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Natura Impact Statement

PRESENTED TO

Zolbury Ltd. for a Large-Scale Residential Development at Blackglen Road, Sandyford, Dublin 18

May 2025

Environmental Consultancy Services

DOCUMENT CONTROL SHEET

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TABLE OF CONTENTS

DOCUMENT CONTROL SHEET ..... **I**

REPORT LIMITATIONS ..... **II**

TABLE OF CONTENTS ..... **III**

LIST OF TABLES ..... **V**

LIST OF FIGURES ..... **V**

1 INTRODUCTION **1**

1.1 BACKGROUND 1
1.2 QUALITY ASSURANCE AND COMPETENCE 1
1.3 DESCRIPTION OF PROPOSED DEVELOPMENT 2
1.3.1 Site Location *2*
1.3.2 Proposed Development Description *2*
1.3.3 Existing Drainage *4*
1.3.4 Proposed Drainage *4*
1.4 LEGISLATIVE AND POLICY CONTEXT 9
1.4.1 Legislative Background *9*
1.4.2 Legislative Context *9*
1.4.3 Consideration of Embedded Mitigation in AA *9*
1.4.4 Policy Context *10*
1.4.5 Stages of Appropriate Assessment *12*
1.4.6 Stage 1: Appropriate Assessment Screening Conclusion *13*

2 METHODOLOGY **15**

2.1 GUIDANCE 15
2.2 NIS STEPS 15
2.3 DESK STUDY 16
2.4 FIELD SURVEYS 16
2.5 IMPACT PREDICTION 16
2.6 LIMITATIONS 17

3 NATURA IMPACT STATEMENT **18**

3.1 EXISTING ENVIRONMENT 18
3.2 SUMMARY OF RELEVANT EUROPEAN SITES 19
3.2.1 South Dublin Bay SAC (000210) *19*
3.2.2 South Dublin Bay and River Tolka Estuary SPA (004024) *20*
3.3 QUALIFYING INTERESTS AND CONSERVATION OBJECTIVES 20
3.4 IMPACT PREDICTION 23
3.4.1 Potential Impacts of the Proposed Development on Key Species and Habitats *23*
3.4.2 Potential for In-combination Effects *26*
3.5 AVOIDANCE AND MITIGATION MEASURES 28
3.5.1 Summary of Potential Effects *28*
3.5.2 Construction Phase *28*
3.5.3 Mitigation 1: Ecological Clerk of Works *28*
3.5.4 Mitigation 2: Silt Management and Silt Fencing *28*
3.5.5 Mitigation 3: Water Quality Protection *30*
3.5.6 Mitigation 4: Invasive Species Management *33*
3.5.7 Operational Phase Mitigation *36*
3.6 MONITORING 36
3.6.1 Construction Phase *36*

~~**4 CONCLUSION** ..... **38**~~

5 REFERENCES..... 39

LIST OF TABLES

Table 1. Summary of European Sites considered for Stage 2 Appropriate Assessment 13
Table 2. EPA monitoring stations and assigned Q values 18
Table 3. WFD Risk and Water Body Status 19
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 (2025)) and the latest national status is taken from the latest Article 17 Report (NPWS, 2019a & 2019b) for species and habitats, or Gilbert et al. (2021) for bird species 20
Table 5. Assessment of the potential impact of the Proposed Development on the QIs and SCIs of the relevant European sites. Those QIs/SCIs for which notable impact pathways were identified have been highlighted in green. 24
Table 6. Granted and Pending Development applications within 300m of the Proposed Development. Location and distance given is relative to the Proposed Development 26
Table 7. Monitoring measures to be implemented. 37

LIST OF FIGURES

Figure 1. Site Location. 7
Figure 2. Proposed site layout (Extracted from OMP Drwg: 20006A-OMP-01-00-DR-A-1000). 8
Figure 3. Location of European sites as identified in the AA Screening (Envirogudie, 2025) relative to the Proposed Development 14
Figure 4. Rhododendron seedling in the south of the Site (Image facing south-east) 34

1 INTRODUCTION

1.1 Background

Enviroguide was commissioned by Zolbury Ltd. to prepare an Appropriate Assessment (AA) Screening Report in relation to a Large-Scale Residential Development at Blackglen Road, Sandyford, Dublin 18. The AA Screening Report concluded that a degree of uncertainty exists in whether the Proposed Development could give rise to potentially significant effects on nearby European site(s), namely: South Dublin Bay SAC (000210) and South Dublin Bay and River Tolka Estuary SPA (004024).

Therefore, a Natura Impact Statement (NIS) has been prepared as part of a Request for Further Information (RFI) response from Dún Laoghaire Rathdown (DLR) County Council (dated 21st March 2025). The purpose of this NIS report is to provide information for the relevant competent authority to carry out a Stage 2 Appropriate Assessment in respect of the Proposed Development.

1.2 Quality Assurance and Competence

Enviroguide Consulting is a 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. Shane Connolly (SC), Ecologist with Enviroguide, authored this Report. It was reviewed by LG, Senior Ecologist and approved by Ben Lansbury, Principal Ecologist.

Shane Connolly (SC) holds a B.Sc. (Hons) in Botany from the University of Galway and has over 3 years' experience working in the environmental consultancy sector. SC has project-managed and delivered on ecological services for a wide range of developments including wind farms, commercial units, and large residential schemes. SC has extensive field expertise surveying bats, birds, mammals, plants, habitats, reptiles, amphibians, and invasive species, and holds a bat disturbance licence. SC is proficient in preparing a wide range of ecological reports, including Appropriate Assessment (AA) Screenings, Natura Impact Statements (NIS), Ecological Impact Assessments (EcIA), Bat Reports, Invasive Species Management Plans (ISMP), and constraint reports.

LG 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).

Ben Lansbury (BL) holds a BSc. (Hons), First Class in Marine and Freshwater Biology and an MSc with Distinction in Environmental Consultancy. BL is a Full Member of the Chartered Institute of Ecology and Environmental Management and Principal Ecologist with over 10 years of experience across both private and public sector projects: encompassing residential housing developments, large scale road schemes, cycles routes, railway, renewable, mineral, and waste schemes. BL has been responsible for a variety of tasks, including, project and team management, specialist ecological reports to support planning applications with a particular interest in ornithology, botany and Biodiversity Net Gain, budget management, survey design, client liaison, tendering, quality assurance and specialist field surveys. Through working on a variety of projects, BL has a thorough understanding of ecological legislation, the planning system, best practice survey methodologies, biodiversity net gain and is able to provide competent and concise reports to ensure legal compliance and support planning applications. Additionally, BL has experience in Operations Management of a team of over 140 ecologists. Tasks included monthly reviews of utilization, forward workloads, project and revenue forecasting and input into monthly and annual income statements.

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 Glasnalower 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

1.3.4.1.1.1 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.

1.3.4.1.1.2 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.

1.3.4.1.1.3 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.

1.3.4.1.1.4 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.

1.3.4.1.1.5 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.

1.3.4.1.1.6 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.

1.3.4.1.1.7 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.

1.3.4.1.1.8 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.

1.3.4.1.1.9 Filter Drains

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

1.3.4.1.1.10 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).

1.3.4.1.1.11 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.

1.3.4.1.2 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.

