

PROPOSED SOCIAL AND AFFORDABLE MIXED TENURE HOUSING DEVELOPMENT ON SDCC LAND AT CASTLEFIELD AVENUE, OLD KNOCKLYON ROAD, DUBLIN 16

Report to Inform Appropriate Assessment (AA) Screening

Prepared for:

South Dublin County Council



Comhairle Contae South Dublin
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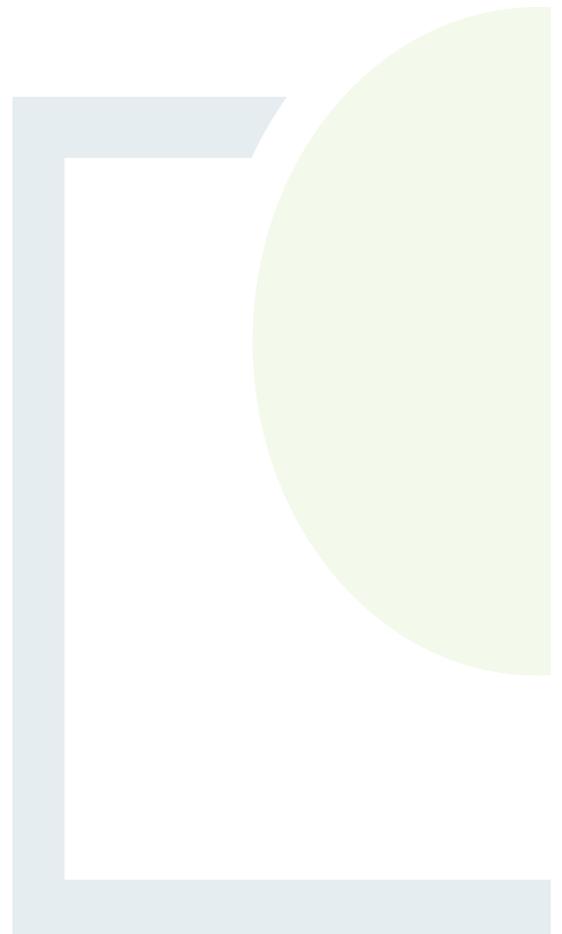
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Report to Inform Appropriate Assessment (AA) Screening for a Proposed Social and Affordable Mixed Tenure Housing Development on SDCC Land at Castlefield Avenue, Old Knocklyon Road, Dublin 16.

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Abstract: Fehily Timoney and Company is pleased to submit this Report to Inform AA Screening to South Dublin County Council for a Proposed Social and Affordable Mixed Tenure Housing Development on SDCC land at Castlefield Avenue, Old Knocklyon Road, Dublin 16.

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1. INTRODUCTION

South Dublin County Council (SDCC) intends to prepare a Part 8 Application for a Proposed Social and Affordable Mixed Tenure Housing Development ('the proposed development') on SDCC land at Castlefield Avenue, Old Knocklyon Road, Dublin 16

Fehily Timoney and Company (FT) were commissioned by SDCC to prepare a report to inform their Appropriate Assessment (AA) Screening for the proposed development.

1.1 Legislative Context

Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) provides legal protection for habitats and species of European importance. The Directive requires that where a plan or project is likely to have a significant effect on a European Site, while not directly connected with or necessary to the nature conservation management of the site, it will be subject to 'Appropriate Assessment' to identify any implications for the European site in view of the site's Conservation Objectives. Specifically, Article 6(3) of the Habitats Directive states:

"6(3) Any plan or project not directly connected with or necessary to the management of the site (Natura 2000 sites) but likely to have 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."

The competent authority must carry out a screening for appropriate assessment to assess, in view of best scientific knowledge, if the proposed development, individually or in combination with another plan or project is likely to have a significant effect on a European site. If it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site, an appropriate assessment of its implications for the European Site(s) in view of the Site's conservation objectives is required to be carried out.

The provisions of Article 6(3) do not apply where the proposed development is 'connected with or necessary to the management of the site'. In this case, the proposed development is not directly connected with or necessary to the management of any European site(s).



1.2 Methodology

1.2.1 Guidance

The assessment was conducted in accordance with the following guidance:

- 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. Commission Notice (2021) Brussels, 28.9.2021 C(2021) 6913 final (European Commission, 2021)¹.
- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin (2009, updated 2010) (Environment Heritage and Local Government, 2009)².
- Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission (2019). Brussels, (2019/C 33/01). OJ C 33, 25.1.2019³.
- Interpretation Manual of European Union Habitats. Version EUR 28. (European Commission, 2013)⁴.
- OPR Practice Note PN01 Appropriate Assessment Screening for Development Management, (Office of the Planning Regulator, 2021)⁵.

1.2.2 Process

The process of determining the likelihood of significant effects from a proposed development on European sites is an iterative process centred around a Source-Pathway-Receptor model. In order for an effect to be established, all three elements of this mechanism must be in place. The absence of one of the elements of the mechanism is sufficient to conclude that a potential effect cannot occur.

- Source(s) – e.g., pollutant run-off, noise, removal of vegetation;
- Pathway(s) – functional link, or ecological pathway e.g., groundwater connecting to nearby wetland habitats, or loss of foraging habitat; and,
- Receptor(s) – the qualifying habitats and species of European sites and ecological resources supporting those habitats/species.

¹ European Commission. (2021). Commission notice- Assessment of plans and projects in relation to Natura 2000 sites - Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (Issue 2021/C 437/01).

² Environment Heritage and Local Government. (2009). Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities.

³ European Commission. (2019). Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC.

⁴ European Commission. (2013). Interpretation Manual of European Union Habitats. EUR 28.

⁵ Office of the Planning Regulator. (2021). OPR Practice Note PN01. Appropriate Assessment Screening for Development Management.



In the context of this report, a source is any identifiable element of the proposed development that is known to interact with the receiving environment. A receptor is the Qualifying Interests (QI)⁶ for an SAC or Special Conservation Interests (SCI)⁷ for an SPA or an ecological feature that is known to be utilised by the QI/SCI. In practice, the term Qualifying Interests also applies to SCIs (and is used in this document for simplicity). A pathway is any connection or link between the source and the receptor.

The assessment commences with a description of the project, along with a description of the receiving environment and the associated sources for impacts to the receiving environment. All elements of the project are presented including the project location and existing baseline environment. The type of impacts that are likely due to the project (Source) are identified having regard to the spatial and temporal scale of the project, resource requirements and likely emissions. These sources are then used to define the zone of influence (Zoi) of the project as detailed in Section 4.2.

The European Commission Notice (2021) on the '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', states that in identifying European sites (Natural 2000 sites), which may be affected by the project, the following should be identified:

- Any European sites geographically overlapping with any of the actions or aspects of the plan or project in any of its phases, or adjacent to them;
- Any European sites within the likely zone of influence of the plan or project. European sites located in the surroundings of the plan or project (or at some distance) that could still be indirectly affected by aspects of the project, including as regards the use of natural resources (e.g., water) and various types of waste, discharge or emissions of substances or energy;
- European sites whose connectivity or ecological continuity can be affected by the plan or project.

