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Appropriate Assessment Screening Report

PRESENTED TO

Zolbury Ltd.

Large Scale Residential Development (LRD) at lands at Blackglen Road, Sandyford, Dublin 18.

December 24

Environmental Consultancy Services

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1 INTRODUCTION

1.1 Background

Enviroguide Consulting was commissioned by Zolbury Ltd., to prepare an Appropriate Assessment (AA) Screening Report (the 'Report') for a Proposed Large-scale Residential Development (LRD), at lands at Blackglen Road, Sandyford, Dublin 18, hereafter referred to as 'Proposed Development' or 'Site', when referring to the application Site area. This Report contains information to enable the Competent Authority to undertake Stage 1 Appropriate Assessment (AA) screening in respect of the Proposed Development.

1.2 Quality Assurance and Competence

Enviroguide Consulting is multi-disciplinary consultancy specialising in the areas of the Environment, Waste Management and Planning. All Enviroguide consultants carry scientific or engineering qualifications and have a wealth of experience working within the Environmental Consultancy sectors, having undergone extensive training and continued professional development.

Enviroguide Consulting as a company remains fully briefed in European and Irish environmental policy and legislation. Enviroguide staff members are highly qualified in their field. Professional memberships include the Chartered Institution of Wastes Management (CIWM), the Irish Environmental Law Association and Chartered Institute of Ecology and Environmental Management (CIEEM).

All surveying and reporting have been carried out by qualified and experienced ecologists and environmental consultants. Eli Kane, Graduate Ecologist with Enviroguide, undertook the report writing and desktop research for this Report. Liam Gaffney, Senior Ecologist with Enviroguide, reviewed this Report and coordinated and/or undertook the habitat, fauna and flora surveys for this project.

Eli has a BSc in Psychology from the University of Maryland, USA and an MSc in Biodiversity and Conservation from Trinity College Dublin. His experience includes desktop research, literature-scoping review, and report writing, as well as vegetation surveys, rare species surveys, and habitat mapping.

Liam has a B.Sc. in Zoology (Hons) and a M.Sc. (Hons) in Wildlife Conservation and Management from University College Dublin. Liam is a Senior Ecologist with 5 years of experience in Ecological Consultancy and is experienced in desktop research, literature scoping-review, and report writing, as well as practical field experience (e.g., Bat surveys, habitat surveys, invasive species surveys, wintering bird surveys, large mammals, fresh water macro-invertebrates etc.). Liam is experienced in compiling Biodiversity Chapters of EIARs, Ecological Impact Assessments (EcIA), Appropriate Assessment (AA) screening and Natura Impact Statements (NIS) reports, and in the overall assessment of potential impacts to ecological receptors from a range of developments. Liam is also a Qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

1.3 Description of Proposed Development

1.3.1 Site Location

The Site of the Proposed Development is located at Blackglen Road, Sandyford, Dublin 18, 710m south of the M50 and 3km west of Leopardstown Golf Course (See Figure 1). The Site is bounded to the north partially by Blackglen Road, with the remainder of the northern boundary, along with the east, south and western boundaries, bounded by residential dwellings and their associated gardens. The Site is also abutted by the Woodside Road to the south-west and the Carrickmines stream along the south-east. The surrounding landscape is comprised of residential estates, agricultural land and areas of woodland.

1.3.2 Proposed Development Description

Zolbury Ltd., intend to apply to Dun Laoghaire Rathdown County Council for permission for development for a Large Scale Residential Development (LRD) on a site of approx. 3.86ha on lands at Blackglen Road, Sandyford, Dublin 18.

The development will consist of 192 no. residential units ranging from 2-5 storeys in height, associated resident amenity facilities, a childcare facility, all boundary treatment and landscaping works, site services connections and all site development works to include:

a) Construction of 192 no. residential units, in the form of 6 no. new apartment buildings (A1 – B4), 40 duplexes (C1, C2, C2A) and 14 houses (D1 & D2), to include 33 no. 1-beds, 84 no. 2 -beds, 61 no. 3-beds and 14 no. 4-beds as follows:

- Block A1 (4 storeys) comprising 15 no. apartments (3 no. 1 bed units, 6 no. 2 bed units & 6 no. 3 bed units); a crèche facility of approx. 378.2 sq. m with associated outdoor play space of approx. 170 sq. m; and resident amenity facilities of approx. 31.6 sq. m.
- Block A2 (3-4 storeys) comprising 26 no. apartments (2 no. 1 bed units, 20 no. 2 bed units and 4 no. no. 3 bed units) and resident amenity facilities of approx. 353.6 sq. m.
- Blocks B1 and B2 (2-5 storeys) comprising 51 no. apartments (15 no. 1 bed units, 29 no. 2 bed units, 7 no. 3 bed units).
- Blocks B3 and B4 (2-5 storeys) comprising 46 no. apartments (13 no. 1 bed units, 23 no. 2 bed units and 10 no. 3 bed units).
- Duplex Units C1 (4 storeys), C2 and C2A (3 storeys) comprising 40 duplexes (6 no. 2 bed units, 20 no. 3 bed units and 14 no. 4 bed units).
- House Units D1 and D2 (2 storeys) comprising 14 houses (14 no. 3 bed units).

b) Total Open space (approx. 10,854 sq. m) is proposed in the form of public open space (approx. 8, 686 sq. m), and residential communal open space (approx. 2,168 sq. m). Each residential unit is afforded with associated private open space in the form of a garden/terrace/balcony.

c) The development will be served via a new vehicular access via Blackglen Road. This will be designed as a priority junction with pedestrian and cycle crossings where required to tie in with the Blackglen Road Improvement Scheme.

d) A new toucan crossing is proposed across Blackglen Road just to the east of the new vehicular access. This toucan crossing has been designed as per TL607 of the Cycle Design Manual to allow crossing of pedestrians and cyclists to the northern side of Blackglen Road for improved public transport access.

e) Emergency access only is proposed via Woodside Road.

f) A dedicated wildlife corridor is proposed to the east/south-east side of the site and a public open space (approx. 307 m in length) tree trail to the west/north-west side of the site.

g) Basement/Podium car park areas are proposed below Blocks B1, B2, B3 and B4. A total of 226 no. car parking spaces are proposed, which includes 2 no. car club spaces, 12 no. accessible spaces and 47 no. EV charging spaces (198 no. long-stay spaces, 18 no. visitor space & 10 no. car parking spaces for creche use), in addition to 9 no. motorcycle spaces.

h) A total of 484 no. bicycle spaces are proposed in the form of 442 no. long stay bicycle spaces 42 short-term stay visitor parking.

i) 2 no. ESB substations at surface level.

j) Bin Storage areas for the Duplex blocks are proposed at ground level adjacent to the Duplex blocks.

k) All associated site and infrastructural works to include provision for water services; foul and surface water drainage and connections; internal roads, attenuation proposal; permeable paving; all landscaping works including green infrastructure zones; green roofs; and general plant areas; photovoltaic panels; landscaped boundary treatment; footpaths; public lighting; and electrical services.

1.3.3 Existing Drainage

The following details are extracted from the Engineering Services Report (ESR) submitted as part of this application (OSCS, 2024).

1.3.3.1 Surface water

Existing services records indicate that no surface water sewer is present in the vicinity of the Proposed Development and runoff from the Site is allowed to infiltrate naturally.

1.3.3.2 Foul water

Existing services records do not indicate the presence of any wastewater infrastructure within the Site of the Proposed Development. Records indicate that there is an existing 150mm Ø wastewater sewer on Blackglen Road. This sewer is to be upgraded as part of the planned upgrade works on Blackglen Road.

1.3.4 Proposed Drainage

It is proposed to separate the surface water and wastewater drainage networks, which will serve the Proposed Development, and provide independent connections to the surface water sewer and local wastewater sewer networks, respectively.

The following details are extracted from the ESR submitted as part of this application (OSCS, 2024a).

1.3.4.1 Surface water

The proposed surface water design splits the Proposed Development into two main catchments to better integrate Sustainable Drainage Systems (SuDS) measures and reduce the rainfall runoff rate:

1. Main Development catchment (**Catchment 1**) discharging controlled and restricted flow rates of the treated rainfall runoff to the existing stormwater network at Blackglen Road. This is split into five sub-catchments (**1A, 1B, 1C, 1D and 1E**)
2. Blocks B3 and B4, including access road (**Catchment 2**), draining to the proposed infiltration soakaway, and then discharging treated rainfall runoff at a restricted rate (Max. of QBAR for the catchment; 1.3 l/s) to the existing stream on the southeast boundary line, matching existing outfall for the catchment.

Each sub-catchment area will look to provide interception and treatment to the rainfall runoff, either at source or through site design. Infiltration systems will be provided in off-podium areas where applicable as the soakaway testing carried out on Site resulted in good infiltration rates across the Site. The proposed surface water networks are to typically comprise a gravity pipe network, with significant SuDS measures e.g., bioretention areas, infiltration trench, green roofs, podium drainage, pervious paving, filter drains, trapped road gullies, flow control devices, attenuation storages implemented and integrated, wherever practicable. Interim attenuation benefits are to be provided at roof level, through the provision of green roofs (>70% total roof area), and throughout the external drainage network: within the landscape features, the podium build-up and pervious paving base course.

1.3.4.1.1 SuDS Measures

Permeable ‘pervious’ paving

A Type B pervious paving, with a 300mm (typical) depth of open graded crushed rock as base course, is to be provided in driveways/ car parking spaces, within the Proposed Development. An overflow pipe, from the basecourse, will be provided to the drainage network, which will allow for interception of initial rainfall, groundwater discharge, with an attenuated outflow to the main network in extreme rainfall events.

Grasscrete

For the remaining car parking spaces, a grasscrete surface is proposed. While providing the general benefits of permeable paving (above), it provides initial abstraction by vegetation and, similar to green roof technology, retains a small amount of runoff allowing for transpiration and evaporation, thus reducing runoff volume.

Bioretention areas

A number of small bioretention areas next to the individual housing units will provide treatment and interception for minor storm events. Runoff will pond temporarily on the surface and then filters through the vegetation and underlying soils. The filtered runoff is then collected using underdrain pipes and partially infiltrated into the surrounding soil.

Green roofs

Green roofs are to be provided across the development with greater than 70% coverage, as required by DLR's planning policy. As this development includes roof areas greater than 300m^2 on apartment buildings, the planning application must include green roof coverage in accordance with Standard GR2 of Appendix 7.2 (DLR County Development Plan). This calls for at least 70% coverage for applicable buildings when using an extensive buildup (min. 80mm substrate), or at least 50% coverage when using an intensive buildup (min 200mm substrate). It is proposed that block B1/B2 and block B3/B4 will each provide a minimum of 50% green roof coverage using an intensive buildup. The green roofs on these blocks will also be blue roofs.

