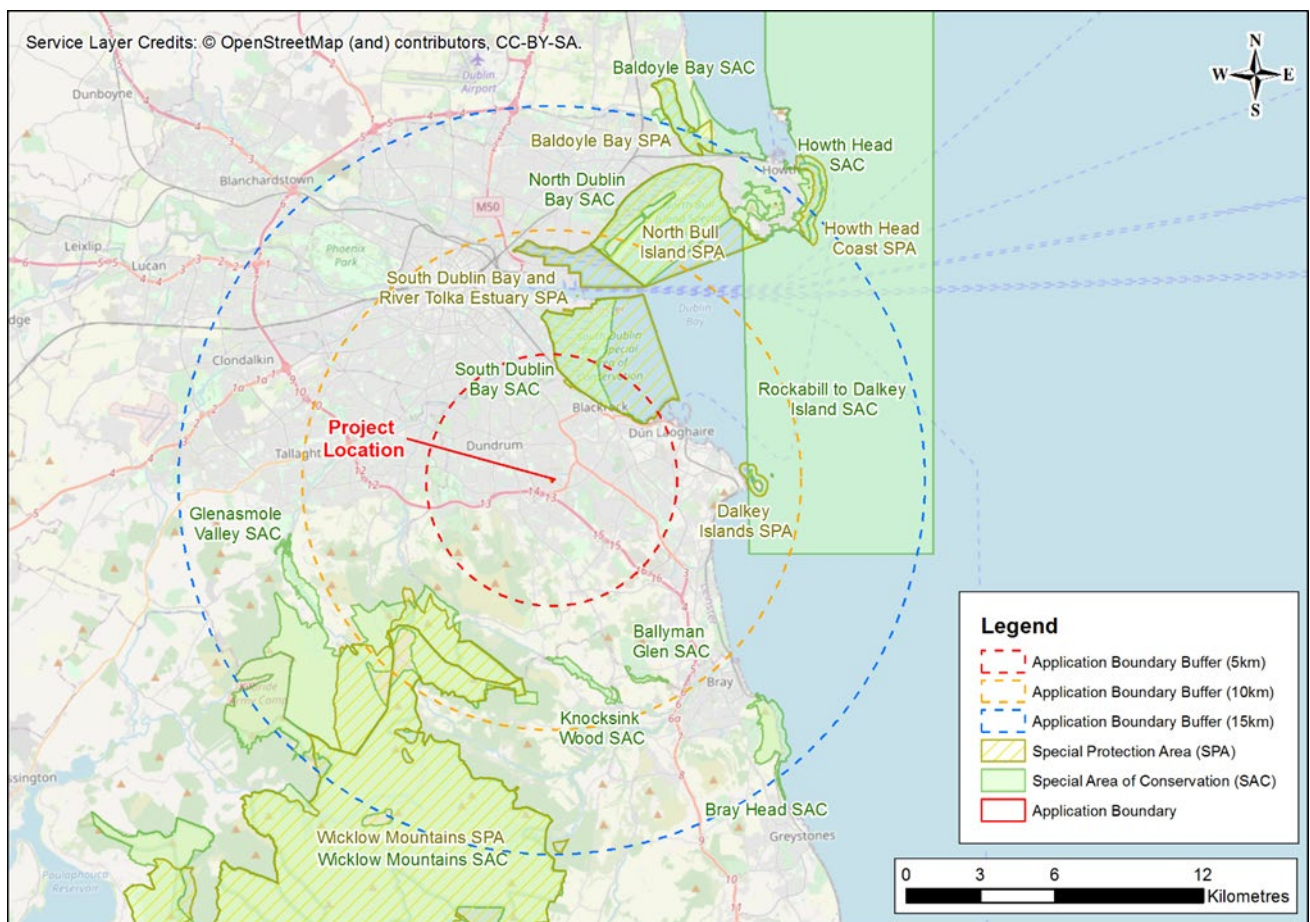


Figure 3: Natura 2000 Sites within 15 km of the Site

3.3 Screening Assessment

Throughout this stage 1 screening assessment it is important to reiterate the key focus points required. In essence, will the residential development described herewith have the potential to cause likely significant effect (LSE) on Natura 2000 sites and associated qualifying species. The following sections serve to consider this question.

3.3.1 Water

Consideration of the committed design parameters demonstrates why LSE will not arise to Natura 2000 receptors. There are no watercourses on or near the Site. The Site is approximately 3.6 km from the boundary of the South Dublin Bay and River Tolka estuary SPA/SAC and the habitat between the Site and these Natura sites is essentially residential, industrial and transport related development with no ecological pathway.