The zone of influence of a proposed development is therefore the geographical area over which it could affect the receiving environment in a way that could have potential effects on the Qualifying Interests of a European site. The OPR (2021) practice note states that the Zone of Influence must be established on a case-by-case basis using the Source-Pathway-Receptor (S-P-R) framework and not by arbitrary distances (such as 15 km).

Section 4.2 sets out the detailed rationale for the identification of relevant European sites within the Zoi based on the sources of impacts arising from the proposed development. Subsequently, an assessment is undertaken with respect to potential connectivity (Pathways) to European Sites and their qualifying interests/special conservation interests are identified.

The potential for in-combination effects with other plans and projects is examined in Section 3.2, having regard to the identified impacts of the project along the ecological pathways identified to European sites.

The likelihood of significant effects of the European Sites within the Zoi is examined in Section 4 having regard to the sensitivity of the site with pathways for impacts associated with the project on its own and in combination with other plans and projects.

⁶ SACs are areas designated under the Habitats Directive to conserve habitats listed in Annex I of the Directive and plant and animal species listed in Annex II. Collectively these are referred to as the 'Qualifying Interests' or 'QIs' of the SAC.

⁷ SPAs are sites classified under the Birds Directive to protect rare or vulnerable bird species listed in Annex I to the Directive as well as regularly occurring migratory species and wetlands. Wetland habitats that support internationally important populations of migratory birds may be coastal or inland. Collectively, these species and habitats are referred to as the 'Special Conservation Interests' of the SPA.



Having regard to the European Commission Communication on the Precautionary Principle (European Commission, 2021) the:

“absence of scientific evidence on the significant negative effect of an action cannot be used as justification for approval of this action. When applied to Article 6(3) procedure, the precautionary principle implies that the absence of a negative effect on Natura 2000 sites has to be demonstrated before a plan or project can be authorised. In other words, if there is a lack of certainty as to whether there will be any negative effects, then the plan or project cannot be approved.”

Where significant effects are determined to be likely, or where there is uncertainty regarding the likelihood of significant effects, the project will be required under law to be subjected to Appropriate Assessment.

This AA screening is based on best scientific knowledge and has utilised ecological expertise. In addition, a detailed online review of published scientific literature was conducted. This included a detailed review of the National Parks and Wildlife Website including mapping and available reports for relevant sites and in particular sensitive qualifying interests/special conservation interests described and their conservation objectives.



2. PROJECT DESCRIPTION

2.1 Project Overview

The proposed development is comprised of 29 homes and all associated open spaces and all site and development work necessary to facilitate the proposed development and will include:

- i. Construction of 8 No. three-storey, three-bedroom houses in two terraced buildings.
- ii. Construction of 4 No. two-bedroom apartments in a two-storey building.
- iii. Construction of a two and three-storey apartment building which will comprise: 1 No. studio apartment, 8 No. one-bedroom apartments, 4 No. two-bedroom apartments and 4 No. three-bedroom apartments.
- iv. New boundary treatment to adjoining properties and roads. Associated upgrading of roadways and paths, provision of car and cycle parking spaces. All hard and soft landscape works, lighting, boundary structures and all associated ancillary buildings, infrastructure to include a pumping station, and all site and development works necessary to facilitate the proposed development.

2.2 Purpose/Rationale for the Proposed Development

In accordance with the South Dublin County Development Plan 2022-2028, the proposed development site is zoned for 'Existing Residential' (RES) use, reflecting a commitment to the preservation and enhancement of residential amenities.

The proposed development will provide affordable and secure accommodation to individuals and families, promoting social inclusion and stability within communities. The proposed development aligns with the Nation Strategic Outcome 1, 'Compact Growth', as defined in the National Planning Framework (First Revision, 2025).

Furthermore, the proposed development supports the following National Policy Objectives defined in the National Planning Framework:

- National Policy Objective 7: Deliver at least 40% of all new homes nationally, within the built-up footprint of existing settlements and ensure compact and sequential patterns of growth';
- National Policy Objective 8: Deliver at least half (50%) of all new homes that are targeted in the five Cities and suburbs of Dublin, Cork, Limerick, Galway and Waterford, within their existing built-up footprints and ensure compact and sequential patterns of growth.

The principle of Compact Growth and Urban Regeneration is further reinforced as a Regional Strategic Outcome (RSO) under the Eastern and Midland Regional Spatial and Economic Strategy 2019-2031:

- RSO 2 Compact Growth and Urban Regeneration: Promote the regeneration of our cities, towns and villages by making better use of under-used land and buildings within the existing built-up urban footprint and to drive the delivery of quality housing and employment choice for the Region's citizens.



2.3 Construction Phase of the Proposed Development

2.3.1 Overview of Proposed Construction Works

2.3.1.1 *Sequence of Construction Works*

The following construction sequence is expected to be carried out for the proposed development:

- Installation of temporary construction site area
- Site clearance works, including removal of existing vegetation overlapping with the footprint of the proposed development.
- Excavation to formation levels – excavated material will be reused on site or dispatched to an appropriate waste management facility.
- Installation of utility services (foul water and water mains)
- Laying of building foundations
- Backfilling of excavated material and any imported fill required will be carried out
- Construction of residential units
- Construction/installation of ancillary site infrastructure, including boundary treatments, roadways, paths, on-street parking, landscaping, surface water and wastewater drainage systems, lighting, boundary structures, and electrical connections.
- Site clean-up and commissioning.

The exact sequencing of the works will be confirmed upon the appointment of a suitable contractor.

2.3.2 Construction Programme

Construction works are planned for commencement in Q4 of 2026, and will last for approximately 18 months.

Hours of construction will be restricted to the following:

- 07:00 to 19:00 hours on Monday to Friday
- 09:00 to 13:00 hours on Saturday

Construction employee numbers and arrangements will be determined by the appointed Contractor. The expected number of employees will be commensurate with a project of similar scope and scale.



2.3.3 Environmental Management during Construction

The construction works will be undertaken in accordance with a Construction Environmental Management Plan (CEMP). This CEMP will cover the following aspects:

- Environmental Management System (EMS) requirements.
- Pollution Prevention
- Management of Noise, Vibration and Dust
- Surface Water Management
- Soil Management
- Ecological protection
- Archaeological monitoring and conservation
- Emergency Response
- Invasive Species Management

The Contractor responsible for the construction works will be required to develop and implement a Construction Traffic Management Plan (CTMP) to manage safe access and egress of construction vehicles from the site and the movement of plant and vehicles around the site.

A Construction Stage Health and Safety Plan (CSHSP) will be adopted and adhered to by the Contractor to ensure minimal risk in terms of human health and the environment due to the construction works.