Blocks A1 and A2 both have sloped roofs which are not practical for green roof construction. However, as both buildings exceed the 300m^2 threshold, green roof coverage has been provided as an extensive buildup on 20 of the individual housing units. Even with a 700mm setback on each of these roofs almost 80% coverage for Blocks A1 and A2 is provided, thus exceeding the 70% requirement.

Trapped road gullies

All road gullies serving the Proposed Development are to be trapped, to help prevent sediment and gross pollutants from entering the surface water network, and thus improving the water quality discharging from Site.

Silt traps

A manhole upstream of attenuation system is to contain a 600mm sump, below invert level of outlet pipe, in order to trap sediment and other gross pollutants, and prevent from entering downstream watercourses; thus improving the water quality discharging from Site.

Geocellular storage systems

Unlined proprietary geocellular storage units are to be provided for the attenuation of rainfall runoff for the catchment area. These systems are to provide sufficient temporary storage volume for rainfall events up to, and including, the design 1% AEP rainfall event (including climate change). Typical geocellular storage systems comprise plastic cellular units of high porosity (typically >95%), structurally arranged in rows and layers, with a perforated distribution pipe through the centre.

Interception storage

Interception storage is to be provided below the development's primary attenuation. This will temporarily store and treat the first 5mm rainfall on the development. The interception storage is to be allowed to drain naturally, which will reduce the volume of

discharging to the existing network while increasing the quality of the water infiltrating to the ground.

Filter drains

Filter drains (perforated pipe with cl505 surround) to be provided along roads where possible to intercept and treat polluted water.

Flow control device

A flow control device is to be provided immediately downstream of attenuation system, in order to restrict the surface water discharge from Site to a flow rate equivalent, or below, the natural greenfield runoff rate OCSC, 2024a).

Oil separator

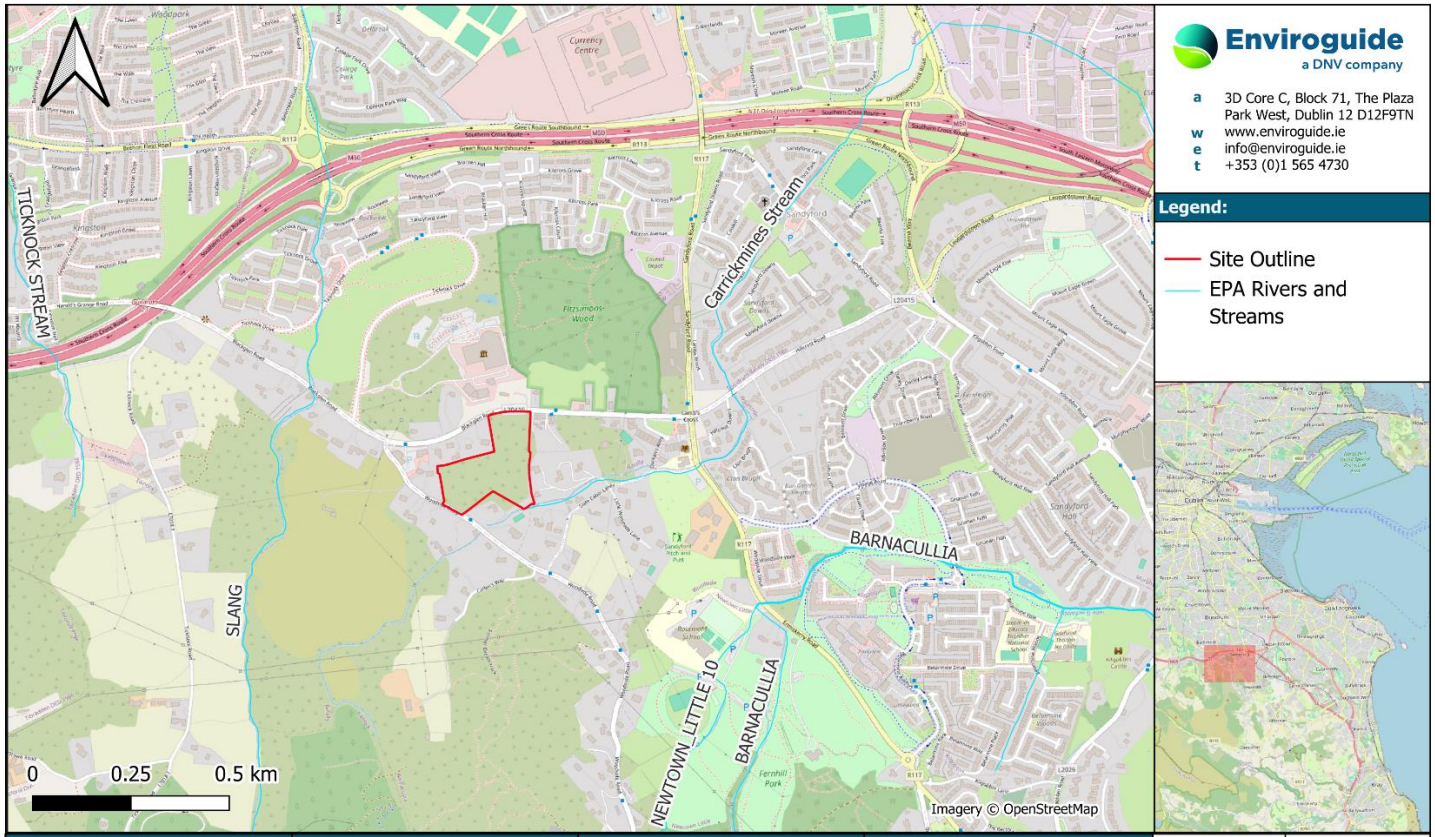
A Class 1 bypass fuel separator is to be provided immediately downstream of the last attenuation system, as an additional and final embedded mitigation measure, prior to surface water discharge from each unit sub-catchment to the surface water network.7

For the smaller surface water network which discharges from the area around Block B3/B4 to the existing stream on the south-eastern boundary, a similar separator will be provided immediately upstream of the infiltration soakaway.

1.3.4.2 Foul Drainage

It is proposed to separate the wastewater and surface water drainage networks, which will serve the Proposed Development, and provide independent connections to the public wastewater infrastructure. The Proposed Development is to be drained by a gravity wastewater network, based on the natural topography of the development Site. The buildings' wastewater network is to connect to the new development's gravity wastewater network at the ground level which will connect the upgraded foul sewer network on Blackglen Road.

A Pre-Connection Enquiry Form (IW Ref Nr. CDS22002623) was submitted 6th April 2022 to Irish Water for a total of 360nr. residential units. Feedback on this enquiry has been received and states that the development is feasible subject upgrades to the existing network. A new Pre-Connection Enquiry Form (IW Ref Nr. Feedback on this enquiry has been received and states that the development is feasible, subject to upgrades to the existing network. Please see the ESR (OCSC, 2024a) for further details.



Applicant:	Project:	Location:	Figure Title:	Drawn By: EK	Projection: IRENET95 / Irish Transverse Mercator
Zolbury Ltd.	Proposed Large-scale Residential Development	Blackglen Rd, Sandyford, Dublin 18	Site Location	Checked: LG	
				Date: 13/12/2024	Scale @ A4: 1:12437

Notes:
Site boundaries shown are for illustration purposes only and do not represent legal or exact boundaries

FIGURE 1. SITE LOCATION



FIGURE 2. SITE LAYOUT (EXTRACTED FROM OMP DRWG: 20006A-OMP-01-00-DR-A-1000)

2 LEGISLATIVE AND POLICY CONTEXT

2.1 Legislative Background

The Habitats Directive (92/43/EEC) (as amended) seeks to conserve natural habitats and wild fauna and flora by the designation of Special Areas of Conservation (SACs) and the Birds Directive (2009/147/EC) (as amended) seeks to protect birds of special importance by the designation of Special Protection Areas (SPAs). The Habitats Directive has been transposed into Irish law through the EC (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011) (as amended).

It is the responsibility of each Member State to designate SPAs and SACs, both of which will form part of the Natura 2000 Network, a network of protected sites throughout the European Community. These designated sites are referred to as "Natura 2000 sites" or "European sites". SACs are selected for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds). SPAs are selected for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. The annexed habitats and species for which each site is selected correspond to the Qualifying Interests (QIs) and Special Conservation Interests (SCIs) of the sites; from these the conservation objectives of the site are derived.

An AA is a required assessment to determine the likelihood of significant effects, based on best scientific knowledge, of any plans or projects on European sites. A screening for AA determines whether a plan or project, either alone or in combination with other plans and projects, is likely to have significant effects on a European site, in view of its conservation objectives.

This AA Screening has been undertaken to determine the potential for significant effects on relevant European sites. The purpose of this assessment is to determine, the appropriateness, or otherwise, of the Proposed Development in the context of the conservation objectives of such sites.

2.1.1 Legislative Context

The obligations in relation to Appropriate Assessment have been implemented in Ireland under Part XAB of the Planning and Development Act 2000, as amended ("the 2000 Act"), and in particular Section 177U and Section 177V thereof. The relevant provisions of Section 177U in relation to AA screening have been set out below:

"***177U.—*** *(1) A screening for appropriate assessment of a draft Land use plan or application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.*

(2)…

(3)…

(4) The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed development, as the case may be, is required if it cannot be excluded,

on the basis of objective information, that the draft Land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.

(5) The competent authority shall determine that an appropriate assessment of a draft Land use plan or a proposed development, as the case may be, is not required if it can be excluded, on the basis of objective information, that the draft Land use plan or proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site."

An Appropriate Assessment is required under Article 6 of the Habitats Directive where a project or plan may give rise to significant effects upon a European site. Paragraph 3 states that:

"*6(3) 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."*

2.1.2 Consideration of Embedded Mitigation in AA

With regard to the consideration of embedded mitigation in the Appropriate Assessment process the following is noted. According to the ruling in ECO Advocacy delivered in Luxembourg on 15th June 2023 regarding the interpretation of Article 6(3) of Directive 92/43 (as amended), the Article must be interpreted as meaning that:

"In order to determine whether it is necessary to carry out an appropriate assessment of the implications of a plan or project for a site, account may be taken of the features of that plan or project which involve the removal of contaminants and which therefore may have the effect of reducing the harmful effects of the plan or project on that site, where those features have been incorporated into that plan or project as standard features, inherent in such a plan or project, irrespective of any effect on the site".

As such, standardised embedded mitigation (such as the use of Sustainable Drainage Systems (SuDS) in large-scale residential developments), that are incorporated into the design of a proposal or project and which may result in the elimination of likely significant effects on European sites, but where the primary reason of the embedded mitigation is not to protect a European site, are permitted for consideration when screening for AA. The inclusion of SuDS measures in new developments is noted in the policy objectives of the Dún Laoghaire-Rathdown County Development Plan 2022-2028 e.g., Policy Objective EI6.