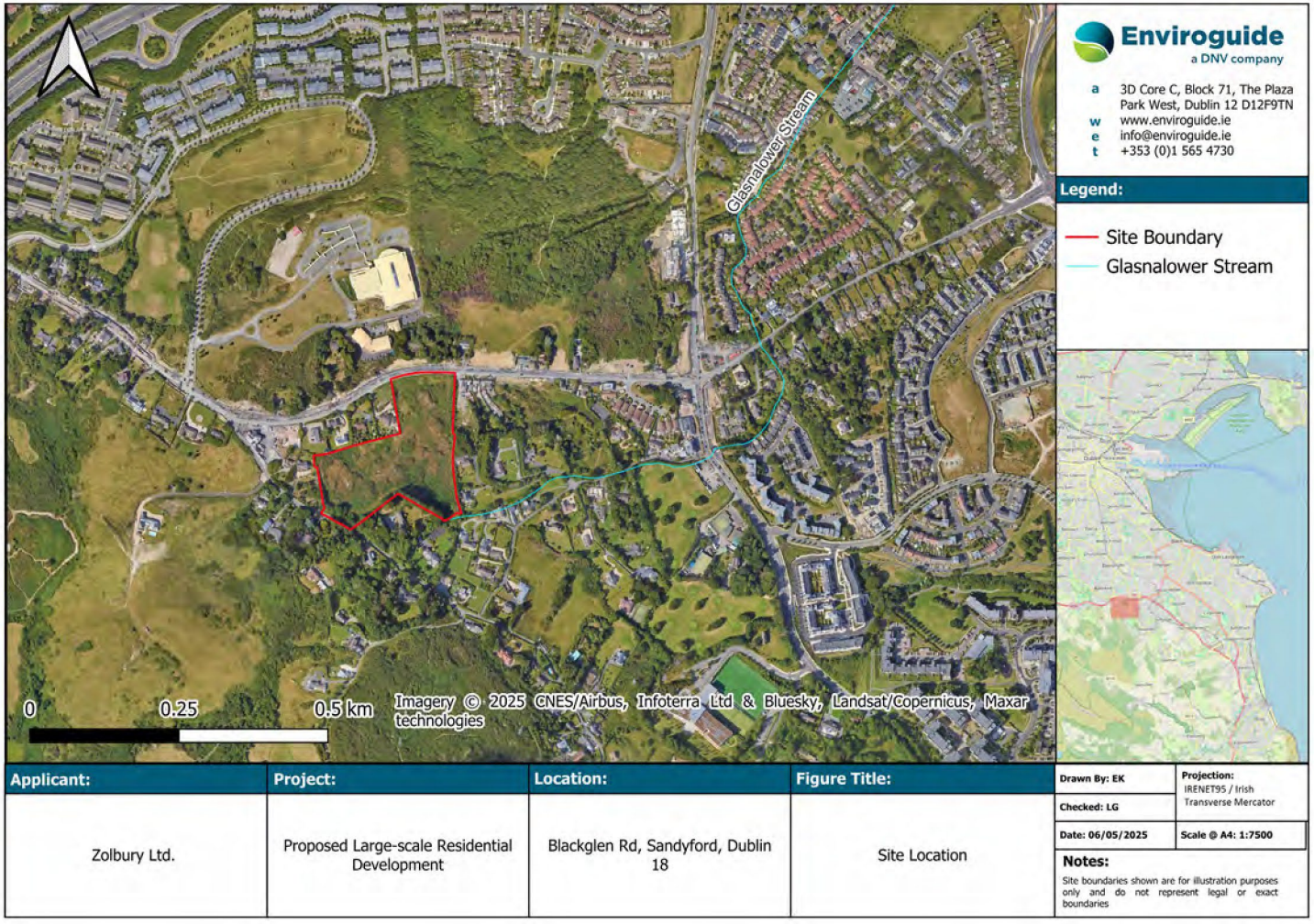

FIGURE 1. SITE LOCATION.



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

1.4 Legislative and Policy Context

1.4.1 Legislative Background

The Habitats Directive (92/43/EEC) 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) 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 Part XAB of the Planning and Development Act 2000, as amended and the EC (Birds and Natural Habitats) Regulations 2011 (SI 477 of 2011) (as amended).

The Planning and Development Act 2000 as Amended will be superseded by the Planning and Development Act 2024. While the 2024 Act has been signed into law, the Planning and Development Act 2000 (the 2000 Act) will continue to apply until repealed and the new provisions commenced by way of Ministerial Order. The phased commencement of the new Planning and Development Act is expected to take place up to early 2026.

It is the responsibility of each member state to designate SPAs and SACs, both of which will form part of Natura 2000, a network of protected sites throughout the European Community. SACs and SPAs are collectively known as “Natura 2000” 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 an assessment required prior to the grant of planning permission to determine whether a plan or project, based on best scientific knowledge, is likely to have an adverse effect on the integrity of a European site, either alone or in combination with other plans and projects. It is required for any plan or project not directly connected with or necessary to the management of a site but likely to have a significant effect on it

An AA is required under Article 6 of the Habitats Directive (as amended) where a project or plan may give rise to significant effects upon a Natura 2000 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.”*

1.4.2 Legislative Context

The obligations in relation to Appropriate Assessment for this project have been implemented in Ireland under Part XAB of the Planning and Development Acts (as amended), and in particular Section 177T and Section 177V.

1.4.3 Consideration of Embedded Mitigation in AA

With regard to the consideration of embedded mitigation in the Appropriate Assessment process the following is noted. In Case C-721/21 *Eco Advocacy,* the Court of Justice of the

European Union held that, 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)), that are incorporated into the design of a proposal or project and which may result in a reduction of effects impacting European sites, but where the primary reason of the embedded mitigation is not to protect a European site, are permitted for consideration of Operational Phase impacts during the undertaking of AA.

1.4.4 Policy Context

1.4.4.1 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).

1.4.4.2 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."*

1.4.5 Stages of Appropriate Assessment

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.

1.4.6 Stage 1: Appropriate Assessment Screening Conclusion

An AA Screening Report was prepared for the Proposed Development by Enviroguide Consulting (2025). The conclusion of the AA Screening Report is as follows:

"*…the possibility of likely significant effects **may not be excluded** for the following European sites in light of the above listed European sites' conservation objectives and the nature of the Proposed Development:*

- *South Dublin Bay SAC (000210)*
- *South Dublin Bay and River Tolka Estuary SPA (004024)*

Thus, there is a requirement to proceed to Stage 2 of the Appropriate Assessment process. An NIS has been prepared and is included with this application under separate cover".

As such, this NIS will address the potential for the Proposed Development to have adverse effects on the integrity of South Dublin Bay SAC (000210) and South Dublin Bay and River Tolka Estuary SPA (004024).

These sites are linked to the Proposed Development via the pathways summarised in Table 1 below.

TABLE 1. SUMMARY OF EUROPEAN SITES CONSIDERED FOR STAGE 2 APPROPRIATE ASSESSMENT.