The proposed development footprint will require removal of trees and hedgerows that overlap with the footprints of the housing units. Existing hedgerows and trees will be retained where feasible, and additional planting with native species will be carried out as part of the landscaping works.

Vegetation clearance shall be carried out outside the bird breeding season (i.e. outside of 01st March to 31st August). If this is not possible, the trees will need to be subjected to a pre-clearance nest check. In the event that active nests are present, clearance can only proceed under a derogation licence awarded by the NPWS.

2.4 Operational Phase of the Proposed Development

An overview of the key elements of the operational phase of the proposed development is provided below.

- **Residential Activity:** The proposed development will provide housing for the community. Typical activity at the proposed development will include home occupation and daily-life activities, and may extend to occasional home-based work and property maintenance.
- **Energy Use:** The proposed residential units will be designed to achieve an A2 Building Energy Rating (BER).
- **Foul Water Discharge:** The proposed foul drainage network will be designed to comply with Uisce Éireann Code of Practice. Uisce Éireann (UE) have confirmed there is available capacity in the surrounding network to accommodate the foul flows from the development. A foul pumping station has been proposed to connect to the UE network on the nearby Ballycullen Road, which is ultimately served by Ringsend Wastewater Treatment Plant. The pump station will be designed to comply with the Uisce Éireann Code of Practice and has been located on the site to comply with all the necessary offsets required by UE.



- **Water Supply:** The water supply to the site will be taken from the existing UE watermain network in Castlefield Avenue and the Old Knocklyon Road. UE have confirmed there is sufficient capacity in the surrounding network to accommodate the demand associated with the development.
- **Stormwater Drainage:** Surface water will be collected, treated and stored onsite by a number of SuDS features such as raingardens, permeable paving, filter drain, swales and tree pits. The drainage strategy will utilise infiltration where possible and restrict the runoff rate from the development to match the pre-development runoff rate so as not to have a detrimental impact of flooding downstream of the development. The discharge from the site will connect to an adjacent culvert which is within the site boundary. The strategy has been integrated into the proposed site layout and will be further developed at detailed design stage to be in compliance with the SDCC SuDS Design Guide and the Greater Dublin Regional Code of Practice for Drainage Works.
- **Access:** All units at the north site will have main access from Old Knocklyon Road, and units at the south site will have main access from Castlefield Avenue.



3. DESCRIPTION OF THE EXISTING SITE AND THE RECEIVING ENVIRONMENT

3.1 Existing Site

The overall development site is 0.80 hectares (ha) in extent and is located a greenfield site in the townland of Knocklyon, Co. Dublin.

The overall development site consists of two triangular shaped sites (the 'north site' and the 'south site') which are currently greenfield, intersected by the Old Knocklyon Road in the centre. A surface water drain/culvert is situated along the eastern boundary of the site, adjacent to the M50, with a 10-meter wayleave on both sides. As a result, the eastern section of the site is not feasible for development, prompting the proposed units to be located on the western side.

The western and northern boundaries of the northern section of the site adjoin Homeville Road. The eastern section of the site is surrounded by the M50 and the southern area is located next to the Castlefield Avenue. The southern triangular area features a steep slope, descending approximately 7 m from south to north. The overall site is generally level, with moderate sloping to the centre of the site.

The site is composed of mainly rank grassland, scrub and bordered by treelines and walls. No watercourses or drains have been recorded at the site. A site visit undertaken by an arborist⁸ recorded a group of Leyland with a mature ash and sycamore, with a group of Lawson and Leyland cypress adjacent to the western boundary. The north site contains a tree and hedge line of ash, sycamore, elm and hawthorn along the southern boundary. The western boundary also contains three lime and one horse chestnut of a late-mature age class.

Landcover at the site is largely amenity grassland, with a strip of hedgerow and treelines along the eastern boundary of the site. A patch of broadleaved Forest and Woodland is present to the west of the south site.

The lands where the proposed development is situated is zoned 'Existing Residential' (RES) under the South Dublin County Development Plan 2022-2028, the objective of which is to '*To protect and/or improve residential amenity*'.

3.1.1 Desktop Assessment

A desk study was carried out to collate available information on the existing natural environment at the proposed development location. This comprised a review of the following publications, data and datasets:

- Environmental Protection Agency (EPA) (on-line map-viewer including the Appropriate Assessment Tool)⁹;
- Department of Housing, Planning, and Local Government- EIA Portal;
- National Parks and Wildlife Service – online European site network information, including site conservation objectives¹⁰;
- National Parks and Wildlife Service – Information on the status of EU protected habitats and species in Ireland (including Article 17 and Article 12 Reports);

⁸ Charles McCorkell Arboricultural Consultancy; Site visit was undertaken on 22nd August 2024.

⁹ <https://gis.epa.ie/EPAMaps/> (Accessed February 2026)

¹⁰ www.npws.ie (Accessed February 2026)



The site is located within WFD Catchment Liffey and Subcatchment Dodder_SC_010. The historical route of the now culverted Orlagh watercourse flows in a northerly direction, approximately 50 m west of the site, merging into the Dodder River, which is approximately 350 m north-west of the site. The Dodder River flows easterly before draining into Dublin Bay.

The Ballycullen Stream is a heavily modified waterbody with a small section of open channel located to the north-west of the proposed development site. The stream has a history of flooding arising predominantly from culvert blockages and culvert capacity issues. The stream was previously modified for the construction of the M50 and subsequently culverted to allow for the construction of properties around the Castlefield area.

The soils underlying the proposed development site are classified as 'Urban'¹¹ ('Soil concreted over'). The subsoils in this area comprise Limestone till, sands and gravels (Carboniferous), and the proposed development is underlain by Fine loamy drift with limestones.

The site is underlain by the Dublin Groundwater Body. WFD Risk Status for this waterbody is currently under review, and the overall groundwater status is 'Good'. Groundwater vulnerability at the site ranges from 'Low' (to the northern portion of the site) to 'High' (southern end of the site). The aquifer underlying the site is 'Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones'.

3.1.1.1 Field Assessment

A site visit was undertaken on the 18th June 2024 by FT ecologist Daniel Weldon. A walkover survey of the site was undertaken with aim of assessing the following:

- Assess the habitat for suitability to support QIs/SCIs of relevant Natura 2000 sites and to identify the presence or potential presence of QIs/SCI species.
- Determine any hydrological connectivity of the site with proximate watercourses.
- Identify the presence of invasive alien species as listed on the third schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended.

The proposed development site consists of two blocks separated by the Old Knocklyon road and were dominated by species poor rank grassland categorised as Dry meadows and grassy verges (GS2) primarily composed of Yorkshire-fog.