2.2 Policy Context

2.2.1 Dún Laoghaire-Rathdown County Development Plan 2022-2028

Policies and objectives of the Dún Laoghaire-Rathdown County Development Plan 2022 – 2028 that are of relevance to this Screening Report are outlined below:

- **GIB11:** Coastal Area Feasibility Study. It is a Policy Objective to explore undertaking a comprehensive feasibility study on the recreational potential along the coastal area of the County, which comprehensively addresses recreational impact - including visitor numbers, mapping and surveying of sensitive habitats and species and identification of significant threats on European sites - and which would allow an assessment of any future proposals, alone or in combination, to assess impact on the coastal and marine zone within and adjacent to the County boundary. The Council will explore the possibility of carrying out this study with adjoining and/or coastal Local Authorities and/or other agencies.

- **GIB18:** Protection of Natural Heritage and the Environment. It is a Policy Objective to protect and conserve the environment including, in particular, the natural heritage of the County and to conserve and manage Nationally and Internationally important and EU designated sites - such as Special Protection Areas (SPAs), Special Areas of Conservations (SACs), proposed Natural Heritage Areas (pNHAs) and Ramsar sites (wetlands) - as well as non-designated areas of high nature conservation value known as locally important areas which also serve as 'Stepping Stones' for the purposes of Article 10 of the Habitats Directive.

- **GIB19:** It is a Policy Objective to ensure the protection of natural heritage and biodiversity, including European Sites that form part of the Natura 2000 network, in accordance with relevant EU Environmental Directives and applicable National Legislation, Policies, Plans and Guidelines.

- **GIB21:** It is a Policy Objective to protect and preserve areas designated as proposed Natural Heritage Areas, Special Areas of Conservation, and Special Protection Areas. It is Council policy to promote the maintenance and as appropriate, delivery of 'favourable' conservation status of habitats and species within these areas.

- **GIB22:** It is a Policy Objective to protect and promote the conservation of biodiversity in areas of natural heritage importance outside Designated Areas and to ensure that notable sites, habitats and features of biodiversity importance - including species protected under the Wildlife Acts 1976 and 2000, the Birds Directive 1979, the Habitats Directive 1992, Birds and Habitats Regulations 2011, Flora (Protection) Order, 2015, Annex I habitats, local important areas, wildlife corridors and rare species - are adequately protected. Ecological assessments will be carried out for all developments in areas that support, or have potential to support, features of biodiversity importance or rare and protected species and appropriate mitigation/ avoidance measures will be implemented. In implementing this policy, regard shall be had to the Ecological Network, including the forthcoming DLR Wildlife Corridor Plan, and the recommendations and objectives of the Green City Guidelines (2008) and 'Ecological Guidance Notes for Local Authorities and Developers' (Dún Laoghaire-Rathdown Version 2014).

- **GIB23:** It is a Policy Objective to protect the Ecological Network which will be integrated into the updated Green Infrastructure Strategy and will align with the DLR County Biodiversity Action Plan. Creating this network throughout the County will also improve the ecological coherence of the Natura 2000 network in accordance with Article 10 of the Habitats Directive. The network will also include non-designated sites.

- **GIB25:** It is a Policy Objective to retain and protect hedgerows in the County from development, which would impact adversely upon them. In addition, the Council will promote the protection of existing site boundary hedgerows and where feasible require the retention of these when considering a grant of planning permission for all developments. The Council will promote the County's hedgerows by increasing coverage, where possible, using locally native species and to develop an appropriate code of practice for road hedgerow maintenance. The Council will promote the protection of existing hedgerows when considering a grant of planning permission for all developments.

- **GIB28:** It is a Policy Objective to prepare an 'Invasive Alien Species Action Plan' for the County which will include actions in relation to Invasive Alien Species (IAS) surveys, management and treatment and to also ensure that proposals for development do not lead to the spread or introduction of invasive species. If developments are proposed on sites where invasive species are or were previously present, the applicants will be required to submit a control and management program for the particular invasive species as part of the planning process and to comply with the provisions of the European Communities Birds and Habitats Regulations 2011 (S.I. 477/2011).

- **EI6:** It is a Policy Objective to ensure that all development proposals incorporate Sustainable Drainage Systems (SuDS).

2.2.2 Dún Laoghaire-Rathdown Biodiversity Action Plan 2021-2025

The Dún Laoghaire-Rathdown Biodiversity Action Plan (BAP) 2021-2025 is set out to protect and improve biodiversity, following five main themes and associated objectives:

1. Reaching a deeper understanding of our county's biodiversity.
   "***Objective 1*** *Strengthen the knowledge base for conservation, management, and sustainable use of biodiversity."*
2. Making good decisions for biodiversity.
   "Objective 2 *Mainstream biodiversity into decision making and improve the management of this valuable resource"*
3. Powerful actions to protect biodiversity and us.
   *"**Objective 3** Conserve and restore biodiversity and ecosystems and support ecosystem services in DLR, including coastal and marine"*
4. Connecting people and nature and inspire a positive future.
   *"**Objective 4** Increase awareness, training and appreciation of biodiversity, ecosystems and ecosystem services*."
5. Strength in working together.
   "***Objective 5*** *Strengthen the effectiveness of collaboration between all stakeholders for the conservation of biodiversity, including with Local Authority Biodiversity Officers, Local Authority Waters Programme (LAWPRO), the National Biodiversity Data Centre, BirdWatch Ireland, NPWS and other State Bodies."*

2.3 Stages of Appropriate Assessment

This AA Screening Report (the 'Screening Report') has been prepared by Enviroguide Consulting. It considers whether the Proposed Development is likely to have a significant effect on a European site and whether a Stage 2 AA is required.

The AA process is a four-stage process. Each stage requires different considerations, assessments and tests to ultimately arrive at the relevant conclusion for each stage. An important aspect of the process is that the outcome at each successive stage determines whether a further stage in the process is required.

The four stages of an AA, can be summarised as follows:

- **Stage 1: *Screening*.** The Screening for AA considers whether a plan or project is directly connected to or necessary for the management of a European site, or whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a European site in view of its conservation objectives.
- **Stage 2: *Natura Impact Statement (NIS).*** Where Stage 1 determines that significant effects are likely, uncertain or unknown, the preparation of a NIS is required. The NIS must include a scientific examination of evidence and data to classify potential impacts on any European site(s) in view of their conservation objectives in the absence of mitigation. The NIS will identify appropriate mitigation to remove the potential for likely significant adverse effects on any European site(s). If the competent authority determines that the plan or project would have an adverse effect on the integrity of any European site(s) despite mitigation, it can only grant consent after proceeding through stages 3 and 4.
- **Stage 3: *Assessment of alternative solutions***. If the outcome of Stage 2 is negative i.e., adverse impacts to the sites cannot be scientifically ruled out, despite mitigation, the plan or project should proceed to Stage 3 or be abandoned. This stage examines alternative solutions to the proposal.
- **Stage 4: *Assessment where no alternative solutions exist and where adverse impacts remain***. The final stage is the main derogation process examining whether there are imperative reasons of overriding public interest (IROPI) for allowing a plan or project to adversely affect a European site, where no less damaging solution exists.

The Habitats Directive promotes a hierarchy of avoidance, mitigation, and compensatory measures. First the project should aim to avoid any negative effects on European sites by identifying possible effects early in the planning stage and designing the project to avoid such effects. Second, mitigation measures should be applied, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If the project is still likely to result in adverse effects, and no further practicable mitigation is possible, a refusal for planning permission may be recommended. In this case, the project will generally only be considered where no alternative solutions are identified and the project is required for IROPI, or, in the case of priority habitats, considerations of health or safety, or beneficial consequences of primary importance for the environment or to other IROPI. Then compensation measures are required for any remaining adverse effects.

3 AA SCREENING METHODOLOGY

3.1 Guidance

This Screening Report has been undertaken in accordance with the following guidance:

- *Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities.* (Department of Environment, Heritage and Local Government, 2010 revision);
- *Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.* Circular NPW 1/10 & PSSP 2/10;
- *Communication from the Commission on the precautionary principle* (European Commission, 2000);
- *Managing Natura 2000 Sites: The Provisions of Article 6 of the Habitat's Directive 92/43/EEC* (European Commission, 2019);
- *Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC* Brussels, 28.9.2021 C (European Commission, 2021); and
- *Appropriate Assessment Screening for Development Management, OPR Practice Note PN01, Office of the Planning Regulator March 2021.*

3.2 Screening Steps

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 baseline existing environment at the Site of the Proposed Development;
- Identification of relevant European site(s) potentially affected;
- Identification and description of potential effects on the relevant European site(s);
- Assessment of the likely significance of the effects identified on the relevant European site(s);
- Description and characterisation of other projects or plans that in combination with the Proposed Development have the potential for having significant effects on the European site; and
- Exclusion of sites where it can be objectively concluded that there will be no significant effects.

It should be noted that any specific targeted ecological mitigation measures and/or measures intended or included exclusively for the purposes of avoiding adverse effects arising from the Proposed Development on any European site **have not been considered** as part of this Screening Report.

3.3 Desk Study

A desktop study was carried out to collate and review available information, datasets and documentation sources relevant for the completion of this Screening Report. The desktop study relied on the following sources:

- Information on the network of European Sites, boundaries, QIs and conservation objectives, obtained from the National Parks and Wildlife Service (NPWS) at *www.npws.ie*;
- Text summaries of the relevant European sites taken from the respective Standard Data Forms (available at *https://natura2000.eea.europa.eu/*) and Site Synopses (available at *www.npws.ie*);
- Information on waterbodies, catchment areas and hydrological connections obtained from the Environmental Protection Agency (EPA) at https://gis.epa.ie/EPAMaps/
- Information on bedrock, groundwater, aquifers and their statuses, obtained from Geological Survey Ireland (GSI) at *www.gsi.ie*;
- Satellite imagery and mapping obtained from various sources and dates including Google, Digital Globe, Bing and Ordnance Survey Ireland; and
- Information on the existence of permitted developments, or developments awaiting decision, in the vicinity of the Proposed Development from the Dún Laoghaire-Rathdown County Council online planning database (https://www.dlrcoco.ie/planning-applications/planning-applications-online-search) and the National Planning Database (DHLGH, 2024).

For a complete list of the documents consulted as part of this assessment, see *Section 6 References*.