European Site	Identified Pathway(s)	Potential Source(s) of Effects
South Dublin Bay SAC (000210)	**Direct Pathways:** • A direct hydrological connection exists between the Proposed Development and this European site via the Glasnalower/Brewery stream network.	**Construction Phase:** • Surface water runoff. • Spread of invasive species. **Operational Phase:** • No significant source due to attenuation, SuDS, and design setbacks.
South Dublin Bay and River Tolka Estuary SPA (004024)	**Direct Pathways:** • A direct hydrological connection exists between the Proposed Development and this European site via the Carrickmines stream network.	**Construction Phase:** • Surface water runoff. • Spread of invasive species. **Operational Phase:** • No significant source due to attenuation, SuDS, and design setbacks

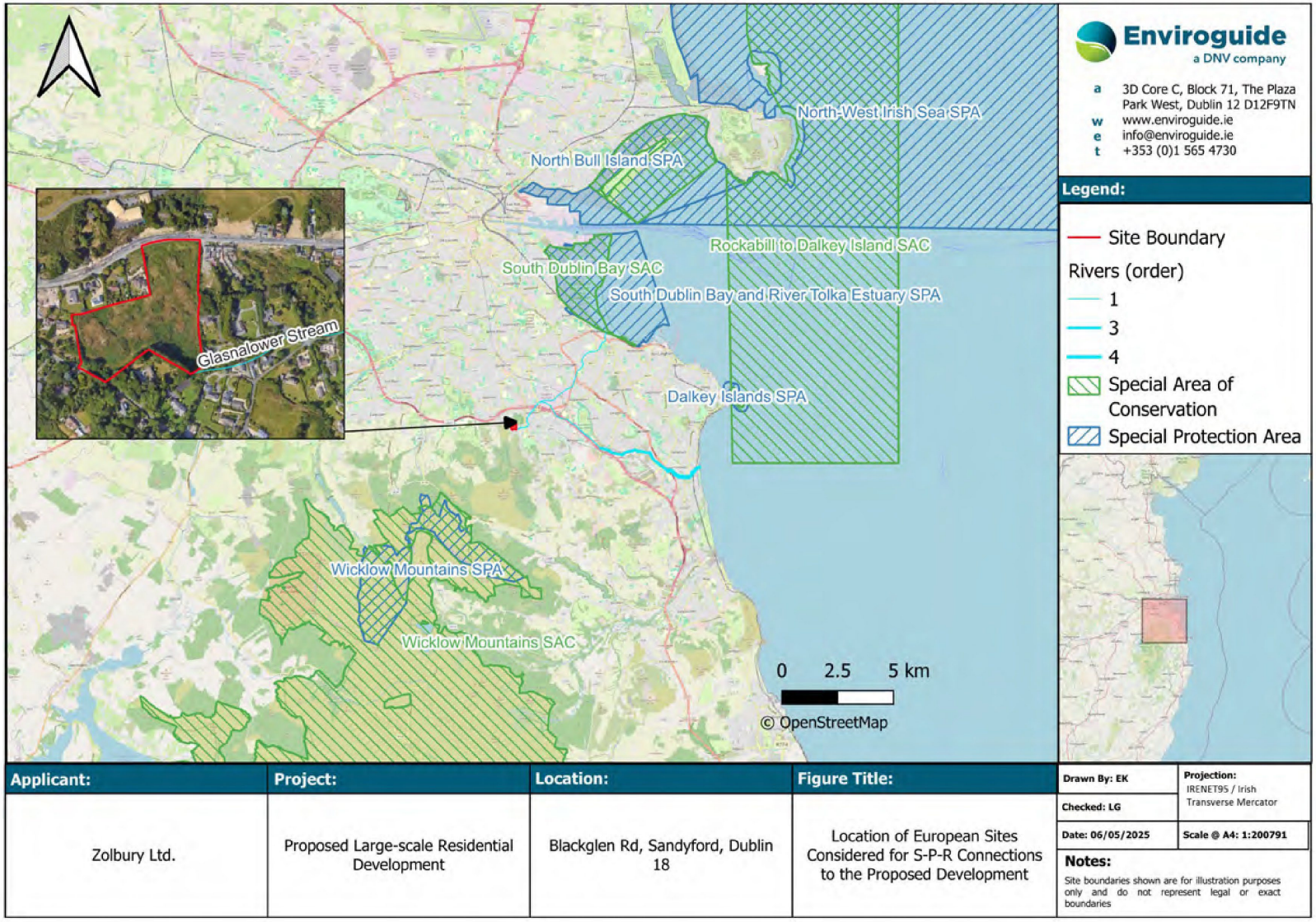

FIGURE 3. LOCATION OF EUROPEAN SITES AS IDENTIFIED IN THE AA SCREENING (ENVIROGUDIE, 2025) RELATIVE TO THE PROPOSED DEVELOPMENT.

2 METHODOLOGY

2.1 Guidance

This NIS 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 (European Commission, 2021)*.
- *Appropriate Assessment Screening for Development Management, OPR Practice Note PN01, Office of the Planning Regulator March 2021.*
- *Amendments to section 42 of the Planning and Development Act 2000, as amended and associated Planning and Development Regulations 2001. Department of the Environment, Heritage and Local Government. (2021). Circular Letter: EUIPR 01/2021.*

2.2 NIS Steps

This NIS has been prepared following the steps described below:

- Description of the baseline existing environment at the Site of the Proposed Development.
- Review and description of available data for the relevant European site(s) potentially affected as identified in the AA Screening Report (Enviroguide, 2025).
- Identification and description of potential effects on the relevant European site(s) and their designated QIs/SCIs.
- Assessment of the likely significance of the effects and/or impacts identified on the relevant QIs/SCIs in view of their Site-Specific Conservation Objectives (SSCOs) where available.
- Description and characterisation of other projects or plans that in combination with the Proposed Development have the potential for having significant effects on the relevant QIs/SCIS.
- Identification of appropriate mitigation measures to remove the likelihood of significant effects on any European site(s) and their QIs/SCI.
- Exclusion of sites where it can be objectively concluded that there will be no significant effects once mitigation measures are adhered to.

2.3 Desk Study

A desk study was carried out to collate and review available information, datasets and documentation sources relevant for the completion of the NIS. The most recent desk study, completed in April 2025, relied on the following sources:

- Information on the network of European sites, relevant boundaries, QIs and conservation objectives, obtained from the National Parks and Wildlife Service (NPWS) at *www.npws.ie* and the European Environment Agency (EEA) at *https://natura2000.eea.europa.eu/.*
- Information on the status of EU protected habitats and species in Ireland, obtained from the NPWS Article 17 reports.
- Text summaries of the relevant European sites taken from the respective Site Synopses for each site, available at *www.npws.ie.*
- Information on waterbodies, catchment areas and hydrological connections obtained from the Environmental Protection Agency (EPA) at *www.gis.epa.ie.*
- 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.
- Information on the extent, nature and location of the Proposed Development, provided by the applicant and their design team.

A comprehensive list of all the specific documents and information sources consulted in the completion of this Report is provided in Section 5 - References.

2.4 Field Surveys

A Site visit was undertaken on 29th November 2023 to assess potential connectivity between the Proposed Development Site and any European sites to inform the preparation of this Report. The Site was walked by an Enviroguide ecologist and any occurrences or signs of SCI / QI species, habitat suitability for SCI / QI species or presence of QI habitat was noted. Additionally, any invasive species which could potentially spread during the Construction / Operation Phases and affect the integrity of a European site were also recorded where present. The Site was further assessed by INVAS Biosecurity on 27th September 2024 for the presence of invasive flora species.