Other species present within the grassland included hogweed (*Heracleum sphondylium*), cocks-foot (*Dactylis glomerata*), docks (*Rumex spp.*), creeping thistle (*Cirsium arvense*), creeping buttercup (*Ranunculus repens*), cow parsley (*Anthriscus sylvestris*) and nettle (*Urtica dioica*). Encroaching bramble (*Rubus fruticosus agg.*) is present in many areas within the grassland and transitions to Scrub (WS1) adjacent to the old Knocklyon road. Willow (*Salix spp.*) was also present here. Winter heliotrope (*Petasites pyrenaicus*) is also present along the eastern boundary of the site. Much of the site boundary is composed of walls classified as Buildings and artificial surfaces (BL3). Hedgerows (WL1) and Treelines (WL2) provide the boundary for the remainder of the site. Hedgerows at the site were species poor and almost entirely comprised of butterfly-bush (*Buddleja davidii*) with some cherry laurel (*Prunus laurocerasus*) present along the eastern boundary of the site. Treelines were also dominated by non-native cypress (*Cupressus x leylandii*), horse chestnut (*Aesculus hippocastanum*), sycamore (*Acer pseudoplatanus*) and limes (*Tilia spp.*).

¹¹ Irish Soil Information System (Available at: <https://teagasc.ie/environment/soil/irish-soil-information-system/>; Accessed February 2026)



Figure 2-1: Habitats present within the northern block of the proposed development site



Figure 2-2: Habitats present within the southern block of the proposed development site



3.2 Potential Interactions of the Proposed Development on the receiving environment

Having regard to the European Commission (2021) guidance document and the OPR (2021) practice note, the potential impacts of the project on the receiving environment at source are set (in Table 3-1) out relative to the following criteria:

- Habitat destruction/fragmentation/deterioration;
- Surface water run-off carrying suspended silt and contaminants, into local watercourses;
- Changes to groundwater quality, yield and/or flow paths associated with the proposed development;
- Project related activities (noise, vibration, lighting, human presence, structures, etc);
- Air pollution due to dust and other airborne emissions; and
- Disturbance and potential spread of invasive species during the proposed works.

These impacts are further examined in defining the Zone of Influence (Zol) of the project to identify likely significant effects through the Source-Pathway-Receptor assessment (Section 4.2).



Table 3-1: Identification of sources for impacts arising from the proposed development that have potential for interactions with the receiving environment

Criteria	Potential sources of impact
<p>Habitat destruction / fragmentation / deterioration</p>	<p>Construction Phase Site clearance will involve the removal of rank grassland, tree lines, hedgerows and scrub. However, these habitats are common in the wider landscape and given the size and scale of the proposed development it is foreseen that these activities will not have a significant effect on the receiving environment.</p> <p>Operational Phase No works that could cause habitat destruction, fragmentation or deterioration will take place during this phase.</p>
<p>Surface water run-off carrying suspended silt and contaminants, into local watercourses.</p>	<p>Construction Phase The historic route of Orlagh River is located 50 m west of the red line boundary separated by a road and residential housing. No watercourses are present at the proposed development site.</p> <p>Operational Phase Surface water will be collected, treated and stored on-site by SuDS features. The drainage strategy for the proposed development will utilise infiltration where possible and restrict the runoff rate from the development to match the pre-development runoff rate so as not to have a detrimental impact of flooding downstream of the development. The discharge from the site will connect to an adjacent culvert which is within the site boundary.</p> <p>Surface water run-off at the site will be suitably attenuated in accordance with Sustainable Drainage System (SuDS) principles.</p>



Criteria	Potential sources of impact
<p>Changes to groundwater quality, yield and/or flow paths associated with the proposed development.</p>	<p>Construction Phase</p> <p>During the construction phase, works will not involve activities that lead to changes in groundwater quality, yield and/or flow paths. Earthworks are required during construction for foundations at the Site and could have potential to require dewatering of groundwater and associated draw down of water levels. However, earthworks will not be deep enough to affect groundwater yield, flow or quality.</p> <p>Operational Phase</p> <p>During the operational phase, there will be no activities that lead to changes in groundwater quality, yield and/or flow paths.</p>
<p>Project related activities (noise, vibration, lighting, human presence, structures, etc).</p>	<p>Construction Phase</p> <p>Elevated levels of noise and vibration will occur as a result of proposed development works, during the construction phase.</p> <p>Adjacent lands to the proposed development consist of roads, residential housing, improved grassland and occasional treelines/hedgerows. Works will also require lighting, which may project onto these habitats.</p> <p>An increase in human presence will also occur as a result of proposed development works.</p> <p>Operational Phase</p> <p>Increased human presence will occur at the Site with associated increases in noise and lighting levels locally.</p>



Criteria	Potential sources of impact
Air pollution due to dust and other airborne emissions.	<p>Construction Phase</p> <p>Proposed development works will involve excavation, which is likely to emit dust. As a general rule, Holman et al. 2014¹² prescribes a 50m zone of influence for dust effects from track out and construction activities at 'small' construction sites. Dust deposition into the adjacent habitats is therefore expected (in the absence of mitigation).</p> <p>Operational Phase</p> <p>No activities will be carried out during the operational phase of this proposed development that could cause air pollution.</p>
Disturbance and potential spread of invasive species during the proposed works.	<p>Construction Phase</p> <p>There are no records of invasive species listed on the Third Schedule within the proposed development.</p> <p>Operational Phase</p> <p>During this phase, no works that could spread invasive species will take place.</p>

¹² Holman et al (2014). IAQM Guidance on the assessment of dust from demolition and construction, Institute of Air Quality Management, London. www.iaqm.co.uk/text/guidance/construction-dust-2014.pdf.



4. SCREENING FOR APPROPRIATE ASSESSMENT

4.1 Introduction

This section of the report examines if the proposed development is likely to have a significant effect upon European sites, either alone or in combination with other plans or projects.

NOTE: It is to be noted that SuDS that have been considered as part of the proposed development are not included within the design to avoid or reduce any potential harmful effects to any European Sites but are included for alignment with County and Regional Development Policies. This screening for Appropriate Assessment does not take SuDS into consideration in determining whether the proposed development could result in likely significant effects on European Sites.

Furthermore, this screening for Appropriate Assessment does not take the measures provided in Section 2.3.3 'Environmental Management during Construction' into consideration in determining whether the proposed development could result in likely significant effects on European Sites.

4.2 Identification of European Sites within the Zone of Influence of the Proposed Development

The OPR (2021) AA Screening practice note states that the Zone of Influence must be established on a case-by-case basis using the Source-Pathway-Receptor model. The S-P-R model has been used to identify the Zol to ensure that relevant European sites are identified. The S-P-R model minimises the risk of overlooking distant or obscure effect pathways, while also avoiding an over reliance on buffer zones (e.g. 15 km), within which all European sites should be considered. This approach follows the DoEHLG (2009 rev 2010) guidance on AA which states that:

“For projects, the distance could be much less than 15 km, and in some cases less than 100m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in combination effects”.

As detailed in Section 1.2.2, in order for an effect to occur, all three elements of this mechanism must be in place. The absence of one of the elements of the mechanism means there is no likelihood for the effect to occur. The potential impacts of the proposed development are set out in Section 3.2 of this report. The impact is essentially the 'source' in the S-P-R model.