3.4 Identification of Relevant European sites

The Zone of Influence (ZOI) for a project is the area over which ecological features may be affected by changes as a result of a development and associated activities. This is likely to extend beyond the development site, for example where there are ecological or hydrological links beyond the site boundaries (CIEEM, 2018). Furthermore, ZOI in relation to European sites is described as follows in the 'OPR Practice Note PN01 - Appropriate Assessment Screening for Development Management' (OPR, 2021):

> "*The zone of influence of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. This should be established on a case-by-case basis using the Source-Pathway-Receptor framework and not by arbitrary distances (such as 15 km).*"

Thus, to identify the European sites that potentially lie within the ZOI of the Proposed Development, a Source-Path-Receptor (S-P-R) method was adopted, as described in OPR PN01 (OPR 2021). This note was published to provide guidance on screening for AA during the planning process, and although it focuses on the approach a planning authority should

take in screening for AA, the methodology is also readily applied in the preparation of Screening Reports such as this.

The relevant European sites were identified based on the following:

- Identification of potential sources of effects based on the Proposed Development description and details, including changes to potentially suitable *ex-situ* habitats at the Site (i.e., habitats utilised by SCI bird species outside of their designated SPAs);
- Use of up-to-date GIS spatial datasets for European designated sites and water catchments – downloaded from the NPWS website (*www.npws.ie*) and the EPA website (*www.epa.ie*) to identify European sites which could potentially be affected by the Proposed Development; and
- Identification of potential pathways between the Site of the Proposed Development and any European sites within the ZOI of any of the identified sources of impacts.
    - The catchment data were used to establish or discount potential hydrological connectivity between the Proposed Development and any European sites.
    - Groundwater, soils, and bedrock information used to establish or discount potential hydrogeological connectivity between the Proposed Development and any European sites.
    - Air and land connectivity assessed based on Proposed Development details and proximity to European sites.
    - Consideration of potential indirect pathways, e.g., impacts to flight paths, *ex-situ* habitats, etc.
- Defining the likely ZOI based on the identified sources of effects and potential pathways between the Proposed Development and any European sites.

3.5 Assessment of Significant Effects

The conservation objectives of the European sites identified to lie within the ZOI were reviewed and assessed in order to establish whether the construction and operation of the Proposed Development has the potential to have a negative impact on any of the QIs and/or conservation objectives listed for the site.

The assessment framework is taken from the best practice guidelines issued by the European Commission, i.e., "*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*".

The potential for significant effects that may arise from the Proposed Development was considered through the use of key indicators:

- Habitat loss or alteration.
- Habitat/species fragmentation.
- Disturbance and/or displacement of species.

- Changes in population density.
- Changes in water quality and resource.

In addition, information pertaining to the conservation objectives of the European sites, the ecology of the designated habitats and species and known or perceived sensitivities of the habitats and species were considered.

3.6 Limitations

No limitations were encountered which would prevent robust conclusions from being drawn as to the potential impacts of the Proposed Development and therefore the likely significant effects on the European Site, in view of the Site's conservation objectives.

4 STAGE 1 SCREENING ASSESSMENT

4.1 Existing Environment

4.1.1 Desk Study Results

4.1.1.1 Hydrology, Geology and Hydrogeology

The Site is located in the Avoca-Vartry Catchment (Catchment I.D 10) and in the Dargle_SC_010 Sub-catchment (Sub-catchment I.D.10_5) (EPA, 2024).

The Carrickmines (1st order) stream passes approximately 8m south of the Site boundary and flows in a southeasterly direction for 8.9km before joining the Shanganagh River (3rd order). The Shanganagh River flows a further 1.7km southeast before discharging into the Southwestern Irish Sea at Killiney Bay.

The EPA water quality monitoring data for the stations on the Carrickmines Stream and Shanganagh River located closest to the Site is summarised in Table 1. The reported Q-value results indicate that water quality in the Carrickmines Stream was 'poor' in 2003 but 'good' in the Shanganagh River downstream of the Site as of 2020 (EPA, 2024).

TABLE 1. EPA MONITORING STATIONS AND ASSIGNED Q VALUES

EPA Monitoring Station name	Station Code	Location from Site	Distance from Site	Assigned Q value
Carrickmines Stream – Glenamuck rd Br (Friarsland/Priorsland)	RS10C040200	Southeast downstream	4.3km	3 "Poor" (2003)
At Commons Road	RS10S010600	Southeast downstream	7.9km	4 "Good" (2020)

The Site of the Proposed Development is situated on the Wicklow (IE_EA_G_076) groundwater body. The bedrock aquifer identified beneath the Site is mapped as "Poor Aquifer – Bedrock which is Generally Unproductive except for Local Zones" (Pl) (GSI, 2024).

The Groundwater Vulnerability Rating assigned to groundwater beneath Site is "*Extreme" (E)* (GSI, 2024).

The soil beneath the Site is not mapped. Subsoils beneath the Site are classified as "*Bedrock at or close to surface – Rck*" (EPA, 2024).

The groundwater rock units underlying the aquifer are classified as *Granites and other Igneous Intrusive Rocks*. (GSI, 2024.)

The Waterbody Status for river, groundwater, transitional and coastal water bodies relevant to the Site as recorded for the most recent reporting period—2016-2021-- by the EPA (2024) in accordance with European Communities (Water Policy) Regulations 2003 (SI no. 722/2003), Part IV of the European Communities Environmental Objectives (Surface Waters) Regulations 2009 and Part IV of the European Communities Environmental Objectives (Groundwater) Regulations 2010, are provided in Table 2.

TABLE 2. WFD RISK AND WATER BODY STATUS

Waterbody Name	Water body; EU code	Location from Site	Distance from Site	WFD water body status (2016-2021)	WFD 3rd cycle Risk Status	Hydraulic Connection to the Site
Surface Water Bodies						
Carrickmines Stream	IE_EA_10C040350	South	8m	Good	Not at risk	Downstream of the Site
Shanganagh River	IE_EA_10S010600	Southeast	8.9km	Good	Not at risk	Downstream of the Site
Coastal Water Bodies						
Southwestern Irish Sea – Killiney Bay	IE_EA_100_0000	East	8.4km	High	Not at Risk	Downstream of the Shanganagh River
Groundwater Bodies						
Wicklow Groundwater Body	IE_EA_G_076	N/A	N/A	Good	At risk	Underlying groundwater-body

4.1.1.2 Site Drainage

There is an existing ditch along Woodside Road on the southwestern corner of the Site with flow due east into a neighbouring private garden observed during the Site walkover on the 29th of November, 2023. Overall, the Site slopes south to north towards Blackglen Road.

4.2 Identification of Relevant European Sites

4.2.1 Potential Sources of Impacts

The Proposed Development is not directly connected with or necessary to the management of European sites. The following elements of the Proposed Development were identified and assessed for their potential to cause likely significant effects on European sites.

Construction Phase (*Estimated duration: 18 months*)

- Uncontrolled releases of dust, sediments and/or other pollutants to air due to earthworks;
- Surface water run-off containing silt, sediments and/or other pollutants into nearby waterbodies or surface water network;
- Surface water run-off containing silt, sediments and/or other pollutants into the local groundwater;
- Waste generation during the Construction Phase comprising soils and construction wastes;
- Increased noise, dust and/or vibrations as a result of construction activity;
- Increased dust and air emissions from construction traffic;
- Increased lighting in the vicinity as a result of construction activity; and
- Increased human presence and activity as a result of construction activity.
- Loss of *ex-situ* habitat due to land-use change (i.e., development).

Operational Phase *(Estimated duration: Indefinite)*

- Surface water drainage from the Site of the Proposed Development;

- Foul water from the Proposed Development;
- Increased lighting at the Site and in the vicinity emitted from the Proposed Development; and
- Increased human presence and activity at the Site and in the vicinity as a result of the Proposed Development.
- Collision risk for birds involving proposed structures.

4.2.2 Potential Pathways to European Sites

For the above listed potential sources of effects to have the potential to cause likely significant effects on any European site, a pathway between the source of potential effects (i.e., the Site of the Proposed Development) and the receptor is required. Potential impact pathways are discussed in the following sections in the context of the identified impact sources as identified in section 4.2.1.

4.2.2.1 Direct Pathways

4.2.2.1.1 Hydrological pathways

Surface waters generated at the Site during the Construction Phase could enter the Carrickmines stream adjacent to a section of the Site's south-eastern boundary. To reach a European site via hydrological means, any pollutants entering this surface water network would have to travel ca.10.6km via the Carrickmines stream and Shanganagh River before discharging into the Southwestern Irish Sea and traveling a further 1.5km to ***Rockabill Island to Dalkey Island SAC (004024)*** or 2.9km to ***Dalkey Island SPA (004172)***. Thus, surface water pollutants during the Construction Phase are separated from European sites by a minimum of ca.12km of surface water and a significant marine buffer. Due to the relatively small-scale and short-term nature (18 months) of the Construction Phase of the Proposed Development, any impacts to European sites via hydrological pathways during the Construction Phase are not likely to occur. However, a precautionary approach has been taken and this impact pathway has been considered below.

An Operational Phase hydrological impact pathway is not deemed to exist due to the above geographical factors (distance, topography, nature of hydrological pathway) and the inclusion of SuDS as embedded mitigation in the project design. Operational surface waters leaving the Site will therefore have no capacity to cause likely significant effects at downstream European sites. It is noted that, even in the absence of SuDS measures, this would be the case for the reasons explained above.

4.2.2.1.2 Hydrogeological pathways

The Site is located within the Wicklow groundwater body (GWB). The Wicklow GWB is characterised by discharge to the nearest surface water body within the GWB, typically within a couple of a hundred meters (GSI, 2024). The groundwater vulnerability beneath the Site is 'Extreme'.

There are no QI groundwater dependent habitats within European sites downstream of, or sharing surface water pathways with, the Proposed Development within the Wicklow GWB. ***The Murrough Wetlands SAC (002249)*** is located approximately 20.8km southeast of the Site within the Wicklow GWB. This site is designated for groundwater-dependent habitats,

namely Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* [7210] and Alkaline fens [7230]. However, no contaminants originating from the Site of the Proposed Development have the capacity to reach this SAC given the distance and number of surface water bodies within the intervening distance between the Site and the SAC. Any connections to European sites downstream of the Proposed Development along surface water pathways are considered under hydrological connections in Section 4.2.2.1.1. above. Thus, there are no potential hydrogeological pathways from the Proposed Development to any European sites and therefore no S-P-R connections exist by hydrogeological means.

4.2.2.1.3 Air and land pathways

The nearest European sites to the Proposed Development – ***Wicklow Mountains SAC (002122)*** and ***Wicklow Mountains SPA (004040)***—are 4.3km southwest of the Site. This distance is sufficient to rule out connections between any noise and dust produced by the Construction of Operational Phases of the Proposed Development and these European sites. Thus, there are no air/land pathways of note between the Proposed Development and any European sites.

4.2.2.2 Indirect Pathways

4.2.2.2.1 Discharge from Ringsend WWTP

Foul water generated by the Proposed Development once operational will be directed to and treatet at Ringsend WwTP. Therefore, during the Operational Phase there is an indirect hydrological pathway between the Site and **North Dublin Bay SAC (000206), South Dublin Bay SAC (000210), North Bull Island SPA (004006), South Dublin Bay and Tolka Estuary SPA (004024)** and **North-West Irish Sea SPA (004236)** via foul water drainage which discharges in Dubin Bay from Ringsend WwTP.