2.5 Impact Prediction

Potential impacts on the relevant European site(s) identified during the AA Screening are based on information regarding their QIs and/or SCI species, and the attributes and targets relating to their SSCOs where available. These have been informed by the desk study and any field surveys carried out prior to the preparation of this Report.

Impact prediction is based on the Source-Pathway-Receptor (S-P-R) model. The following describes the steps of the S-P-R approach taken in this NIS:

- Potential sources of effects were identified based on the Proposed Development description and details, including changes to potentially suitable ex-situ habitats at the Site (i.e., habitats utilised by Species of Conservational Importance (SCI) bird species outside of their designated SPAs).

- Up-to-date GIS spatial datasets for water catchments as well as any information from relevant site investigations and/or field surveys were used to identify the QIs/ SCIs within the relevant European site(s) that have a notable S-P-R connection to the Proposed Development:
    - The catchment data were used to establish or discount potential hydrological connectivity between the Proposed Development and any QIs/SCIs.
    - Groundwater and bedrock information used to establish or discount potential hydrogeological connectivity between the Proposed Development and any QIs/SCIs.
    - Air and land connectivity assessed based on Proposed Development details and proximity to QIs/SCIs.
    - Consideration of potential indirect pathways, e.g., impacts to flight paths, *ex-situ* habitats, etc.
- Identification of potential impacts for those QIs/SCIs linked to the Proposed Development via notable S-P-R connections.

Where the preceding steps identified any potential for adverse impacts on any QIs/SCIs for the relevant European site(s), appropriate mitigation measures to eliminate the potential for significant adverse effects are identified in this Report.

2.6 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.

3 NATURA IMPACT STATEMENT

3.1 Existing Environment

3.1.1.1 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, 2025).

The closest surface water feature is the Glasnalower stream (also known as the Brewery stream or Maretimo stream) (Identified on EPA (2025) as River Waterbody Code: IE_EA_09B130400, WFD Name: Brewery Stream_010), which is located adjacent to the southern boundary of the Site.

Approximately 1.8km northeast of the Site, the Glasnalower stream passes the Carrickmines Stream_010. Though the Glasnalower does not directly connect with the Carrickmines stream here, during flood events water from the Glasnalower may overflow into the Carrickmines. The Carrickmines stream continues for approximately 7km southeast 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 Glasnalower stream flows in a northeasterly direction for approximately 1.5km, where it is culverted under Sandyford Business Park to reappear on Brewery Road (Stillorgan) approximately 3.0km northeast of the site. The stream runs in a northeasterly direction before discharging into the Dublin Bay coastal waterbody approximately 5.8km northeast of the Site.

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 2. No water quality monitoring stations are located on the Brewery stream network between the Site and Dublin Bay. 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, 2025).

TABLE 2. 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, 2025).

The soil beneath the Site is not mapped. Subsoils beneath the Site are classified as "*Bedrock at or close to surface – Rck*" (EPA, 2025).

The groundwater rock units underlying the aquifer are classified as *Granites and other Igneous Intrusive Rocks*. (GSI, 2025.)

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 (2025) 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 3.

TABLE 3. 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						
Glasnalower Stream (Carrickmines Stream_010 on EPA maps)	IE_EA_10C040350	South	8m	Good	Not at risk	Downstream of the Site
Brewery Stream_010	IE_EA_09B130400	Northeast	4.5km	Poor	Review	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
Dublin Bay	IE_EA_090_0000	Northeast	7.1km	Good	Not at Risk	Downstream of the Brewery stream
Groundwater Bodies						
Wicklow Groundwater Body	IE_EA_G_076	N/A	N/A	Good	At risk	Underlying groundwater-body

3.1.1.2 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.

3.2 Summary Of Relevant European Sites

The following descriptions of the relevant habitats and species occurring within the European site(s) considered in this NIS have been extracted from the Standard Data Forms (EEA, 2025), Site Synopses from the NPWS website, and any supporting documents available for the relevant site(s).

3.2.1 South Dublin Bay SAC (000210)

The following descriptions of the South Dublin Bay SAC (000210) are extracted from the Site Synopsis (NPWS, 2015a) for the site:

"Site possesses a fine and fairly extensive example of intertidal flats. Sediment type is predominantly sand, with muddy sands in the more sheltered areas. A typical macro-

invertebrate fauna exists. Has the largest stand of Zostera *on the east coast. Supports part of the important wintering waterfowl populations of Dublin Bay. Regularly has an internationally population of* Branta bernicila horta*, plus nationally important numbers of at least a further 6 species, including* Limosa lapponica. *Regular autumn roosting ground for significant numbers of Sterna terns, including* S. dougallii*. The scientific interests of the site have been well documented"*

3.2.2 South Dublin Bay and River Tolka Estuary SPA (004024)

The following descriptions is extracted from the Site Synopsis (NPWS, 2015b) for the site:

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

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 (2025)) AND THE LATEST NATIONAL STATUS IS TAKEN FROM THE LATEST ARTICLE 17 REPORT (NPWS, 2019A & 2019B) FOR SPECIES AND HABITATS, OR GILBERT ET AL. (2021) FOR BIRD SPECIES.

QI / SCI (* = priority habitat)	Conservation Status	National Status	Conservation Objective
South Dublin Bay SAC (000210)			
1140 Mudflats and sandflats not covered by seawater at low tide	Good	Inadequate	To maintain the favourable conservation condition of this habitat in South Dublin Bay SAC.
1210 Annual vegetation of drift lines	Good	Inadequate	No CO have been published to date for *1210 Annual vegetation of drift lines, 1310 Salicornia and other annuals colonising mud and sand,* or *2110 Embryonic shifting dunes.* It is noted as per the standard data form (SDF) for this SAC (EA, 2025), that these three habitat types cover a minimal amount of the SAC area (0.01 - 0.03ha each), and are all classed in the SDF as having 'Good' conservation status and 'Excellent' representativity at the SAC, with their assessment based on 'Good' data quality (e.g., based on surveys). These three habitat types are also all noted as being ephemeral or transient in nature (NPWS, 2019). The combination of their minimal distribution cover at this SAC along with their ephemeral nature, would make assigning conservation
1310 Salicornia and other annuals colonising mud and sand	Good	Favourable	
2110 Embryonic shifting dunes	Good	Inadequate	

QI / SCI (* = priority habitat)	Conservation Status	National Status	Conservation Objective
			objectives challenging and possibly unwarranted, considering their good conservation status and data quality etc. Regardless, as is detailed in Table 5, no significant impact pathway connects these habitats to the Proposed Development, and they are not likely to be affected by same.
South Dublin Bay and River Tolka Estuary SPA (0040224)			
A169 Turnstone (*Arenaria interpres*)	Good	Amber	To maintain the favourable conservation condition of these species in South Dublin Bay and River Tolka Estuary SPA.
A046 Light-bellied Brent Goose *(Branta bernicla hrota)*	Excellent	Amber	
A144 Sanderling *(Calidris alba)*	Excellent	Green	
A149 Dunlin *(Calidris alpina)*	Good	Red	
A143 Knot *(Calidris canutus)*	Good	Red	
A137 Ringed Plover *(Charadrius hiaticula)*	Good	Amber	
A130 Oystercatcher *(Haematopus ostralegus)*	Good	Red	
A182 Common Gull (*Larus canus*)	Good	Amber	
A176 Mediterranean Gull (*Larus melanocephalus*)	Excellent	Amber	
A179 Black-headed Gull *(Chroicocephalus ridibundus)*	Good	Amber	
A157 Bar-tailed Godwit *(Limosa lapponica)*	Good	Red	
A069 Red-breasted Merganser (*Mergus serrator*)	Good	Red	
A160 Curlew (*Numenius arquata*)	Good	Red	