These impacts may be very localised and confined to the proposed development site with no potential connectivity to a European site and therefore no potential for effects. Alternatively, where an ecological or functional pathway exists they may give rise to a potential effect to a Qualifying Interest of a European site. This section of the report identifies the potential pathways to European sites emanating from these potential sources of impact.



The dominant ecological pathways to consider are:

- Direct physical interactions or changes to the local environment;
- Air dispersal (noise, dust, odour emissions etc.);
- Hydrological interactions; and
- Dispersal patterns of mobile species.

The potential impacts of the proposed development on the receiving environment, as identified in Table 3-1, are as follows:

- Increase locally in noise and lighting levels during construction and operation;
- Temporary increase in dust during construction;
- Temporary dewatering excavations, resulting in drawdown of the local water table.

These impacts are further considered in terms of:

- Potential effects to groundwater / hydrogeology;
- The potential effects to mobile SCI from SPAs;
- The potential effect to mobile QI species from SACs;
- Whether there are any European sites geographically overlapping or adjacent to any of the impacts of the proposed development (noise, lighting and dust).

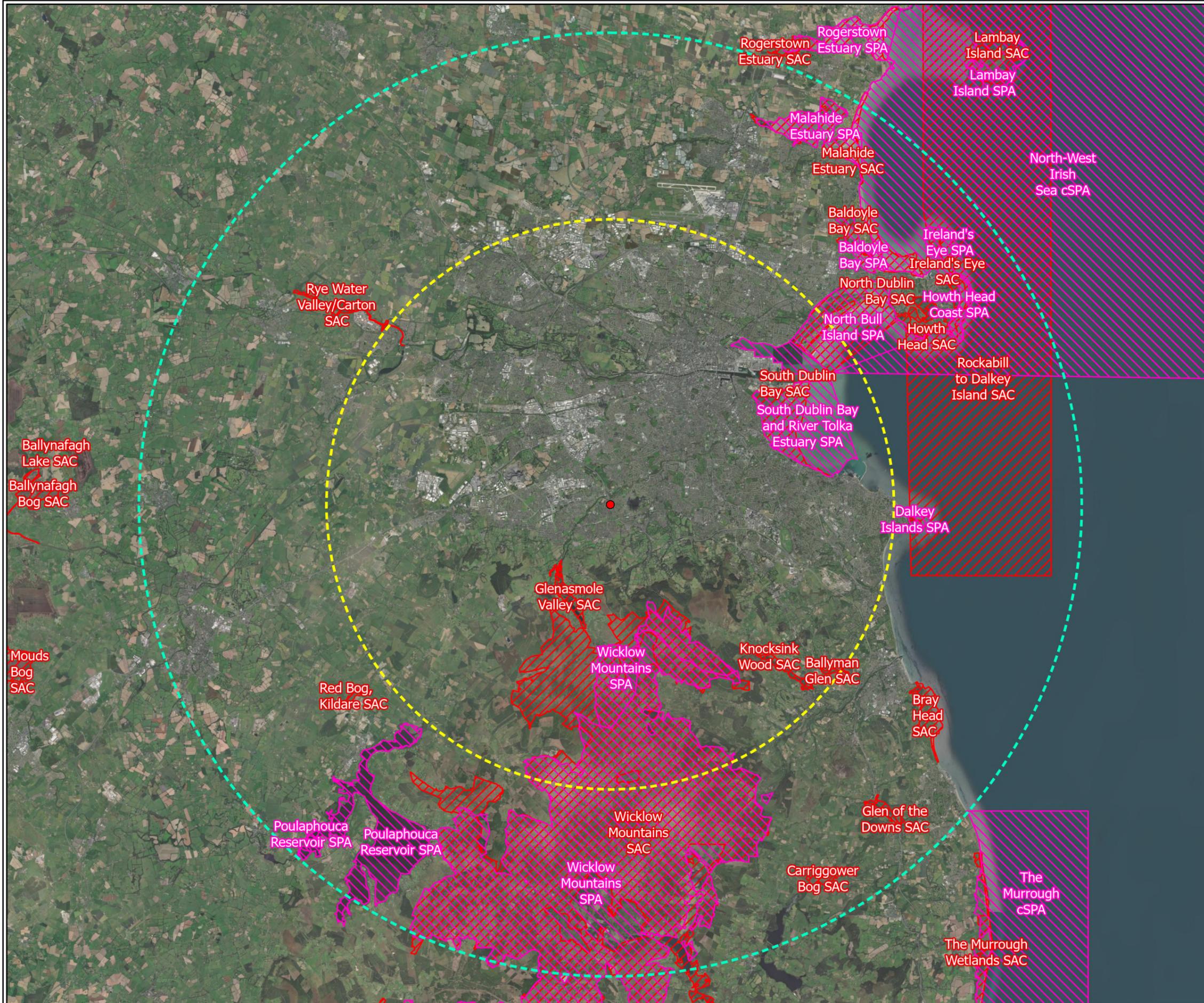
4.2.1 Zone of Influence of the proposed development

In consideration of the potential impact of the proposed development, the Zol has been identified as:

- All European sites (SACs and SPAs) within 15 km and SPAs designated for Greylag and Barnacle Geese within 25 km of the proposed development;
- Any European sites within 2 km of the proposed development, with potential impacts from habitat loss, noise, lighting, invasive species and dust.

A map showing the European sites in the context of the site is presented in Figure 4-1 overleaf.

Appendix 2 has further information pertaining to the basis of the identified Zol for the proposed development. The findings of the Zol assessment are presented in Table 4-1.



Legend

- Site Location
- 15km Zone of Influence
- 25km Zone of Influence
- Special Area of Conservation
- Special Protection Areas

TITLE:	European Sites Surrounding the Proposed Development Site		
PROJECT:	EIA and AA Screenings for Social Housing Development at Castlefield Avenue, Co. Dublin		
FIGURE NO:	4.1		
CLIENT:	South Dublin County Council		
SCALE:	1:200,000	REVISION:	0
DATE:	26/02/2026	PAGE SIZE:	A3

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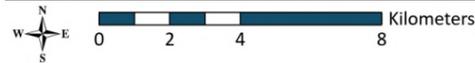




Table 4-1: Identification of European Sites within the Zone of Influence of the Proposed Development

Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathways for potential effects	Considered further in screening [Y/N]
001209	Glenasmole Valley SAC	3.84	Petrifying springs with tufa formation (Cratoneurion) [7220], Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410], Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) * important orchid sites [6210]	The SAC is sensitive to direct land use management activities, groundwater and hydrological interactions.	<p>Terrestrial based habitats for which the SAC is designated for lie outside the Zone of Influence from the proposed development site.</p> <p>The GWDTE (tufa springs) associated with the SAC are located beyond the 250m Zol for groundwater effects (see Appendix 2 for more detail on Zol).</p> <p>The SAC is located 5.2km upstream of Orlagh River. However, the proposed development has no potential for hydrological connectivity to the river given the culverted nature of the watercourse and its location outside of the proposed development red line boundary.</p>	No = no potential pathway for effect
004040	Wicklow Mountains SPA	5.39	Peregrine falcon (Falco peregrinus) [A103], Merlin (Falco columbarius) [A098]	The SPA is sensitive to disturbance effects and direct land use management activities.	<p>The proposed development site lies outside the Zone of Influence for direct effects on the designated site.</p> <p>No suitable nesting or foraging habitat is present given the size, scale and location of the proposed development site within an urban landscape.</p>	No - no potential pathway for effect



Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathways for potential effects	Considered further in screening [Y/N]
002122	Wicklow Mountains SAC	5.65	Siliceous rocky slopes with chasmophytic vegetation [8220], Alpine and Boreal heaths [4060], Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0], European dry heaths [4030], Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani) [8110], Blanket bogs * if active bog [7130], Natural dystrophic lakes and ponds [3160], Otter (Lutra lutra) [1355], Northern Atlantic wet heaths with Erica tetralix [4010], Calcareous rocky slopes with chasmophytic vegetation [8210], Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110], Calaminarian grasslands of the Violetalia calaminariae [6130], Species-rich Nardus grasslands, on siliceous substrates in mountain areas - and submountain areas in Continental Europe [6230]	The SAC is sensitive to disturbance effects, direct land use management activities and hydrological interactions.	<p>Terrestrial based habitats for which the SAC is designated for lie outside the Zone of Influence from the proposed development site.</p> <p>The designated site is located 9km upstream of Orlagh River. However, the proposed development has no potential for hydrological connectivity to the river given the culverted nature of the watercourse and its location outside of the proposed development red line boundary.</p> <p>No suitable habitat for otter exists at the proposed development site.</p> <p>Therefore, disturbance/displacement effects are not anticipated as a result of the proposed development.</p>	No = no potential pathway for effect



Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathways for potential effects	Considered further in screening [Y/N]
000210	South Dublin Bay SAC	8.92	Embryonic shifting dunes [2110], Salicornia and other annuals colonising mud and sand [1310], Annual vegetation of drift lines [1210], Mudflats and sandflats not covered by seawater at low tide [1140]	The hydrologically sensitive habitats of this SAC are highly sensitive to changes in siltation loads, the distribution of silt loads, pollutants and water levels, and anthropogenic disturbance.	Terrestrial based habitats for which the SAC is designated for lie outside the Zone of Influence from the proposed development site. The designated site is located over 17km downstream of Orlagh watercourse. However, the proposed development has no potential for hydrological connectivity to the river given the culverted nature of the watercourse and its location outside of the proposed development red line boundary.	No = no potential pathway for effect
004024	South Dublin Bay and River Tolka Estuary SPA	8.96	Sanderling (<i>Calidris alba</i>) [A144], Common tern (<i>Sterna hirundo</i>) [A193], Dunlin (<i>Calidris alpina</i>) [A149], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Arctic tern (<i>Sterna paradisaea</i>) [A194], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Roseate Tern (<i>Sterna dougallii</i>) [A192], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Redshank (<i>Tringa totanus</i>) [A162], Wetland and Waterbirds [A999], Knot (<i>Calidris canutus</i>) [A143], Ringed Plover (<i>Charadrius hiaticula</i>) [A137], Grey Plover (<i>Pluvialis squatarola</i>) [A141]	The hydrologically sensitive habitats and species of this SPA are highly sensitive to changes in siltation loads, the distribution of silt loads, pollutants, water levels, and anthropogenic disturbance.	The proposed development site lies outside the Zone of Influence for direct effects on the designated site. No suitable foraging or roosting sites for the SCI's exists at the proposed development site.	N



Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathways for potential effects	Considered further in screening [Y/N]
004006	North Bull Island SPA	12.82	Shelduck (<i>Tadorna tadorna</i>) [A048], Teal (<i>Anas crecca</i>) [A052], Dunlin (<i>Calidris alpina</i>) [A149], Knot (<i>Calidris canutus</i>) [A143], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Wetland and Waterbirds [A999], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Pintail (<i>Anas acuta</i>) [A054], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Redshank (<i>Tringa totanus</i>) [A162], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Curlew (<i>Numenius arquata</i>) [A160], Shoveler (<i>Anas clypeata</i>) [A056], Sanderling (<i>Calidris alba</i>) [A144], Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179], Grey Plover (<i>Pluvialis squatarola</i>) [A141], Turnstone (<i>Arenaria interpres</i>) [A169]	The hydrologically sensitive species of this SPA are highly sensitive to changes in siltation loads, the distribution of silt loads, pollutants, water levels and anthropogenic disturbance.	The proposed development site lies outside the Zone of Influence for direct effects on the designated site. No suitable foraging or roosting sites for the SCI's exists at the proposed development site.	No = no potential pathway for effect
004063	Poulaphouca Reservoir SPA	15.45	Greylag Goose (<i>Anser anser</i>) [A043], Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183]	NA	The proposed development site lies outside the Zone of Influence for direct effects on the designated site. No suitable foraging or roosting sites for the SCI's exists at the proposed development site	No = no potential pathway for effect



Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathways for potential effects	Considered further in screening [Y/N]
004172	Dalkey Islands SPA	15.50	Common tern (<i>Sterna hirundo</i>) [A193], Roseate tern (<i>Sterna dougallii</i>) [A192], Arctic tern (<i>Sterna paradisaea</i>) [A194]	The SPA is sensitive to hydrological interactions, disturbance effects and direct land use management activities.	The proposed development site lies outside the Zone of Influence for direct effects on the designated site. No suitable foraging or roosting sites for the SCI's exists at the proposed development site	No = no potential pathway for effect
004016	Baldoyle Bay SPA	18.28	Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Shelduck (<i>Tadorna tadorna</i>) [A048], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Wetland and Waterbirds [A999], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Ringed Plover (<i>Charadrius hiaticula</i>) [A137], Grey Plover (<i>Pluvialis squatarola</i>) [A141]	The SPA is sensitive to hydrological interactions, disturbance effects and direct land use management activities.	The proposed development site lies outside the Zone of Influence for direct effects on the designated site. No suitable foraging or roosting sites for the SCI's exists at the proposed development site	No = no potential pathway for effect
004113	Howth Head Coast SPA	20.22	Kittiwake (<i>Rissa tridactyla</i>) [A188]	The SPA is sensitive to hydrological interactions, disturbance effects and direct land use management activities.	The proposed development site lies outside the Zone of Influence for direct effects on the designated site. No suitable foraging or roosting sites for the SCI's exists at the proposed development site	No = no potential pathway for effect