However, this pathway is considered weak and insignificant for several reasons outlined below:

- The completion of the first phase of upgrade works to Ringsend WwTP, which increased the capacity of the facility by 400,000 Population Equivalent (P.E) in December 2021 and the further upgrade works proposed which will increase the capacity of the facility to 2.4 million P.E.
- The increase of the PE load at the facility as a result of the Proposed Development, assuming each PE unit was not previously supported by the WwTP, is considered to be an insignificant increase in terms of the overall scale of the facility. The increased load does not have the capacity to alter the effluent released from the WwTP to such an extent as to result in likely significant effects on European sites in Dublin Bay.
- It is considered that effects on marine biodiversity and the European sites within Dublin Bay from the current operation of Ringsend WwTP are unlikely (See Section 4.3.6.3).

It is not expected that foul waters generated by the Proposed Development will result in the overloading of Ringsend WwTP and foul waters from the Proposed Development will not result in impacts to any European Sites located within Dublin Bay. Therefore, there is no S-P-R pathway of note via Ringsend WwTP between the Proposed Development and European sites in Dublin Bay.

4.2.2.2.2 Ex-situ habitat loss

The closest SPA to the Proposed Development is ***Wicklow Mountains SPA (004040***, 4.3 km southwest of the Site. This site is protected for Peregrine (*Falco peregrinus*) and Merlin (*Falco columbarius*). Although peregrine and merlin may forage over the lands within and surrounding the Site, the Site itself provides limited suitable *ex-situ* foraging habitat and no suitable nesting habitat (i.e., cliffs, moorland or plantation forestry) for these species (being comprised of a mosaic of dense gorse scrub, exposed rock, and tall bracken). In addition, the Proposed Development does not have the capacity to cause any significant disturbance and/or displacement to any species within any other European Site due to the intervening distances between the Site of the Proposed Development and those European Sites.

4.2.2.2.3 Collision risk with birds and buildings

The physical location of buildings and structures can influence the likelihood of bird collisions, with structures placed on or near areas regularly used by large numbers of feeding, breeding, or roosting birds, or on a local flight path, such as those located between important foraging and roosting areas, can present a higher risk of collision.

The Site itself is surrounded by a mix of residential, greenfield, and agricultural land in County Dublin. The nearest SPA to the Proposed Development, ***Wicklow Mountains SPA (004040***, is 4.3 km southwest of the Site As discussed above, there is no significant *ex-situ* feeding/roosting/staging habitat on the Site for any SCI species of wintering birds listed for this European site, or those located to the east along the Dublin coastline.

In-flight collisions between SCI species and the Proposed Development are not deemed to pose a source of likely significant effects to the conservation objectives of the relevant SPAs, as detailed in the following sections.

Building Height

The Proposed Development will be a max height of 5 storeys (approx. 17m). Birds that commute to reach feeding grounds at various locations would tend to fly above this height and once the proposed structures are made of visible materials i.e., not entirely comprised of reflective materials such as glass, the birds flying in the vicinity of the buildings will simply fly around or over them.

SCI species for SPAs within the ZOI of the Proposed Development, which regularly use or travel over inland areas in Dublin (e.g., Peregrine), navigate the urban environment with built structures daily. To put some context on some of their avoidance capabilities, in a different setting and for use in collision risk modelling for onshore wind turbines, an avoidance rate between 95% and 99% is applied for raptor species including Kestrel (*Falco tinnunculus*), Red kite (*Milvus milvus*), and Hen harrier (*Circus cyaneus*) (SNH, 2018). The risk of collision is even less with a static, clearly detectable building.

Building Appearance

The overall façades of the proposed structures are well broken up, with areas of glazing dispersed across a varied material composition (See Figure 3). The opaque materials proposed provide important visible cues as to the presence and extent of the proposed structures to any commuting/foraging bird species should they be in the vicinity of the Site. The overall visual heterogeneity of the building façades will be sufficient to further ensure that

the risk of bird collisions as a result of the Proposed Development is extremely low. These architectural design features are part of the overall design of the Proposed Development and are not included as specific mitigation measures to prevent collisions, however, they will contribute to the overall effect in this regard.

As such, based on the heights of the proposed structures and their physical appearance, it is deemed that birds including SCI species do not face a significant risk of collision with the Proposed Development. While the presence of the Proposed Development might alter flight patterns of bird species in the area slightly to avoid the proposed building structures, the risk of collision is extremely low. Thus, there is no S-P-R pathway of note via population level effects or change in distribution of any species, including any SCI species for SPAs within the ZoI of the Proposed Development or further afield.

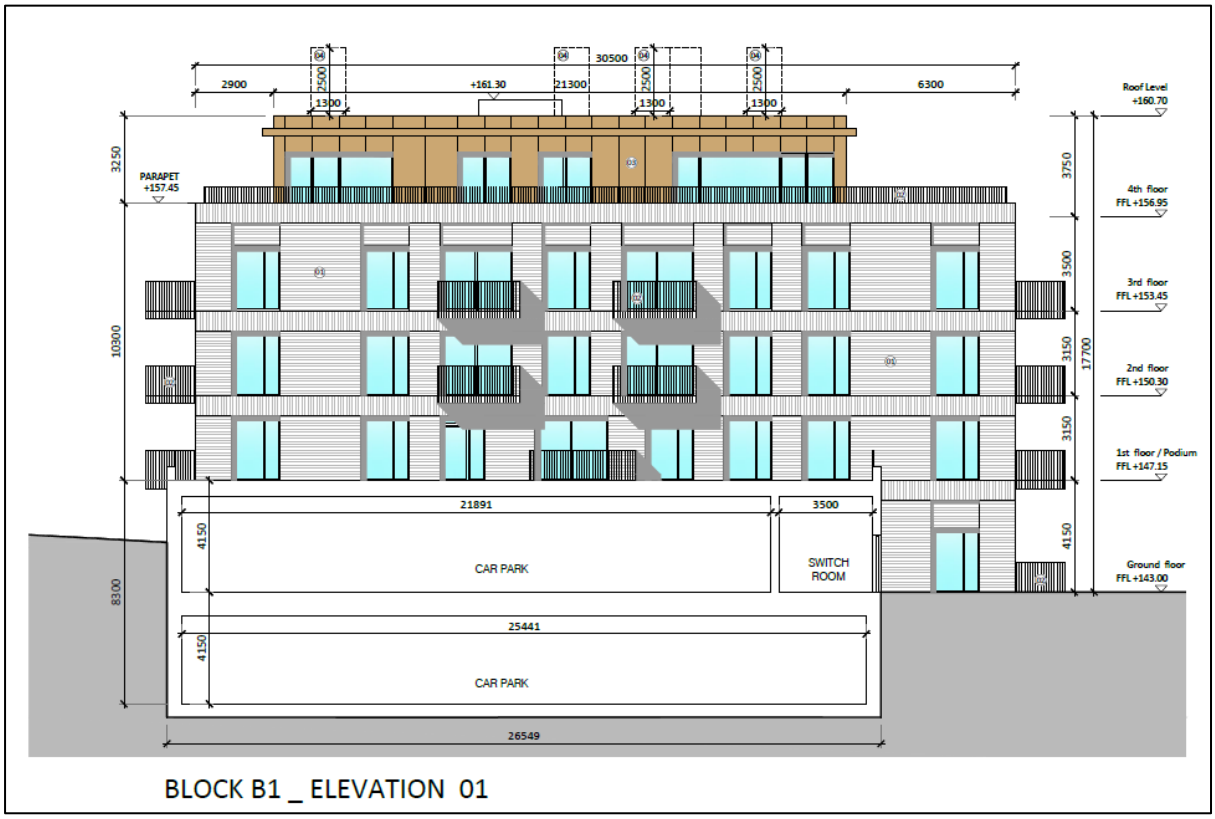


FIGURE 3. IMAGE SHOWING AN EXAMPLE OF THE BUILDING FACADES INLCUDED IN THE PROPOSED DEVELOPMENT (EXTRACTED FROM OMP DRWG: 20006A-OMP-B1-ZZ-DR-A-2000).

4.2.3 Relevant European sites

A European site will only be at risk from likely significant effects where a S-P-R link exists between the Proposed Development Site and the European site. All European sites considered under the S-P-R method are listed in Table 3.

TABLE 3. EUROPEAN SITES CONSIDERED WITH THE SOURCE-PATHWAY-RECEPTOR (S-P-R) METHOD TO ESTABLISH NOTABLE LINKS BETWEEN THE SOURCES OF EFFECTS ARISING FROM THE PROPOSED DEVELOPMENT, AND ANY RELEVANT

EUROPEAN SITES. THOSE SITES WITH NOTABLE S-P-R LINKS ARE HIGHLIGHTED IN GREEN (IF ANY). QUALIFYING INTERESTS (QIS) TAKEN FROM THE RELEVANT CONSERVATION OBJECTIVES DOCUMENTS (AS REFERENCED).

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Distance to Site	Potential Pathways and Impacts
Special Areas of Conservation (SAC)			
Wicklow Mountains SAC (002122)	**Conservation Objectives Version 1.0 (NPWS, 2017b)** • Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*) [3110] • Natural dystrophic lakes and ponds [3160] • Northern Atlantic wet heaths with *Erica tetralix* [4010] • European dry heaths [4030] • Alpine and Boreal heaths [4060] • Calaminarian grasslands of the *Violetalia calaminariae* [6130] • Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe) [6230] • Blanket bogs (* if active bog) [7130] • Siliceous scree of the montane to snow levels (*Androsacetalia alpinae* and *Galeopsietalia ladani*) [8110] • Calcareous rocky slopes with chasmophytic vegetation [8210] • Siliceous rocky slopes with chasmophytic vegetation [8220] • Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles [91A0] • *Lutra lutra* (Otter) [1355] •	4.3km south-west	**Construction Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Construction Phase. **Operational Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Operational Phase.
South Dublin Bay SAC (000210)	**Conservation Objectives Version 1.0 (NPWS, 2013d)**	5.6km north-east	**Construction Phase** No S-P-R pathways of note exist between the Proposed Development and this European

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Distance to Site	Potential Pathways and Impacts
	• 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]		site during the Construction Phase. **Operational Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Operational Phase.
North Dublin Bay SAC (000206)	**Conservation Objectives Version 1.0 (NPWS, 2013a)** • 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 (*Glauco-Puccinellietalia maritimae*) [1330] • Mediterranean salt meadows (*Juncetalia maritimi*) [1410] • 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] • *Petalophyllum ralfsii* (Petalwort) [1395]	10.5km north-east	**Construction Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Construction Phase. **Operational Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Operational Phase.
Rockabill to Dalkey Island SAC (003000)	**Conservation Objectives Version 1.0 (NPWS, 2013e)** • Reefs [1170] • Phocoena phocoena (Harbour Porpoise) [1351]	9.6km east	**Construction Phase** A weak hydrological connection between the Proposed Development and this site exists via surface water drainage through the Carrickmines stream and Shanganagh river network. However, no likely significant effects are expected as detailed in Section 4.3.3.