QI / SCI (* = priority habitat)	Conservation Status	National Status	Conservation Objective
A017 Great Cormorant (*Phalacrocorax carbo*)	Good	Amber	
A141 Grey Plover *(Pluvialis squatarola)*	Good	Red	
A005 Great Crested Grebe (*Podiceps cristatus*)	Good	Amber	
A192 Roseate Tern *(Sterna dougallii)*	Excellent	Amber	
A193 Common Tern *(Sterna hirundo)*	Excellent	Amber	
A194 Arctic Tern *(Sterna paradisaea)*	Excellent	Amber	
A162 Redshank *(Tringa totanus)*	Good	Red	
A999 Wetlands	No status available	N/A	To maintain the favourable conservation condition of the wetland habitat in South Dublin Bay and River Tolka Estuary SPA as a resource for the regularly occurring migratory waterbirds that utilise it.

3.4 Impact Prediction

This section follows the S-P-R method as outlined in section 2 to identify if and how any of the QIs/SCIs of the relevant European sites are linked to the Proposed Development. Once the connections have been identified, the potential impacts of the Proposed Development on South Dublin Bay SAC (000210) and South Dublin Bay and River Tolka Estuary SPA (004024) in light of their QIs/SCIs are assessed.

3.4.1 Potential Impacts of the Proposed Development on Key Species and Habitats

The following elements of the Proposed Development were identified as potential sources of effects and were subsequently assessed for their potential to adversely affect the integrity of the relevant European sites:

Construction Phase (*Estimated duration: 18 months*)

- 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 network.
- Spread of invasive plant species as a result of construction activity.

Operational Phase *(Estimated duration: Indefinite)*

- None identified.

The QIs/SCIs for the connected European sites are described in Table 5 below. Descriptions are sourced from the relevant Conservation Objectives and supporting documents from the NPWS website, Standard Data Forms (EEA, 2025) as well as from any surveys carried out at the Site.

TABLE 5. ASSESSMENT OF THE POTENTIAL IMPACT OF THE PROPOSED DEVELOPMENT ON THE QIS AND SCIS OF THE RELEVANT EUROPEAN SITES. THOSE QIS/SCIS FOR WHICH NOTABLE IMPACT PATHWAYS WERE IDENTIFIED HAVE BEEN HIGHLIGHTED IN GREEN.

Description	Impact Pathway(s)	Assessment of potential for Adverse Effects on QI / SCI	Mitigation Requirement
South Dublin Bay SAC (000210)			
1140 Mudflats and sandflats not covered by seawater at low tide			
Habitat area was estimated using OSI data as 720ha. This habitat is present throughout the SAC.	A direct hydrological connection exists between the Proposed Development and this European site via the Glasnalower/ Brewery stream network.	In a worst-case scenario, significant effects on this habitat could occur due to the spread of invasive plant species and/or a construction-related pollution event at the Site, potentially reducing water quality in the SAC.	**Construction Phase:** Surface and ground water protection measures. Invasive species control measures at the Site. **Operational Phase:** No mitigation measures are required due to embedded SuDS measures included in the project design.
1210 Annual vegetation of drift lines			
No information as to its extent as not included within the Conservation Objectives document for this SAC. The SDF for the SAC gives an area of 0.01ha for this habitat. This habitat is very difficult to measure in view of its dynamic nature, which means that it can appear and disappear within a site from year to year.	No impact pathway exists between the Proposed Development and this habitat.	No likelihood of significant effects to this habitat. The only impact pathway between the Proposed Development and this European Site is through a hydrological connection.	No mitigation required.
1310 Salicornia and other annuals colonising mud and sand			
No information as to its extent as not included within the Conservation Objectives document for this SAC. The SDF for the SAC gives an area of 0.01ha for this habitat.	A direct hydrological connection exists between the Proposed Development and this European site via the Glasnalower/ Brewery stream network.	In a worst-case scenario, significant effects on this habitat could occur due to the spread of invasive plant species and/or a construction-related pollution event at the Site, potentially reducing water quality in the SAC.	**Construction Phase:** Surface and ground water protection measures. Invasive species control measures at the Site. **Operational Phase:**

Description	Impact Pathway(s)	Assessment of potential for Adverse Effects on QI / SCI	Mitigation Requirement
			No mitigation measures are required due to embedded SuDS measures included in the project design.
2110 Embryonic shifting dunes			
No information as to its extent as not included within the Conservation Objectives document for this SAC. The SDF for the SAC gives an area of 0.03ha for this habitat.	No impact pathway exists between the Proposed Development and recorded locations of this terrestrial habitat.	No likelihood of significant effects to this terrestrial habitat. The only impact pathway between the Proposed Development and this European Site is through a hydrological connection which would not reach this habitat considering its terrestrial nature.	No mitigation required.
South Dublin Bay and River Tolka Estuary SPA (004024)			
This Site supports nationally and internationally important numbers of migratory and resident shorebird species.	A direct hydrological connection exists between the Proposed Development and this European site via the Glasnalower/ Brewery stream network.	Significant effects within the SPA are considered unlikely, however, in a worst-case scenario, construction related pollution events at the Site could contribute to a reduction in water quality in the SPA, which could adversely affect the feeding resources of the bird species for which it is designated.	**Construction Phase:** Surface and ground water protection measures. **Operational Phase:** No mitigation measures are required due to embedded SuDS measures included in the project design.

3.4.2 Potential for In-combination Effects

3.4.2.1 Existing Planning Permissions

A search of planning applications located within a 300m radius of the Site of the Proposed Development was conducted using online planning resources such as the National Planning Application Database (NPAD) (MyPlan.ie), the DHLGH EIA Portal, and Dun Laoghaire Rathdown Planning Applications database. 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.

Based on the location of the Site and the nature and scale of the Proposed Development, a 300m radius is deemed sufficient to capture any projects that could act in-combination with the Proposed Development to cause likely significant effects on European sites. The larger developments in the vicinity of the Proposed Development are outlined in Table 6 below.

TABLE 6. GRANTED AND PENDING DEVELOPMENT APPLICATIONS WITHIN 300M 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 Development 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.**

3.4.2.2 Relevant Policies and Plans

The local policies and plans detailed in section 1.4.4 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 2022 - 2028), 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/

3.5 Avoidance and Mitigation Measures

The following sections outline the avoidance and mitigation measures required to eliminate the potential for likely significant impacts on connected European sites. Once the recommended measures in the following sections are implemented in full, no adverse impacts on the relevant European sites or their QIs/SCIs are anticipated as a result of the Proposed Development.

3.5.1 Summary of Potential Effects

Potential adverse effects arising from the **Construction Phase** include:

- Water quality impacts in designated sites arising from contaminated surface water run-off during the Construction Phase.
- Spread of invasive species.

The following mitigation measures will ensure no adverse effects arise in designated sites as a result of the Proposed Development, either alone or in-combination with other projects or plans.