Site Code	Site Name	Distance	Qualifying Feature	Potential Effects	Pathways for potential effects	Considered further in screening [Y/N]
004025	Malahide Estuary SPA	21.24	Grey Plover (<i>Pluvialis squatarola</i>) [A141], Pintail (<i>Anas acuta</i>) [A054], Dunlin (<i>Calidris alpina</i>) [A149], Redshank (<i>Tringa totanus</i>) [A162], Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046], Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157], Golden Plover (<i>Pluvialis apricaria</i>) [A140], Shelduck (<i>Tadorna tadorna</i>) [A048], Goldeneye (<i>Bucephala clangula</i>) [A067], Great Crested Grebe (<i>Podiceps cristatus</i>) [A005], Red-breasted Merganser (<i>Mergus serrator</i>) [A069], Black-tailed Godwit (<i>Limosa limosa</i>) [A156], Oystercatcher (<i>Haematopus ostralegus</i>) [A130], Wetland and Waterbirds [A999], Knot (<i>Calidris canutus</i>) [A143]	The SPA is sensitive to hydrological interactions, disturbance effects and direct land use management activities.	The proposed development site lies outside the Zone of Influence for direct effects on the designated site. No suitable foraging or roosting sites for the SCI's exists at the proposed development site	No = no potential pathway for effect
004117	Ireland's Eye SPA	21.55	Guillemot (<i>Uria aalge</i>) [A199], Razorbill (<i>Alca torda</i>) [A200], Cormorant (<i>Phalacrocorax carbo</i>) [A017], Kittiwake (<i>Rissa tridactyla</i>) [A188], Herring Gull (<i>Larus argentatus</i>) [A184]	The SPA is sensitive to hydrological interactions, disturbance effects and direct land use management activities.	The proposed development site lies outside the Zone of Influence for direct effects on the designated site. No suitable foraging or roosting sites for the SCI's exists at the proposed development site	No = no potential pathway for effect



4.3 Consideration of in-combination Effects with other plans or projects

Article 6(3) of the Habitats Directive requires that:

“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”.

It is therefore required that the likely significant effects of the proposed development are considered in-combination with any other plans or projects within the zone of influence. The consideration of in-combination effects with other plans or projects, focuses on any sources of impacts identified for the proposed development in Section 3.2 and any ecological pathways identified in Section 4.2.

As there are no meaningful pathways for effects identified with respect to European sites - given the nature of the habitats on the Site and the distance from relevant QI or SCI species. There are no further considerations required as the S-P-R model has been completed with no potential effects that could arise from the proposed development.



4.4 Screening Conclusion

Conclusion option 1: No Likely Significant Effects

The results of the s-p-r assessment (Table 4-1) identified that - given the scale and nature of the potential sources identified in Table 3.1 - there are no likely significant effects identified to any European sites. The AA screening process has considered potential effects which may arise during all phases of the proposed development. Through an assessment of the pathways for effects and an evaluation of the sources for impacts, taking account of the processes involved and the distance of separation from European sites, it has been evaluated that there are no likely significant effects on the qualifying interests, special conservation interest or the conservation objectives of any designated European site.



5. REFERENCES

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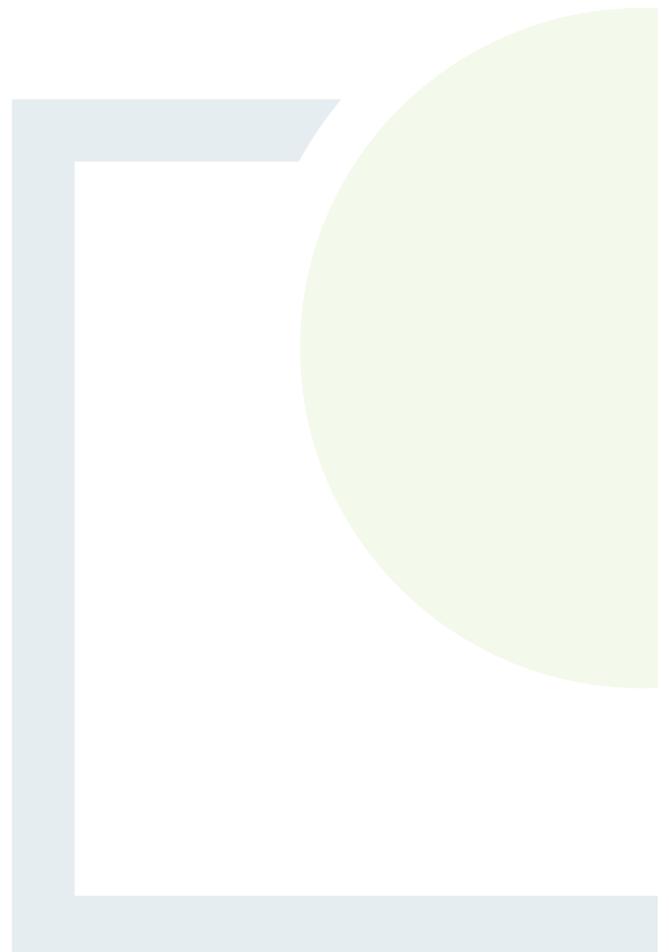
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APPENDIX 1