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Distance to Site	Potential Pathways and Impacts
			Operational Phase No S-P-R pathways of note exist between the Proposed Development and this European site during the Operational Phase.
The Murrough Wetlands SAC (002249)	**Conservation Objectives Version 1.0 (NPWS, 2017)** • Annual vegetation of drift lines [1210] • Perennial vegetation of stony banks [1220] • Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330] • Mediterranean salt meadows (*Juncetalia maritimi*) [1410] • Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* [7210] • Alkaline fens [7230]	20.8km southeast	**Construction Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Construction Phase. **Operational Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Operational Phase.
Special Protection Areas (SPA)			
Wicklow Mountains SPA (004040)	**Conservation Objectives Version 1.0 (NPWS, 2014)** • Merlin (*Falco columbarius*) [A098] • Peregrine (*Falco peregrinus*) [A103]	4.3km south-west	**Construction Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Construction Phase. **Operational Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Operational Phase.
South Dublin Bay and River Tolka Estuary SPA (004024)	**Conservation Objectives Version 1.0 (NPWS, 2015c)** • Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]	5.6km north-east	**Construction Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Construction Phase.

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Distance to Site	Potential Pathways and Impacts
	• Oystercatcher (*Haematopus ostralegus*) [A130] • Ringed Plover (*Charadrius* hiaticula) [A137] • Grey Plover (*Pluvialis squatarola*) [A141] • Knot (*Calidris canutus*) [A143] • Sanderling (*Calidris alba*) [A144] • Dunlin (*Calidris alpina*) [A149] • Bar-tailed Godwit (*Limosa lapponica*) [A157] • Redshank (*Tringa totanus*) [A162] • Black-headed Gull (*Chroicocephalus ridibundus*) [A179] • Roseate Tern (*Sterna dougallii*) [A192] • Common Tern (*Sterna hirundo*) [A193] • Arctic Tern (*Sterna paradisaea*) [A194] • Wetland and Waterbirds [A999]		**Operational Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Operational Phase.
North Bull Island SPA (004006)	**Conservation Objectives Version 1.0 (NPWS, 2015a)** • Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] • Shelduck (Tadorna tadorna) [A048] • Teal (Anas crecca) [A052] • Pintail (*Anas acuta*) [A054] • Shoveler (*Anas clypeata*) [A056] • Oystercatcher (*Haematopus ostralegus*) [A130] • Golden Plover (*Pluvialis apricaria*) [A140] • Grey Plover (*Pluvialis squatarola*) [A141] • Knot (*Calidris canutus*) [A143]	10.5km north-east	**Construction Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Construction Phase. **Operational Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Operational Phase.

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Distance to Site	Potential Pathways and Impacts
	• Sanderling (*Calidris alba*) [A144] • Dunlin (*Calidris alpina*) [A149] • Black-tailed Godwit (*Limosa limosa*) [A156] • Bar-tailed Godwit (*Limosa lapponica*) [A157] • Curlew (*Numenius arquata*) [A160] • Redshank (*Tringa totanus*) [A162] • Turnstone (Arenaria interpres) [A169] • Black-headed Gull (*Chroicocephalus ridibundus*) [A179] • Wetland and Waterbirds [A999]		
North-west Irish Sea SPA (004236)	**Conservation Objectives Version 1.0 (NPWS, 2023a)** • Red-throated Diver (*Gavia stellata*) [A001] • Great Northern Diver (*Gavia immer*) [A003] • Fulmar (*Fulmarus glacialis*) [A009] • Manx Shearwater (*Puffinus puffinus*) [A013] • Cormorant (*Phalacrocorax carbo*) [A017] • Shag (*Phalacrocorax aristotelis*) [A018] • Common Scoter (*Melanitta nigra*) [A065] • Little Gull (*Larus minutus*) [A177] • Black-headed Gull (*Chroicocephalus ridibundus*) [A179] • Common Gull (*Larus canus*) [A182] • Lesser Black-backed Gull (*Larus fuscus*) [A183] • Herring Gull (*Larus argentatus*) [A184]	10.5km north-east	**Construction Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Construction Phase. **Operational Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Operational Phase.

Site Name & Site Code	Qualifying Interests (*= priority habitats)	Distance to Site	Potential Pathways and Impacts
	• Great Black-backed Gull (*Larus marinus*) [A187] • Kittiwake (*Rissa tridactyla*) [A188] • Roseate Tern (*Sterna dougallii*) [A192] • Common Tern (*Sterna hirundo*) [A193] • Arctic Tern (*Sterna paradisaea*) [A194] • Little Tern (*Sterna albifrons*) [A195] • Guillemot (*Uria aalge*) [A199] • Razorbill (*Alca torda*) [A200] • Puffin (*Fratercula arctica*) [A204]		
Dalkey Islands SPA (004172)	**First-order Site Specific Conservation Objectives Version 1.0 (NPWS, 2022)** • Roseate Tern (*Sterna dougallii*) [A192] • Common Tern (*Sterna hirundo*) [A193] • Arctic Tern (*Sterna paradisaea)* [A194]	9.5km east	**Construction Phase** A weak hydrological connection between the Proposed Development and this site exists via surface water drainage through the Carrickmines stream and Shanganagh river network. However, no likely significant effects are expected as detailed in Section 4.3.3 **Operational Phase** No S-P-R pathways of note exist between the Proposed Development and this European site during the Operational Phase.

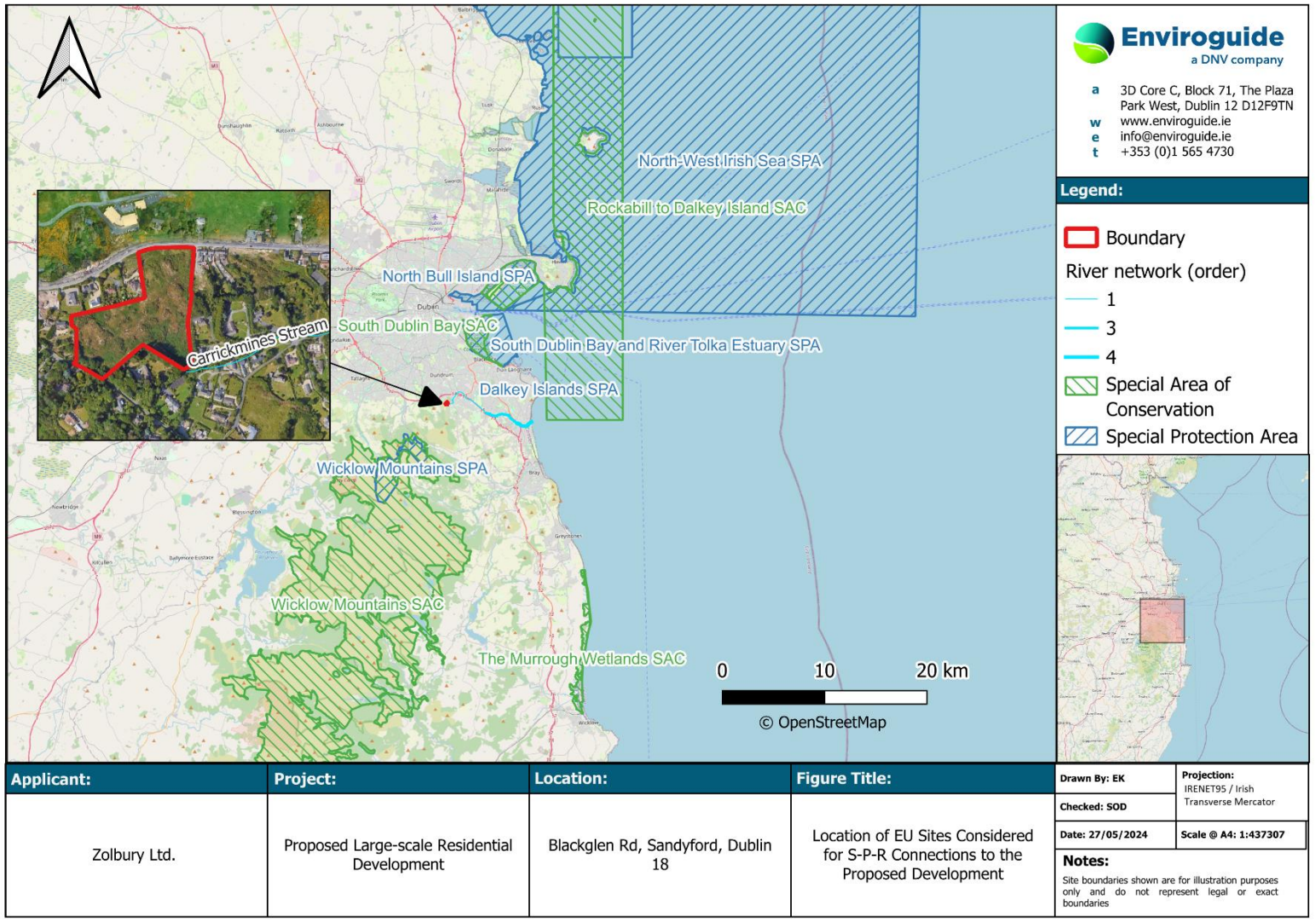


FIGURE 4. LOCATION OF EUROPEAN SITES RELATIVE TO THE PROPOSED DEVELOPMENT.

The following European sites maintain a weak hydrological S-P-R pathway with the Proposed Development via Construction Phase surface water run-off to the receiving surface water network:

- Rockabill to Dalkey Island SAC (003000).
- Dalkey Islands SPA (004172).

4.2.3.1 Rockabill to Dalkey Island SAC (003000)

The following description of the Rockabill to Dalkey Island SAC is extracted from the Standard Data Form (EEA, 2024b) for the Site:

"The area selected for designation represents a key habitat for the Annex II species - harbour porpoise, within the Irish Sea. Population survey data show that porpoise occurrence within the site boundary meets suitable reference values for other designated sites in Ireland. The species occurs year-round within the site and comparatively high group sizes have been recorded. Porpoises with young (i.e. calves) are observed at favourable, typical reference values for the species. Casual and effort-related sighting rates from coastal observation stations are significant for the east coast of Ireland and the latter appear to be relatively stable across all seasons. The selected site contains a wide array of habitats believed to be important for harbour porpoise including inshore shallow sand and mud-banks and rocky reefs scoured by strong current flow. The site also contains two Annex II seal species – Harbour seal (Phoca vitulina vitulina), Grey seal (Halichoerus grypus) for which terrestrial haul-out sites occur in immediate proximity to the site. Bottlenose dolphin (Tursiops truncatus) has also occasionally been recorded in the area. Along the eastern seaboard the habitat type Reef is uncommon due to prevailing geology and hydrographical conditions. Expansive surveys of the Irish coast have indicated that the greatest resource of this habitat within the Irish Sea is found fringing offshore islands which are concentrated along the Dublin coast. A detailed survey of selected suitable islands has shown areas with typical biodiversity for this habitat both intertidally and subtidally. These Reefs are subject to strong tidal currents with an abundant supply of suspended matter resulting in good representation of filter feeding fauna such as sponges, anemones and echinoderms."