3.5.2 Construction Phase

3.5.3 Mitigation 1: Ecological Clerk of Works

A suitably qualified and experienced Ecological Clerk of Works (ECoW) will be appointed prior to the commencement of construction. The ECoW will oversee the implementation of all ecological mitigation measures outlined in this report and ensure compliance with relevant legislation. The ECoW will provide on-site ecological guidance during any works likely to cause significant impacts on European sites, namely any works within 10m of the Brewery Stream.

The ECoW will carry out pre-construction checks where required, deliver toolbox talks to Site personnel before construction works begin, and be available to respond to any unexpected ecological issues that arise during construction. The ECoW will do at least monthly audits to ensure the mitigation in this report is adhered to. Regular reporting and liaison with the project team will be maintained throughout the construction phase.

3.5.4 Mitigation 2: Silt Management and Silt Fencing

Managing silt and sediment at the source is the most effective method to prevent siltation of watercourses. Silt fencing will be used to isolate the Site from receiving surface water bodies, and to isolate designated surface water percolation areas. The following criteria, as per CIRIA C648, must be adhered to for the installation/operation of silt fencing. These will be subject to the professional judgement of the ECoW/ Project Ecologist:

- Vegetation buffers will be retained, measured, and marked out wherever possible in advance of works commencing.
- Silt fencing will then be installed along all watercourses including drains, in advance of works commencing. Silt fencing is also required around the following areas prior to works commencing: stockpiles, percolation areas associated with settlement tanks, and the water management system on Site.
- Where a vegetation buffer of 10m or more is in place, no silt fencing is required.
- Where a vegetation buffer of between 5m and 10m is in place, a single layer silt fence is required.

- Where a vegetation buffer of less than 5m is in place, a double layer, parallel silt fence is required.
- Where no vegetation buffer is in place, or where works are close to a sensitive watercourse, three parallel layers of silt fencing are required.
- Silt fencing should be positioned at a minimum of 5 meters and where possible, up to 50 meters from surface water bodies. The 2-3 layers of silt fencing shall be spaced in 1-meter intervals.
- Silt fencing must be installed along a level contour, so water does not pond more than 400mm at any point.
- The fence will be supported by a wire mesh if the fabric selected does not have sufficient strength.
- The fabric will be fixed to strong supporting posts at regular intervals.
- In areas where more than one layer of silt fence is required, the following applies:
    - The inner silt fence fabric will be buried at least 100 mm into the ground.
    - The outer silt fence fabric will be folded at ground level and not buried.
- All silt fence installation will be completed under the advisement of the on-site ECoW.
- An undisturbed area behind the fence must be retained for runoff to pond and sediment to settle.
- No more than 0.5 ha of concentrated flow shall drain to any point along the silt fence.
- The silt fences will be positioned at central and right angles to flow, with the ends curving up slope to ensure water ponds behind the fence and does not flow around it.
- Accumulated silt will be cleared regularly; commercially produced silt fences have a printed indicator line over which silt should not accumulate.
- The silt fence must be capable of preventing 180µ (micron) and above sediment from passing through.
- Silt fences must not be decommissioned until all land is vegetated.
- The buried inner silt fence is removed first.
- The outer folded silt fence is removed last when the inner silt fence ground has revegetated.

Every precaution will be taken to ensure that the installation of the silt fencing itself does not result in emissions of silt to watercourses. To this end, sequential excavation, and reinstatement of turves as the silt fence is trenched will be implemented. Silt fencing will be placed as close as possible to the construction works while allowing for sufficient space for maintenance and clearance of silt and debris.

Any drains within the Site boundaries (that are identified by the ECoW) will be blocked or treated to prevent silt entering downstream watercourses. This will be accomplished with either dams, silt curtains in series downstream of the works, straw bales firmly posted to exit points to catch silt before leaving the Site, or via dewatering bags on outflow pipes. These measures will be in place prior to works beginning.

The silt fences shall be regularly inspected to ensure they are functioning as intended, and no damage has occurred (e.g., holes, blown over in wind). The fencing shall be amended as required.

Silt fencing shall remain in place for the duration of works and until exposed soils have revegetated.

Under no circumstances will terrestrial works be undertaken between the silt fences and any watercourse without written consent from the local authority and the presence of the ECoW.

3.5.5 Mitigation 3: Water Quality Protection

The following applies to all stages of the Construction Phase for the Proposed Development unless specific measures have been identified. As it has been identified that the Proposed Development could potentially affect nearby European sites during the Construction Phase as a result of water quality impacts, along with the protected habitats and species associated with these sites, the mitigation measures listed in the following sections will be undertaken. The following measures will treat the source or remove the pathway.

All works carried out as part of the Proposed Development will comply with all Statutory Legislation including the Local Government (Water Pollution) acts, 1977 and 1990.

3.5.5.1 Site Drainage

- All existing services will be mapped, and a plan will be put in place to decommission/divert and manage any drains or sewers which are associated with the Site.
- A plan for dealing with any unknown drains or services which may be encountered during the works will be set out and implemented.
- Any surface water inflow into the main areas of excavation will be minimised where possible.

3.5.5.2 Maintenance of Plant and Machinery

- All plant and equipment will be regularly cleaned and properly maintained.
- There will be no washing out of any concrete trucks on Site. Any washing of chutes will be carefully collected in a designated container which will be subsequently sent off site for compliant waste management.
- Pumped concrete will be monitored to ensure there is no accidental discharge and will be carried out in dry weather and with impermeable pouring mats laid down where possible.

3.5.5.3 Earthworks and Stockpiling Mitigation

The proposed earthworks mitigation measures for the Construction Phase include:

- Material handling systems and stockpiling of materials will be designed and laid out to minimise exposure to wind.
- Water misting or sprays will be used on stockpiles as required if particularly dusty activities are necessary during dry or windy periods.
- Leachate generation from stockpiles or waste receptacles will be prevented by using waterproof covers.

- Stockpiles will be placed as far away from watercourses or drains as is possible. Where stockpiles are within 15m of a watercourse or drain, a minimum of two layers of silt traps will be implemented, considering the increased likelihood for silt contamination of the watercourse during heavy rain.
- Prolonged exposure of contaminated soils or groundwater to the atmosphere will be avoided where practical or unnecessary.
    - Silt fencing should be positioned at a minimum of 5 meters and where possible, up to 50 meters from surface water bodies. 2-3 layers of silt fencing shall be spaced in 1-meter intervals.
    - Where a vegetation buffer exists between the stockpile and watercourse, the following distances will be implemented from the bank of the watercourse (that is at the point closest to the center of the Site):
        - Where a vegetation buffer of less than 5m is in place, a double layer, parallel silt fence is required.
        - Where no vegetation buffer is in place, or where works are close to a sensitive watercourse, three parallel layers of silt fencing are required.