In a construction context, a worst-case scenario would be an item of machinery associated with the construction of the Site leaking hydraulic fluid or hydrocarbon. In this instance the spill would be contained at the scene. Residual spill would be contained within the Site subject to dilution and evaporation over an extended period of time and pollutants would be contained at the Site scale. As such, no risks would be afforded to Natura 2000 habitat or species as defined by the source pathway model of likelihood. In addition, operational effects (residential occupation) will be addressed in accordance with the following design parameters which have been truncated where previously identified in full within Section 1.3.

- The proposed storage network to serve the proposed development has been designed and modelled, for the 1 in 100-year storm event, with an allowance of 20% for climate change, as required in the Greater Dublin Strategic Drainage Study.
- The installation and implementation of the proposed Green Roof system provides additional stormwater storage capacity throughout the Site. A surface water attenuation tank will provide a storage volume of 553 m³.
- Prior to discharging to the public network, stormwaters will flow through two petrol interceptors which are best practice design measures to be protective of water quality'
- The Carmanhall Road SHD 2022 Site (subject Site under this planning application) will discharge foul water independently from the adjacent site, Tack Site. Wastewater from that Site will be connected to the wastewater sewer in Arkle Road. It will be processed at the wastewater treatment plant at Ringsend in Dublin which is due to be upgraded to accord with the EU Wastewater Treatment Directive. This upgrade will enable future housing and commercial development and ensure that Dublin is able to sustain continued growth. The works will be undertaken on a phased basis. Irish Water (IW) states, '*[IW] is working to provide infrastructure to achieve compliance with the Urban Wastewater Treatment Directive for a population equivalent of 2.1 million in the second half 2023. When all the proposed works are complete in 2025, the Ringsend WwTP will be able to treat wastewater for up to 2.4 million population equivalent while meeting the required standards*' (Irish Water, 2022).
- There is an existing 450 mm diameter surface water sewer along Carmanhall Road continuing along Blackthorn Road. There is also a 375mm diameter surface water sewer along Blackthorn Road continuing along Burton Hall Road. The Site will connect into the surface water manhole at the crossing of Carmanhall with Blackthorn Road to the northeast of the subject Site. The proposed surface water drainage system for this development has been designed as a SuDS system (in accordance with the Greater Dublin Strategic Drainage Study) and uses permeable paving, green roofs green podium, below ground attenuation

together with flow control devices and petrol interceptors to treat run-off and remove pollutants to improve quality, restrict outflow and control quantity.

Air Quality – Dust Construction Effects

Dust deposition is the predominant air-related risk which may arise from construction activities resulting from aggregate movement and dust mobilised from vehicle movements. However, given the design parameters and the use suitable dust suppression techniques during construction phase, dust deposition and residual effects to Natura 2000 are considered highly unlikely. The nearest SACs are c. 3.6 km from the Site. Advice provided within the Design Manual for Roads and Bridges (DMRB)⁴ suggests that the most sensitive species appear to be affected by dust deposition at levels above 1000 mg/m²/day (five times greater than the level at which most dust deposition may become a perceptible nuisance to humans). Accordingly, given the low risk of dust mobilisation on Site, design parameters and distance to the nearest Natura 2000 site, it is considered unlikely that dust deposition will have an impact on any nearby Natura 2000 designations.

Noise

Of the Natura 2000 designations in the search area, it is considered that the SPAs would be sensitive to noise disturbance, given that they are designated on the basis of supporting bird species. Activities within Site which may contribute to increased noise levels include construction traffic movements and general construction noise. Residential occupation is unlikely to result in a measurable contribution to noise that may disturb qualifying bird species of the SPAs. The closest SPAs to the Site are situated 3.6 km away. Given the distance of the SPAs from the Site and relative ambient noise levels of the Site and local context e.g. Dublin cityscape, it is considered that over this distance the noise levels within the Site will have a negligible impact on the SPAs.

4.0 SCREENING ASSESSMENT CRITERIA

4.1 Describe any likely direct, indirect or secondary impacts of the Project (either alone or in combination with other plans or projects) on the Natura 2000 sites by virtue of:

Size and Scale	None – the size and scale of the Natura 2000 sites will not be affected.
Land-take	None from Natura 2000 sites.
Distance from Natura 2000 site or key features of the site	Closest Natura sites are 3.6 km away.
Resource requirements (water abstraction etc.)	No resources from a Natura site are required. Site water during construction and residential occupation will be sourced from mains utilities.
Emissions (disposal to land, water or air)	There are no emissions to water that could affect Natura 2000 sites. Air emissions from the Site (use of plant and machinery at the Site during construction e.g. dust) are unlikely to cause impacts on the Natura 2000 sites due to the absence of ecological pathways and negligible emissions.