4.2.3.2 Dalkey Islands SPA (004172)

The following description of the Rockabill to Dalkey Island SAC is extracted from the EEA Standard Data Form (EEA, 2024c) for the Site:

"Site is of importance for both breeding and staging Sterna terns. There is a well-established colony of Sterna hirundo and smaller numbers of Sterna paradisaea. Sterna dougallii bred in 2003 and 2004, one of only three known sites in the country - this came about after several years of conservation management aimed at attracting the species. The site along with other parts of south Dublin Bay is used by the three Sterna tern species as a major post-breeding/pre-migration autumn roost area. The origin of the birds is likely to be the Co. Dublin breeding sites though numbers also suggest birds from other sites, perhaps outside the state. The site also has breeding Larus marinus, Tadorna tadorna and Haematopus ostralegus. The site is known to be frequented in winter by significant numbers of Arenaria interpres and Calidris maritima but recent count data is unavailable."

4.2.3.3 Qualifying Interests and Conservation Objectives

The QIs/SCIs and their respective conservation objectives for each of the relevant European site(s) are detailed in Table 4 below.

TABLE 4. QUALIFYING INTERESTS (QIS) / SPECIAL CONSERVATION INTERESTS (SCIS) AND THEIR CONSERVATION OBJECTIVES FOR THE RELEVANT EUROPEAN SITES. THE CONSERVATION STATUS OF EACH QI / SCI WAS SOURCED FROM THE RELEVANT STANDARD DATA FORM(S) (SOURCE: EEA (2024)).

QI / SCI (* = priority habitat)	Conservation Status	Conservation Objective
Rockabill to Dalkey Island SAC (003000)		
1170 Reefs	Good	To maintain the favourable conservation condition of these interests in Rockabill to Dalkey Islands SAC
1351 Harbour porpoise	N/A	
Dalkey Island SPA (004172)		
A192 Roseate Tern (*Sterna dougallii*)	Good	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for Dalkey Islands SPA
A193 Common Tern (*Sterna hirundo*)	Good	
A194 Arctic Tern (*Sterna paradisaera*)	Good	

4.3 Assessment of Likely Significant Effects

The following sections discuss the potential for likely significant effects on the relevant European site(s) based on the identified S-P-R pathway(s), taking into consideration the QIs, SCIs and SSCOs (where available), and assesses whether the Proposed Development has the capacity to adversely affect the integrity of this European site. Furthermore, due consideration shall be given to species not formally identified but which may be present within [insert site name] and adversely effected by the Proposed Development, provided that those potential impacts are likely to affect the conservation objectives of the designated site. The potential for significant effects that may arise from the Proposed Development was considered through the use of key indicators as detailed in Section 3.5.

4.3.1 Habitat Loss and Alteration

The Project is not located within any European Site and therefore there will be no loss or alteration of habitat as a result of the Proposed Development.

4.3.2 Habitat / Species Fragmentation

As there will be no habitat loss or alteration within any European Site, no habitat fragmentation will arise as a result of the Proposed Development.

4.3.3 Changes in Water Quality and Resource

There is a weak hydrological connection between the Site, Rockabill to Dalkey Island SAC, and Dalkey Islands SPA via surface water flows from the Proposed Development. The Carrickmines stream is located along the south-eastern boundary of the Site, as such a potential hydrological link exists with Rockabill to Dalkey Island SAC and Dalkey Islands SPA via this source. The Carrickmines stream flows past the south-eastern boundary of the Site and continues for over 10 river km before discharging to the Irish Sea as the Shanganagh River at Shanganagh.

A weak S-P-R impact pathway therefore exists via Construction Phase surface water flows. The potential for surface water generated at the Site of the Proposed Development to reach the above European Sites and cause likely significant effects, during the Construction Phase, **is deemed to be negligible** due to the following:

- The Hydrological and Hydrogeological Risk Assessment (HHRA) prepared for the Proposed Development (Enviroguide, 2024) notes that the Carrickmines Stream maintains a potential shallow groundwater connection to the Site due to the nature of the underlying geology (short groundwater flow paths to nearest surface waterbody). There is also a connection through surface water run-off during rainfall events. The HHRA evaluates the risk of these pathways to receptors including the Carrickmines Stream in the worst-case unmitigated scenario as *Low to Moderate Risk* in terms of groundwater contamination, and *Low Risk* in terms of contaminated surface water run-off. The HHRA goes on to note that once standard construction measures within the CEMP are implemented the overall impacts to surface/groundwater quality and flow will be negligible.

- Regardless of standard construction measures within the CEMP, it is noted that in the event of an accidental pollution event of the Carrickmines stream, given the hydrological distance of over 10 river km to the coast, the additional minimum marine buffer of 1.5km to the nearest European Site from the coastal outfall, and the capacity for dilution and mixing within the Carrickmines stream and the Irish Sea itself, there is no significant risk of negative effects to the habitats and species of European sites listed above.

- The design of the Proposed Development; The proposed buildings on Site are significantly set back from the southern boundary of the Site, and excavation works along the southeast boundary are not required. The current vegetated natural buffer of ca.14 meters along the southern boundary of the Site will form part of a designated wildlife refuge at the Site and will further prevent any entrained sediment in surface water runoff from entering the Carrickmines stream during the Construction Phase.

- There may be interactions with the ditch along the southwestern Site boundary, adjacent to Woodside Road. This ditch likely connects with the Carrickmines Stream to the southeast of the Site. As such, the intervening distance of over 10 river km and the lack of direct connectivity to any European site (outfall to Irish Sea at Shanganagh and not directly into European sites) rules out any potential for likely significant effects via this ditch.

It is therefore concluded that **there is no potential** for likely significant effects relating to water quality at any European Sites as a result of the Proposed Development.

4.3.4 Disturbance and / or Displacement of Species

As outlined in section 4.3.3 above, the hydrological link between the Site and the European sites assessed here will not result in significant effects on the water quality and resource indicator during the Construction Phases. The closest SPA to the Proposed Development is Wicklow Mountains SAC & SPA, 4.3 km south-west of the Site. Although SPA QI species Peregrine and Merlin may forage in the lands surrounding the Site, the Site itself provides no significant *ex-situ* habitat for these species , i.e., it is comprised of a mosaic of dense gorse scrub, exposed rock, and tall bracken. In addition, the Proposed Development does not have the capacity to cause any significant disturbance and/or displacement to any species within any other European Site due to the intervening distances between the Site of the Proposed Development and said European Sites.

It is therefore concluded that the Proposed Development **does not have the capacity** to cause any likely significant effects relating to disturbance and/or displacement of any species within European sites.

4.3.5 Changes in Population Density

For the same reasons outlined in Section 4.3.4 above, the Proposed Development does not have the capacity to cause any significant changes in the population density of any species within any European Site.

4.3.6 Potential for In-combination Effects

Although the Proposed Development is not considered to have the capacity to cause significant effects on any European sites alone, it is important to consider the potential for cumulative effects with other plans and/or projects. The following sections outline existing granted or pending planning permissions in the vicinity of the Proposed Development and assess the potential for adverse in-combination effects on any European sites.

4.3.6.1 Existing Planning Permissions

A search of planning applications located within a 300m of the Site of the Proposed Development was conducted using online planning resources such as the National Planning Application Database (NPAD) (MyPlan.ie) and Dun Laoghaire Rathdown County Council Planning Applications online map. Any planning applications listed as granted or decision pending from within the last five years were assessed for their potential to act in-combination with the Proposed Development and cause likely significant effects on the relevant European sites. Long-term developments granted outside of this time period were also considered where applicable.

A search radius of 300m was deemed appropriate given the rural/sub-urban nature of the surrounding environs and the considerable distance between the Site and European sites within the ZOI (the European site closest to the Proposed Development is Wicklow Mountains SAC & SPA, located ca.4.3km south-west of the Site). The majority of granted developments are noted to be one-off extensions or garage conversions and do not have the capacity to act in combination with the Proposed

Development and cause significant effects. Larger developments considered are provided in Table 6 below.

TABLE 5. GRANTED AND PENDING DEVELOPMENT APPLICATIONS WITHIN 300 M OF THE PROPOSED DEVELOPMENT. LOCATION AND DISTANCE GIVEN IS RELATIVE TO THE PROPOSED DEVELOPMENT.

Planning Reference	Planning Authority	Status	Location
D19A/0769	Dun Laoghaire Rathdown County Council	**Granted**	**Woodside Road, Sandford, Dublin 18 (50m west of Proposed Development)**
Development Description Permission for development. The development will consist of the demolition of 2 no. dwellings known as 'Barrogue' & 'The Nook', Construction of 1 no. two storey detached dwelling (232m.sq.), alterations to front boundary treatment including vehicular entrance and associated site works. **Potential for In-combination effects** Due to the small-scale nature of this development, it is not considered that it is capable of acting in-combination with the Proposed Development to affect the integrity of any European sites.			
ABP31332122	**Dun Laoghaire Rathdown County Council**	**Granted**	**Balally and Woodside at Blackglen Road and Slate Cabin Lane, Dublin 18 (50m east of Proposed Development)**
Development Description Demolition of the existing structures on site, construction of 101 no. residential units (32 no. houses, 69 no. apartments), creche and associated site works. **Potential for In-combination effects** No likelihood of in-combination effects involving this development and the Proposed Development that could affect the integrity of any European site. The Proposed Development maintains no significant impact pathway and Stage 2 AA is not required. Stage 2 AA was not deemed a requirement for ABP31332122 in the ABP Inspectors Report.			
D23A/0456 (ABP319621)	**Dun Laoghaire Rathdown County Council**	**Granted**	**Crohamhurst, Sandyford Road, Dublin 18, D18W9Y5 (300m east of Proposed Development)**
Development Description The demolition of the existing single storey dwelling and the construction of a new neighbourhood centre and residential development. The development consists of 80 no. residential apartment units and associated residential amenity space, a supermarket and associated off licence, a restaurant / bar and associated winter garden, 2 no. retail units, an ATM area, a health centre and a café. **Potential for In-combination effects** No likelihood of in-combination effects involving this development and the Proposed Development that could affect the integrity of any European site. The Proposed Development maintains no significant impact pathway and Stage 2 AA is not required. Development D23A/0456 also did not require a Stage 2 AA.			