3.5.5.4 Storage and Use of Fuels, Oils, Chemicals, Concrete, and Other Construction Materials

- Good housekeeping (daily Site clean-ups, use of disposal bins, etc.) on the Site during the Construction Phase, and the proper use, storage and disposal of potential pollutants and their containers will prevent groundwater contamination.
- Appropriate bunding, storage and signage arrangements for all deleterious substances (e.g., fuels, oils, and chemicals) will be used.
- Robust and appropriate Spill Response Plan and Environmental Emergency Plans will be put in place, the details of which will be communicated, resourced and implemented for the duration of the works.
- Control measures and spill clean-up equipment adequate to treat spills at the Site will be available and staff will be trained and experienced in using said equipment.
- Any spillage of fuels, lubricants or hydraulic oils will be immediately contained and the contaminated soil removed from the Site and properly disposed of.
- A register will be kept of all hazardous substances either used on Site or expected to be present. The register shall be available at all times and shall include as a minimum: valid safety sheets; Health & Safety, environmental controls to be implemented when storing, handling, using and in the event of spillage of materials; emergency response procedures/precautions for each material; the Personal Protective Equipment (PPE) required when using the material.
- Fuels, lubricants, and hydraulic fluids for equipment used on the construction Site will be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism, and provided with spill containment according to best codes of practice (Enterprise Ireland BPGCS005).
- Waste oils and hydraulic fluids will be collected in leak-proof containers and removed from the Site for disposal or recycling.

- Diesel tanks, used to store fuel for the various items of machinery, will be self-contained and double-walled.
- Refuelling will be carried out from tanks or delivery vehicles on a designated impermeable surface and will not be left unattended.
- Plant will not be left running when not in use (i.e., no idling) and plant with dust arrestment equipment will be used where practical.
- Discharge water generated during placement of concrete will be stored and removed off Site for treatment and disposal.
- Specific areas for storage, delivery, loading/unloading of materials will be designated, which will have appropriate containment/spill protection measures where required.

3.5.5.5 Spill/Emergency Response Plans

- Robust and appropriate Spill Response Plan and Site Environmental Emergency Plans (SEP) will be implemented for the duration of the works:
    - Identifying fuel storage and refuelling locations on designated areas within the compound, away from drainage ditches/waterbodies (where present), and on substrate underlain with an impermeable liner to prevent contaminant leaching to groundwater.
    - Identifying spill kit locations (spill kits will be required for each piece of heavy equipment (e.g., excavators, loaders, trucks, etc.,) which will be at least 21L drum size each with spill pads, sorbent, small boom, plastic garbage bag and gloves.
    - Staff will be trained and experienced in using appropriate control measures and spill kits on-Site and will be familiar with the location of all spill kit locations and the Site layout.
- A register will be kept of all hazardous substances either used on Site or expected to be present. The register shall be available at all times and shall include as a minimum:
    - Valid safety sheets; Health & Safety, environmental controls to be implemented when storing, handling, using and in the event of spillage of materials.
    - Emergency response procedures/precautions for each material.
    - PPE is required when using the material.

3.5.5.6 Waste Management and Disposal

Waste management and disposal will comprise the following:

- Portaloo's and/or containerised toilets and welfare units will be used to provide facilities for Site personnel. All associated waste will be removed from the Proposed Development Site by a licenced waste disposal contractor.
- Mixer washings are not to be discharged into ground or drainage ditches and will be collected and disposed of at a suitably licenced facility.
- A minimal waste approach of reduction, reuse and recycling will be utilized where practicable/appropriate. Where this cannot be carried out, all wastes will be disposed of at licenced waste facilities.

3.5.6 Mitigation 4: Invasive Species Management

3.5.6.1 Pre-clearance Invasive Species Survey

A pre-clearance survey of the Site will be conducted by a suitable qualified Ecologist before any clearance of vegetation or soil strip takes place. This survey will identify any locations of invasive plant species, in particular the rhododendron and cherry laurel plants recorded along the southern Site boundary. The Ecologist and Site manager will consult the IASMP prepared by INVAS Biosecurity (2024) attached in Appendix V of The EcIA (Enviroguide, 2025c) for recorded locations of invasive species on Site.

3.5.6.2 Invasive Species Management

3.5.6.2.1 Low-Medium Impact Invasive Species

The Ecologist and Site manager will consult the IASMP prepared by INVAS Biosecurity (2024) for the recommended management/control measures for each of the invasive plant species on Site.

With regard to the below listed low-medium impact species recorded on Site:

- Butterfly-bush.
- Himalayan Honeysuckle.
- Cotoneaster sp.
- Winter Heliotrope.

These plants will be removed as per the species-specific guidance for each species included in the IASMP and the Traffic Infrastructure Ireland (TII) guidance document titled “The Management of Invasive Alien Plant Species on National Roads – Technical Guidance - GE-ENV-01105” (TII, 2020).

It is noted that sycamore is not considered to pose a risk of spread or impacts at the Site or off Site due to the nature of its invasiveness (See Section EcIA for details). This species is not included in the TII guidance and does not require a specific removal approach; it can be removed as per normal tree removal protocol if required.

Although traditionally considered to be a ‘low impact’ invasive species, winter heliotrope has been recognised as a vigorous invasive that outcompetes native plant species and significantly alters natural habitats. Furthermore, it is extremely difficult to eradicate and so its removal and treatment on Site will be a priority.

Francis *et al.* (2021) prepared a research report for the EPA which includes chapters on winter heliotrope and the most effective treatment measures for same. Experiments were conducted involving Synero (a selective herbicide containing aminopyralid and fluroxypyr) and Roundup Biactive (a systemic, broad-spectrum herbicide containing glyphosate that is cleared for use near aquatic situations), and these two herbicides each combined with Topfilm (an adjuvant designed to improve the performance of herbicides, particularly in water). The authors concluded that Synero gave the most consistently successful results in these experiments. In locations where the use of Synero is not permitted, such as under the dripline of trees, repeated applications of Roundup Biactive may be used to suppress growth.

3.5.6.2.2 High Impact Invasive Species Management

Rhododendron seedlings were recorded in the south of the Site in November 2023 by the Enviroguide Ecologist. Rhododendron is listed in the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended), making it an offence under Regulation 49 of that instrument to plant, disperse, allow or cause to grow this plant.



FIGURE 4. RHODODENDRON SEEDLING IN THE SOUTH OF THE SITE (IMAGE FACING SOUTH-EAST).

The following is extracted from Traffic Infrastructure Ireland (TII) guidance document titled *"The Management of Invasive Alien Plant Species on National Roads – Technical Guidance - GE-ENV-01105*" (TII, 2020):

Control Information

It is recommended that a suitably qualified ecologist or horticulturalist with sufficient training, experience and knowledge in the control of Invasive Alien Plant Species (IAPS) should be employed to assist in the planning and execution of control measures in relation to rhododendron. In addition, those involved in the control of rhododendron may be advised to have access to the advice of a Registered Pesticide Advisor on the register established by the Minister for Agriculture, Food and the Marine pursuant to Regulation 4 of the Sustainable Use of Pesticides Regulations. All pesticide users must be registered and have the appropriate training necessary to carry out the proposed method of control.

Rhododendron grows vigorously when cut and the tiny seeds may be unintentionally spread by machinery, on clothes, boots, or other PPE. Hence, **biosecurity measures must be put in place to prevent further spread** of the plant when undertaking any control works. Regular follow-up is required to deal with re-growth and seedling germination, irrespective of the control method employed.

Combined chemical and physical control

With isolated plants (> 1m tall) or small infestations, effective control can be achieved by cutting the plant to the stump and immediately treating the latter with herbicide. Any cut material will need to be removed from the site to avoid resprouting or suckering, which will produce new plants and potential infestations. Mulching is a good option for disposal and the mulch may be left on site, if no seeds are present.