Statement of Authority



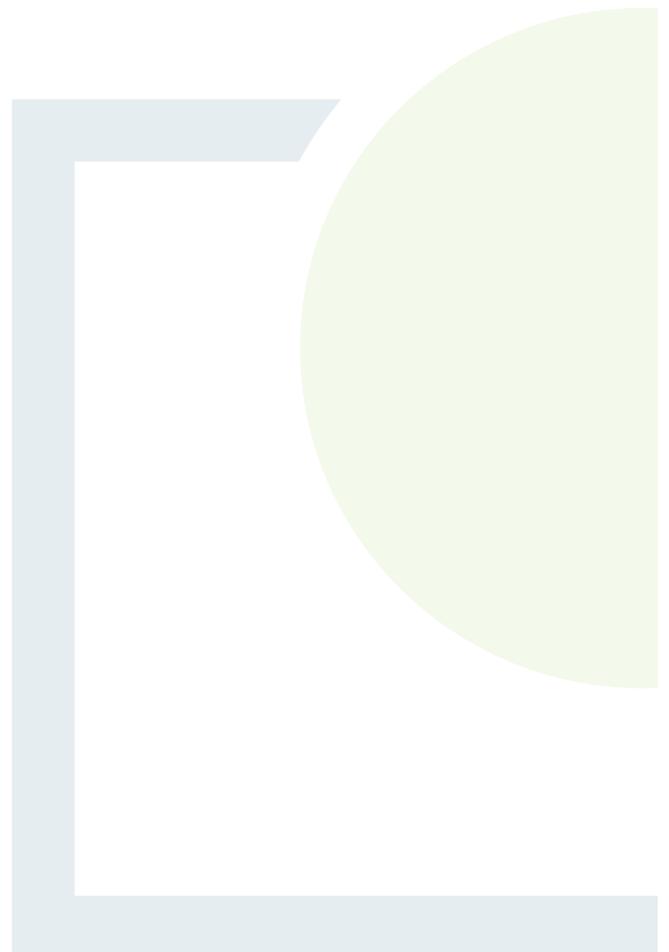
Staff Member	Responsibilities	Biography
Daniel Weldon	Report Author and Surveyor	The preparation of this report and ecological surveys were carried out by ecologist Daniel Weldon (BEnvSc.) who has over two years' professional experience and is a competent expert in the Appropriate Assessment process. He has a broad range of experience in implementing site-specific mitigation where necessary. He is vastly experienced in bird identification and behaviour and has carried out both breeding and wintering bird surveys. Daniel is also experienced in habitat and mammal surveying and ecological clerk of works
Sanghamitra Nidhi Dutta	Report Author	Sanghamitra Nidhi Dutta was responsible for drafting this report. Sanghamitra is a Senior Project Environmental Scientist working with the Circular Economy and Environment Team in FT, with five years of experience. She holds a BSc. in Environmental Science from St. Edmund's College, India and a MSc. in Global Change: Ecosystem Science and Policy from University College Dublin/Justus Liebig Universität, Gießen. She has in-depth knowledge of environmental policy, legislation and assessment procedures.
Rita Mansfield	Report Reviewer	<p>Rita is a Principal Ecologist and Project Manager with 20 years' previous experience as a technical lead within the environmental and planning services sector. She specialises in statutory consent and environmental assessment for large scale public infrastructure projects in the energy, water (including flood relief schemes) and transport sectors. She is a qualified ecologist with experience in environmental impact assessment, planning applications (conventional and strategic infrastructure development), climate adaptation, Appropriate Assessment, foreshore licensing, Water Framework Directive, integrated catchment management, and stakeholder engagement.</p> <p>Rita has held numerous licences under the Wildlife Act and Habitats Directive for disturbance to species which included mitigation (e.g. construction of artificial otter holt, bat exclusion). Rita has provided advice on ecological / environmental design to various private and public sector clients, which included the development of contract requirements for Transport Infrastructure Ireland (TII) for contracts tendered using both the PPP and D&B.</p>
Bernie Guinan	Report Reviewer	Bernie Guinan was responsible for reviewing and approving the assessment and report. Bernie is Director with FT and is a Chartered Waste Manager. She has 25 years' experience in delivering and managing projects and infrastructure delivery for a wide variety of sectors. Bernie has extensive experience in all aspects of strategic management planning and infrastructure development in Ireland, the UK, KSA and UAE. She is an experienced planning policy analyst and strategic planner. She has in-depth knowledge of all environmental and planning policy, legislation and guidance. She has been providing environmental, planning and waste management consultancy services to public bodies for over 20 years. She has a vast amount of experience coordinating EIA, SEA and AA projects, including national, large-scale and complex projects.



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APPENDIX 2

Considerations in Defining the
Potential Zone of Influence of
the Proposed Development



Release of pollutants and sedimentation to watercourses with hydrological connectivity to European sites;

As a precautionary approach in defining the ecological receptors that may be affected, all European sites hydrologically connected (i.e. whereby there is potential for surface water from the project site to runoff directly into a watercourse or drain which flows into a European Site) to the proposed development were examined using Geographic Information System (GIS) mapping. The Site is not hydrologically connected to any European sites. There is no waterbody within or in proximity to the Site that might act as a conduit for pollution of a European site.

Potential effects to groundwater / hydrogeology

In accordance with the 'Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems, Land Use Planning System SEPA Guidance Note 31' (2017) a 250m potential zone of influence from the proposed development was considered in assessing the potential for interaction with Groundwater Dependent Terrestrial Ecosystems (GWDTE). There are no GWDTE or European Sites within 250m of the Site.

Potential effect to mobile SCIs from surrounding SPAs

The assessment has considered the potential pathways for effects on bird species based on the following principles: Generally, the core foraging range for SCI birds species is less than 15 km. However, SNH (2016)¹³ core foraging range for some geese species can be larger. Namely:

- Greylag goose Core range of 15-20 km* Greylag Geese feed mostly on cereal stubble and grassland in their wintering areas.
- Barnacle goose Core range of 15 km, with maximum recorded distance of up to 25 km.

Therefore, as a precautionary approach in defining the ecological receptors that may be affected, all SPA's within 15 km and SPA's within 25km designed for Greylag and Barnacle Geese were examined using Geographic Information System (GIS) mapping. The conservation objectives of these European sites were assessed to identify potential physical or ecological connectivity to the proposed development having regard to the habitats within the subject lands and the surrounding area.

European sites geographically overlapping or adjacent to any of the actions or aspects of the proposed development (noise, lighting and dust)

There are no European sites geographically overlapping or adjacent to the proposed development. The closest European site is Glenasmole Valley SAC [3.84], located 3.84 km away (direct distance).

The Institute of Air Quality Management 'Guidance on the Assessment of dust from demolition and construction' (Holman et al, 2014)¹⁴ states that for sensitive ecological receptors, sensitivity to dust is 'High' up to 20m from the source and reduces to 'Medium' over 50m from the source. Holman et al, 2014 also stipulates that trackout¹⁵ may occur from roads up to 500 m from large sites, 200 m from medium sites and 50 m from small sites. Dust from soiling (excavation works) can occur up to 25 m, 50 m and 100 m, at minor, moderate, and major construction sites respectively (NRA, 2011).

¹³ Scottish Natural Heritage. (2016). Assessing Connectivity with Special Protection Areas (SPAs) Guidance

¹⁴ Holman et al (2014). IAQM Guidance on the assessment of dust from demolition and construction, Institute of Air Quality Management, London. www.iaqm.co.uk/text/guidance/construction-dust-2014.pdf.

¹⁵ The movement of dust and dirt from a construction/demolition site onto the public road network.

The disturbance response of birds (e.g., becoming alert or a flight response) can vary depending on season, species sensitivity, and weather. Goodship and Furness (2022)¹⁶ provides estimates of species-specific buffer zones to protect birds from human disturbance during breeding and non-breeding seasons. Therefore, a disturbance Zone of Influence of 1 km is adopted on the basis of the disturbance distances review.

Other emission sources identified in Table 2.1 (e.g. Lighting) are likely to be more localised than the distances stated for noise impacts and are assessed on a case-by-case basis.

Considering the actions or aspects of the proposed development, a precautionary ZOI of 2 km has been adopted.

Disturbance and potential spread of invasive species during the proposed works.

Invasive species can spread to other habitats by the transportation of plant fragments or soil containing seeds / plant material. This typically can occur during excavation and vegetation clearance. Machinery, vehicles and personnel coming into contact with infected areas can spread these species outside of the site. The ZOI of this potential impact requires the consideration of European sites in close proximity to the footprint of works. As a precautionary approach a ZOI of 2 km has been adopted.

¹⁶ Goodship, N.M. and Furness, R.W. (MacArthur Green) Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species. NatureScot Research Report 1283.



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