There are a number of thinning and clear-felling licences within the mountains to the south-west of the Proposed Development Site as indicated in the DAFM Forestry

Licence Viewer[1]. A small number of these are located within the Shanganagh River's catchment.

A flood relief scheme is also currently being progressed for Loughlinstown. The Loughlinstown Flood Relief Scheme comprises works in two river catchments; Deansgrange and Carrickmines/Shanganagh. The Proposed Developmengt is hydrologically linked to the Carrickmines/Shanganagh catchment via those waterbodies. The Carrickmines/Shanganagh flood relief scheme is at design stage with a Preferred Option Public Consultation Event held in December 2023 according to the scheme's website (*https://www.csfrs.ie/*). The website notes that Stage 2: *Planning Process* is expected to be completed in 2024, with the construction works (Stage 4) expected to start sometime in 2025 and be completed in 2026. As such, there is the possibility of some overlap between these works and the construction of the Proposed Development.

The Proposed Development is, however, unlikely to contribute in any significant manner to adverse in-combination effects to downstream waterbodies such as the Carrickmines stream or Shangannagh River involving the flood relief works, let alone contribute to significant in-combination effects to offshore, downstream European sites e.g., **Dalkey Islands SPA** and **Rockabill to Dalkey Island SAC**. As described in this Report, the Site maintains a tenuous hydrological link to these sites via ca.10km of streams and rivers, and an additional 1.5 – 3km of the Irish Sea, rendering the potential for likely significant effects negligible.

In conclusion, given the distance and rural buffer between the Proposed Development and the above-mentioned permitted developments/forestry Operations, the nature of the Site's hydrological connection to downstream European sites within the ZOI, and the lack of notable impact pathways linking the Site to any European sites, it is concluded that **there is no potential for likely significant in-combination effects to arise as a result of the Proposed Development.**

4.3.6.2 Relevant Policies and Plans

The local policies and plans detailed in Section 2.2 above were reviewed and considered for possible in-combination effects with the Proposed Development. Each of these plans has undergone AA, and where potential for likely significant effects has been identified (e.g., in the case of the Dún Laoghaire Rathdown County Development Plan), an NIS has been prepared which identifies appropriate mitigation. As such, it is considered that the plans and policies listed will not result in in-combination effects with the Proposed Development. The Dún Laoghaire Rathdown County Development Plan 2022-2028 has directly addressed the protection of European sites and biodiversity through specific objectives. The above listed plans are not being relied upon to rule out potential significant effects on European sites.

[1] https://forestry-maps.apps.rhos.agriculture.gov.ie/

4.3.6.3 Operation of Ringsend WwTP

This section addresses in more detail the general issue of potential in-combination effects with Ringsend WwTP arising from the Operational Phase of the Proposed Development and other Developments, including future developments.

In summary, the impact of the Proposed Development and any future development has already been appropriately considered and assessed as part of the application process for the existing planning permissions pertaining to Ringsend WwTP.

The 2012 Ringsend WwTP application for planning permission (Ref. PL.29N.YA0010) was for a PE of 2.4 million and was predicated on the findings of the 2005 GDSDS. The GDSDS set out the drainage requirements for the Greater Dublin Area (GDA) up to 2031. The GDSDS relied on the Regional Planning Guidelines (RPGs) and the National Spatial Strategy (NSS) in order to estimate the future projected population increases for the GDA. The studies indicated a predicted growth in population from 1.2 million in 2002 to just over 2 million in 2031 for the GDA region.

In June 2018 Uisce Éireann (then Irish Water) applied for and subsequently received planning permission in 2019 for upgrade works to the Ringsend WwTP facility. The first phase of upgrade works to Ringsend WwTP was completed in December 2021, which increased the capacity of the plant by 400,000 P.E. Uisce Éireann completed construction of the infrastructure to treat the wastewater for a population equivalent of 2.1 million at the end of 2023. Following a period of testing and commissioning the upgraded assets are operational. These works, together with the future works permitted will ultimately increase the capacity of the facility from 1.6 million P.E. to 2.4 million P.E. by 2025 (Irish Water website: https://www.water.ie/projects/local-projects/ringsend/).

Therefore, both the initially permitted 2012 upgrade and the permitted 2019 revised upgrade (Ref. ABP-301798-18) for Ringsend WwTP take account of population growth up to 2.4 million PE. Both applications were subject to EIA and therefore an EIAR and accompanied by an AA screening report and NIS.

Under the heading of "*Potential impact – Discharge of treated effluent, impacts on water quality, effects on qualifying interests*", the NIS (Irish Water, 2018b) for the Ringsend WwTP 2019 revised upgrade provides as follows:

> "*In the operational phase, the proposed upgrade of the Ringsend WwTP Component will result in an increase in the plant capacity and also an improvement in the final effluent quality. This will result in a reduction in the licensed parameters discharged into the receiving water, with significantly reduced quantities in respect of ammonia and phosphorous.*"[2]

This NIS goes on to state as follows:

> "*Overall, no significant adverse effects on are foreseen and indeed, a slight positive effect is possible. Effects of discharge during the operational phase of*

[2] Section 4.5.1 at page 32

the project from the upgrade project will therefore have imperceptible impact on habitats listed within these European sites."[3]

In respect of this issue, the NIS concludes as follows:

"*Thus, there is no potential for in-combination impacts of any other plan and project with the Ringsend WwTP Component of the proposed Upgrade Project."*[4]

The EIAR for the ongoing upgrade at Ringsend WwTP (Irish Water, 2018a) also details the lack of any significant impacts to European sites observed as a result of the current stormwater overflow discharge levels at the WwTP. During storm events, once the capacities of the holding tanks are surpassed, the WwTP releases overflow via an outfall at Pigeon House Rd into the lower Liffey estuary.

The EIAR carried out in relation to said upgrade concluded that in the 'do nothing' scenario, i.e., wherein the upgrade is not carried out; the current existing levels of nutrient input to Dublin Bay as a result of stormwater overflow from the WwTP, are not deemed to pose significant threats to the integrity of European sites located within or adjacent to Dublin Bay, or any of their Conservation Objectives regardless of said upgrade.

The EIAR report acknowledges that under the do-nothing scenario "*the areas in the Tolka Estuary and North Bull Island channel will continue to be affected by the cumulative nutrient loads from the river Liffey and Tolka and the effluent from the Ringsend WwTP*", which could result in a decline in biodiversity and the deterioration of the biological status of Dublin Bay (Irish Water, 2018a). Nevertheless, these negative impacts of nutrient over-enrichment are considered "unlikely". This is because historical data suggests that pollution in Dublin Bay has had little or no effect on the composition and richness of the benthic macroinvertebrate fauna. The EIAR notes that "*although a localised decline could occur, it is not envisaged to be to a scale that could pose a threat to the shellfish, fish, bird or marine mammal populations that occur in the area."* Furthermore, the EIAR notes that significant impacts on waterbird populations foraging on invertebrates in Dublin Bay due to nutrient over-enrichment are "unlikely" to occur. What is important to note is that the do-nothing scenario predicts that nutrient and suspended solid loads from the WwTP will "*continue at the same levels and the impact of these loadings should maintain the same level of effects on marine biodiversity"* and that *"if the status quo is maintained there will be little or no change in the majority of the intertidal faunal assemblages found in Dublin Bay which would likely continue to be relatively diverse and rich across the bay.*"

Therefore, it can be concluded that significant effects on marine biodiversity and the European sites within Dublin Bay from the current operation of Ringsend WwTP are unlikely. Importantly, this conclusion is not dependent upon any future works to be undertaken at Ringsend. Thus, in the absence of any upgrading works, significant in-combination effects to European sites in this regard are not deemed likely to arise, and

[3] Section 4.5.1 at page 33

[4] Section 4.5.1 at page 34

therefore likely significant effects involving foul waters produced by the Proposed Development also do not have the potential to occur.

TABLE 6. SUMMARY OF IMPACT ASSESSMENT ON EUROPEAN SITES AS A RESULT OF THE PROPOSED DEVELOPMENT.

Site	Habitat Loss / Alteration	Habitat or Species Fragmentation	Disturbance and/or Displacement of Species	Changes in Population Density	Changes in Water Quality and/or Resource	In-combination effects	Stage 2 AA Required
SAC							
North Dublin Bay SAC (000206)	No	No	No	None	None	None	**NO**
South Dublin Bay SAC (000210)	No	No	No	None	None	None	**NO**
The Murrough Wetlands SAC (002249)	No	No	No	None	None	None	**NO**
Rockabill to Dalkey Island SAC (003000)	No	No	No	None	None	None	**NO**
Wicklow Mountains SAC (002122)	No	No	No	None	None	None	**NO**
SPA							
North Bull Island SPA (004006)	No	No	No	None	None	None	**NO**
South Dublin Bay and River Tolka Estuary SPA (004024)	No	No	No	None	None	None	**NO**
North-west Irish Sea SPA (004236)	No	No	No	None	None	None	**NO**
Dalkey Islands SPA (004172)	No	No	No	None	None	None	**NO**
Wicklow Mountains SPA (004040)	No	No	No	None	None	None	**NO**

5 APPROPRIATE ASSESSMENT SCREENING CONCLUSION

The Proposed Development at Blackglen Road, Sandyford, Dublin 18 has been assessed taking into account:

- The nature, size and location of the proposed works and possible impacts arising from the construction works.
- The QIs and conservation objectives of the European sites.
- The potential for in-combination effects arising from other plans and projects.

In conclusion, upon the examination, analysis and evaluation of the relevant information and applying the precautionary principle, it is concluded by the authors of this report that the possibility **may be excluded** that the Proposed Development will have a likely significant effect on any of the European sites listed below:

- *North Dublin Bay SAC (000206)*
- *South Dublin Bay SAC (000210)*
- *The Murrough Wetlands SAC (002249)*
- *Rockabill to Dalkey Island SAC (003000)*
- *Wicklow Mountains SAC (002122)*
- *North Bull Island SPA (004006)*
- *South Dublin Bay and River Tolka Estuary SPA (004024)*
- *North-west Irish Sea SPA (004236)*
- *Dalkey Islands SPA (004172)*
- *Wicklow Mountains SPA (004040)*

In carrying out this AA screening, specific targeted mitigation measures included for the primary reason of protecting a European site have not been taken into account.

On the basis of the screening exercise carried out above, it can be concluded, on the basis of the best scientific knowledge available and objective information, that the possibility of any likely significant effects on the above listed European sites, whether arising from the project itself or in combination with other plans and projects, can be excluded in light of the above listed European sites' conservation objectives. Thus, there is no requirement to proceed to Stage 2 of the Appropriate Assessment process; and a NIS is not required.

6 REFERENCES

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