Recommended Management Approach for the Site

Considering the nature of rhododendron on Site, and the fact that the species is only present in small seedling plants, effective control may be achieved by:

1. Manual pulling of plants that are less than 20cm high ensuring all of the roots are removed.
2. For plants too big to manually pull, with a stem diameter less than 2cm, the stem can be broken at the base ensuring that it is not fully severed, and a concentrated solution of herbicide immediately applied. For plants greater than 2cm in diameter, notches can be cut in the stem using a hatched or saw (referred to as feathering) and a concentrated solution of herbicide immediately applied.
3. Any herbicide application should be carried out by a suitably qualified and registered professional. Professional users of pesticides must be registered pursuant to Regulation 4 of the Sustainable Use of Pesticides Regulations and must have the appropriate training (with associated certificates) required to perform the necessary treatment to suitably manage the targeted IAPS. Chemical treatments must always be used in compliance with the product label (TII, 2020).
4. Herbicide can be applied by spraying, weed-wiping, injection or painted directly onto stumps. The appropriate measure shall be chosen by a suitably qualified professional.
5. An inert dye should be mixed with the herbicide to ensure that no stumps are missed.
6. Herbicide application should be carried out in dry weather, with a 6 to 24 hour rain free period following the treatment.
7. It is important that the herbicide has access to the plant's transport system, which is just inside the bark. This type of treatment is effective all year-round, although it is deemed to be most effective when conducted during the plant's active growth period while transpiration is readily occurring. This will help the herbicide spread through the plants transport system. This treatment should be carried out in late Spring or Summer.
8. Any cut material will be bagged and removed from the Site to avoid resprouting or suckering which will produce new plants and potential infestations.

9. The movement of plant material of any plants listed on the Third Schedule requires a licence from the NPWS under Section 49 of the European Communities (Birds and Natural Habitats) Regulations, 2011 (as amended).
10. Mulching is a possible option for the disposal of small stands provided they have not produced seed. Considering rhododendron, these are plants of less than 10 years old. The mulch may be left on Site, provided no seeds are present.
11. Should any seed producing plants be evident on Site and where bare soil remains, soil should be mulched (covered with a natural or synthetic barrier, such as wood chip, straw, geo-textile, or other appropriate material) and planted at the earliest opportunity with appropriate native replacement vegetation to stabilize the soil and deter subsequent re-invasion by this species (TII, 2020).
12. As part of the clearance programme, follow up surveys will be required to ensure that the above control measures are effective. Rhododendron seed remain viable in soil for up to three years (TII, 2020) and as such these surveys may be required to be undertaken at the end of the growing season following herbicide treatment (i.e., September – October) for a period of three years or until the Site is clear of rhododendron and no longer under threat of reinvasion.
13. Any soil removal scheduled to occur involving mature seed producing rhododendron must be done so under approval from the NPWS and disposed of at a registered and approved waste treatment facility. Soils that contain seed of Third Schedule plants are considered vector materials for the spread of invasive species and may only be transported under licence from the NPWS. The IAS specialist will advise on whether any mature plants exist on Site based on their pre-commencement survey.
14. Machinery operating within an area of IAS should be treated according to TII (2020) guidelines before entering and exiting the Site. This should involve designated power washing areas to prevent the spread of seed on machinery. Similarly, PPE and clothing should be removed and changed when exiting the Site.
15. The treatment programme will be carried out by a suitably qualified person who has experience of treating invasive species and will be carried out in line with the herbicide manufacturer's instructions.
16. If found to be present during the pre-commencement survey, any larger stands of Rhododendron should be inspected for breeding birds during the bird nesting season (1*st* March to 31*st* August) before any removal takes place.

3.5.7 Operational Phase Mitigation

No Operational Phase mitigation measures are required.

3.6 Monitoring

3.6.1 Construction Phase

Table 7 provides a summary of the required monitoring and inspections during the Construction Phase, specifically focusing on the management of surface and groundwater protection measures. These measures will ensure that any potential adverse effects on European sites are avoided. Monitoring and inspections will be conducted regularly to verify

the effectiveness of the implemented mitigation measures and to ensure compliance with environmental standards.

Should any deviations from the proposed mitigation or any corrective measures be required, these will be agreed with the ECoW and Contractor prior to being implemented. Records will be kept of all checks and any deviations/corrective measures to inform Dun Laoghaire Rathdown County Council if required.

Ongoing monitoring will be conducted by the contractor to ensure that sediment control measures (e.g., sediment traps, silt fences, bunds) are functioning correctly and that any necessary maintenance or repairs are promptly undertaken.

Regular inspections of dewatering activities and groundwater control measures will be necessary to prevent any contamination or disruption to the natural groundwater flow. This includes ensuring that temporary in-situ water treatment systems are functioning effectively.

Adherence to the CEMP will be verified through daily checks by the Site Manager and at least monthly audits by the ECoW. During periods of heavy rain, the ECoW will be required to provide additional visits to Site to ensure silt traps remain functional.

Spill prevention and control will involve daily monitoring of fuel storage and handling areas by the Site manager, ensuring that all safety measures such as drip trays and bunding are in place and that spill kits are readily available. Any spills will be reported immediately and cleaned up according to Site protocols.

TABLE 7. MONITORING MEASURES TO BE IMPLEMENTED.

Measure	Implementation Stage	Monitoring
Surface Water Management	• Construction Phase.	• Ongoing monitoring by the Contractor. • Daily checks by the Site Manager. • At least monthly audits by the ECoW with additional visits following periods of heavy rainfall.
CEMP Compliance	• Construction Phase.	• Ongoing monitoring by the Contractor. • Daily checks by the Site Manager. • At least monthly audits by the ECoW with additional visits following periods of heavy rainfall.
Spill Prevention and Control	• Construction Phase.	• Ongoing monitoring by the Contractor. • Daily checks by the Site Manager. • At least monthly audits by the ECoW with additional visits following periods of heavy rainfall.
Invasive Species Monitoring	• Construction Phase. • Operational Phase.	• As per the IASMP (INVAS, 2024)

4 CONCLUSION

This NIS details the findings of the Stage 2 AA conducted to determine whether the Proposed Development at Blackglen Road, Sandyford, Dublin 18, would have an adverse effect on the integrity of any of the following European Sites: South Dublin Bay SAC (000210) and South Dublin Bay and River Tolka Estuary SPA (004024).

The above sites were identified by a screening exercise that assessed likely significant effects of a range of impacts that have the potential to arise from the Proposed Development. The NIS investigated whether the proposed works, both during construction and operation, would have an adverse effect on the integrity of the above European Sites, alone and in combination with other plans and projects, considering the Site's structure, function and conservation objectives, and having regard to best scientific knowledge.

Where the potential for adverse effects was identified, a range of mitigation and avoidance measures have been recommended to avoid them. This NIS has concluded that, once the avoidance and mitigation measures are implemented as proposed, the Proposed Development will not have an adverse effect on the integrity of the above European sites, individually or in combination with other plans and projects. Where applicable, a suite of monitoring measures has been proposed to confirm the efficacy of said mitigation in relation to ensuring no adverse effects on the habitats or species of the relevant European sites have occurred.

As a result of the complete, precise and definitive findings in of this NIS, it has been concluded, beyond reasonable scientific doubt, that the Proposed Development will have no adverse effects on the integrity and extent of South Dublin Bay SAC (000210) and South Dublin Bay and River Tolka Estuary SPA (004024). Accordingly, the Proposed Development will **not** adversely affect the integrity of any relevant European site.

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