⁴ The Highways Agency, Transport Scotland, Welsh Assembly Government & The Department for Regional Development Northern Ireland (2007) Design Manual for Roads and Bridges Volume 11, Section 3, Part 1 HA 207/07 Air Quality

Excavation requirements	There are no excavation requirements within the Natura 2000 sites or those that could affect Natura 2000 sites through source pathway modelling.
Transportation requirements	Transportation of goods to and from Site would not affect Natura 2000 sites in a way that would be measurable.
Duration of construction, operation, decommissioning etc.	Construction of the residential units would occur over a ca. 24 month timeframe. Residential occupation would occur in perpetuity.
Other	None.

4.2 Describe any likely changes to the site arising as a result of:

Reduction of habitat area	None to Natura 2000 sites.
Disturbance to key species	Disturbance to key species is highly unlikely owing to the distance between the Site and Natura 2000 sites including the absence of ecological pathways or synergies.
Habitat or species fragmentation	There will be no habitat or species fragmentation due to the development of the Site. The Site is not part of the Natura 2000 sites in question and no resources are required from them. Designated habitats and species of the SACs/SPAs will not be impacted given their distance from the Site.
Reduction in species density	No reduction in species density is anticipated.
Changes in key indicators of conservation value (water quality etc.	No measurable increase in water quality degradation is predicted.
Climate change	No measurable contribution.

4.3 Describe any likely impacts on the Natura 2000 sites as a whole in terms of:

<i>Interference with the key relationships that define the structure of the site:</i>	No impacts are likely to be afforded.
<i>Interference with key relationships that define the function of the site</i>	No impacts are likely to be afforded.

4.4 Provide indicators of significance as a result of the identification of effects set out above in terms of:

Loss (Estimated percentage of lost area of habitat)	Habitat loss on Site will be negligible and of no biodiversity value. No habitat loss of Natura 2000 sites will occur.
Fragmentation	There will be no habitat fragmentation.
Disruption and disturbance	Disturbance and disruption to species is considered highly unlikely. Species for which the Natura 2000 sites have been designated are highly unlikely to utilise the Site or be influenced by the Site due to distance and / or a lack of environmental connectivity between sites.
Change to key elements of the Site (e.g. water quality etc.)	None. The project will not have a significant adverse effect on surface and groundwater quality, availability, flow or distribution.

4.5 Cumulative Impact

Cumulative impacts focus on the concurrently abutting proposed development known as Tack Sandyford SHD and Sandyford Cycle Route and the likely expansion of residential development as defined by proposed plans and projects within the Dún Laoghaire-Rathdown County Development Plan 2022-2028, Dublin City Development Plan 2016-2022, Fingal Development Plan 2017-2023, South Dublin County Development Plan 2016-2022, and other planning applications.

Cumulative impact assessment is based upon a realisation of additional nutrient loading and pressure on the Ringsend Wastewater Treatment Plant (WwTP). However, cumulative impacts regarding nutrient loading and potential for eutrophication of freshwater and marine habitat are considered to be not significant. That is due to the commitment by Irish Water to upgrade the Ringsend WwTP which will occur in advance of the operational phase of the Development – treating wastewater for 2.1 million people in the second half of 2023, and subsequently for 2.4 million people in 2025 (Irish Water, 2022). Other permitted / under construction

developments are of a similar nature and incorporate similar design principles and widely adopted good practice mitigation, and it is therefore considered that there will be imperceptible cumulative effect.

Cumulative impacts concerning other local committed developments in the vicinity of the Site are assessed in Chapter 15 of the EIAR which accompanies this SHD Application. Other permitted / under construction developments identified in the neighbouring area, include, three committed developments ca. 300 m to the north-west comprising three separate SHD (ABP 305940-19, ABP 304405-19, and ABP 311722-21 respectively). The other three committed developments comprise residential development located ca. 750 m to the south-east (ABP 302580-18), a SHD application ca. 800 m to the south-east (ABP 308227-20), and a SHD application ca. 650 m to the west (D21A/0749).

These developments are of a similar nature and incorporate similar design principles, and it is therefore considered that there will be no significant cumulative effect with these developments.

Given the lack of proximity to Natura Sites and the Development characteristics it is considered highly unlikely that significant effects would be afforded.

4.6 Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale or magnitude of impacts is unknown

As described within this Stage 1 Screening Assessment, it is considered likely that the residential development of the Site will not have a likely significant effect on the Natura 2000 sites pertinent to this assessment. There is a high level of confidence in the assessment of the likely degree of the magnitude of impacts given the Site proposals, and as such it is concluded objectively that significant effects will not be afforded.

The following key considerations contributed towards this conclusion:

- The Site will effectively operate as a closed loop system regarding discharges with no aquatic or terrestrial connectivity with Natura 2000 receptors as defined within this report; and
- There is sufficient distance between the Site and all Natura sites that the Site will not cause disturbance / displacement of those species that form the part of the qualifying interests of the Natura 2000 designation.

5.0 REFERENCES

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