



Appropriate Assessment Screening Report

Large Residential Development

Baneshane, Midleton, Co. Cork

September 2025

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LIMITATIONS

This report combines the outcomes of thorough desk study research and *in-situ* site assessment (completed by a qualified ecologist) to inform a Stage 1 Appropriate Assessment of the proposed large residential development (LRD) on lands near Baneshane, Midleton, Co. Cork.

Best practice was followed at all times and within the limitations stated. This report is the property of Verdé Environmental Consultants Limited (Verde) and cannot be used, copied or given to any third party without the explicit prior approval or agreement of Verde.

All Information contained in this report is based on the information made available to Verde, either through publicly available records or in reports and drawings presented to us which we assume to have been provided in good faith. This report represents an assessment of the site and was performed in accordance with generally accepted standards regarding environmental assessment.

Verde makes no other representations whatsoever, including those concerning the legal significance of its findings or as to other legal matters touched on in this report, including, but not limited to ownership of any property or the application of any law to the facts set forth herein.

EXECUTIVE SUMMARY

Verdé Environmental Consultants (Verdé) was commissioned by Doyle Planning Consultants, on behalf of the Client, Rockspring Properties Ltd., to complete an Appropriate Assessment (AA) Screening Report for a proposed large residential development (LRD) comprised of 74 Duplex units and 99 house unit (varying from 1 – 4 bedrooms), amenity parks, walkways, roadways and typical LRD facilities on lands near Baneshane, Midelton, Co. Cork.

This AA Screening exercise was completed to determine whether the proposed development will have likely significant effects, either alone or in-combination with other developments, on Natura 2000 sites that may be located proximal to, or have direct / indirect connectivity with the proposed development site. This report contains information pertaining to the Appropriate Assessment (AA) Screening, undertaken by Verde, in respect of the ecological site assessment requirements on lands near Baneshane, Midleton, Co. Cork.

The following summary applies to the completed screening exercise,

- The proposed development site does not overlap nor is proximal to any Natura 200 sites nor any other protected habitats (as listed under the EU Habitats Directive).
- There is potential nearby hydrological connectivity between the LRD site and Natura 2000 sites further downstream - The Oatencake stream is located c. 140 m northeast of the proposed LRD site.
- The Oatencake stream flows directly into the Cork Harbour SPA and Great Channel Island SAC
- Water quality within the Oatencake is considered “moderate” (WFD 2016-2021), whilst water quality within the Owennacurra and Dungourney Rivers, of which the Oatencake is a tributary, are considered “moderate” and “poor”, respectively.
- Lands to the South of the proposed LRD site are predominantly comprised of commercial agricultural lands
- Several completed and semi-completed housing estates lie adjacent to the LRD site
- The typical topography of the site is considered flat (< 5% gradient)
- The N25 highway is located < 100 m from the LRD site (direct line, at the nearest point).
- There are no protected or rare habitats within the site boundary.
- There are no supporting habitats for rare/protected bird species within or on lands adjacent to the LRD site.
- There are no alien invasive species listed under the First Schedule of the EU Habitats Directive within the boundaries of the site nor on land directly adjacent to the LRD site

This AA screening assessment has concluded that the proposed Baneshane LRD will result in likely significant effects to the conservation objectives of QIs and SCI of nearby Natura 2000 sites. This report concludes that a Stage 2 appropriate assessment (i.e., Natura Impact Statement) is therefore required for the proposed development to progress.

1 INTRODUCTION

1.1 Project Details

Verde Environmental Consultants, (Verde) was commissioned by Ian Doyle Planning Consultants, on behalf of the client, Rockspring Properties Ltd., to carry out an Appropriate Assessment (AA) screening report in application for planning permission of a proposed large residential development (LRD) on lands near Baneshane, Midleton, Co. Cork. The proposed development will involve the construction of houses and apartments, as well as access roadways, walkways, community amenity areas, associated ancillary facilities, and beautification areas.

10 year permission is sought for a large-scale residential development (LRD). The proposed development will consist of the construction of 173 no. residential units comprising a mix of apartments, duplex units, semi-detached houses, terraced houses and bungalows. Specifically, the LRD will encompass,

- Apartments and Duplexes (74 no.):
 - Block E1: 11 × 2-bed and 6 × 1-bed
 - Block E2: 3 × 3-bed, 6 × 2-bed and 3 × 1-bed
 - Block E3: 9 × 2-bed and 6 × 1-bed
 - Duplex D1: 4 × 2-bed and 4 × 1-bed
 - Duplex D2: 5 × 2-bed and 5 × 1-bed
 - Duplex D3: 9 × 2-bed and 3 × 1-bed
- Houses (99 no.):
 - 11 × 4-bed semi-detached
 - 76 × 3-bed (33 semi-detached, 27 end-of-terrace, 16 mid-terrace)
 - 10 × 2-bed (3 end-of-terrace, 1 terraced, 6 bungalows)
 - 2 × 1-bed bungalows
- A crèche of c.137.5 sq.m gross floor area (59.22 sq.m dedicated childcare space and 78.28 sq.m ancillary/circulation), with capacity for c.20 children.
- The provision of a pumping station to serve the development.
- Alterations and improvements to the junction at Abbey Wood Estate and Ballintubber Road, .
- All associated car parking (273 spaces), bicycle parking (161 spaces), public open space, landscaping, and ancillary site development works.

1.2 Site Location and Setting

The proposed LRD is located on lands to the west of Midleton town, proximal to the N25 dual carriageway. The LRD site is located within a peri-urban development, comprised of agricultural lands and housing estates, with several single lane roadways traversing throughout the landscape. Figure 1.1, below, provides an overview of the location of the LRD site, whilst Figure 1.2, overleaf, provides an overview of the LRD site layout and immediate surrounding landscape.

Figure 1.1 – Location of the proposed Large Residential Development, near Baneshane, Midleton, Co. Cork.

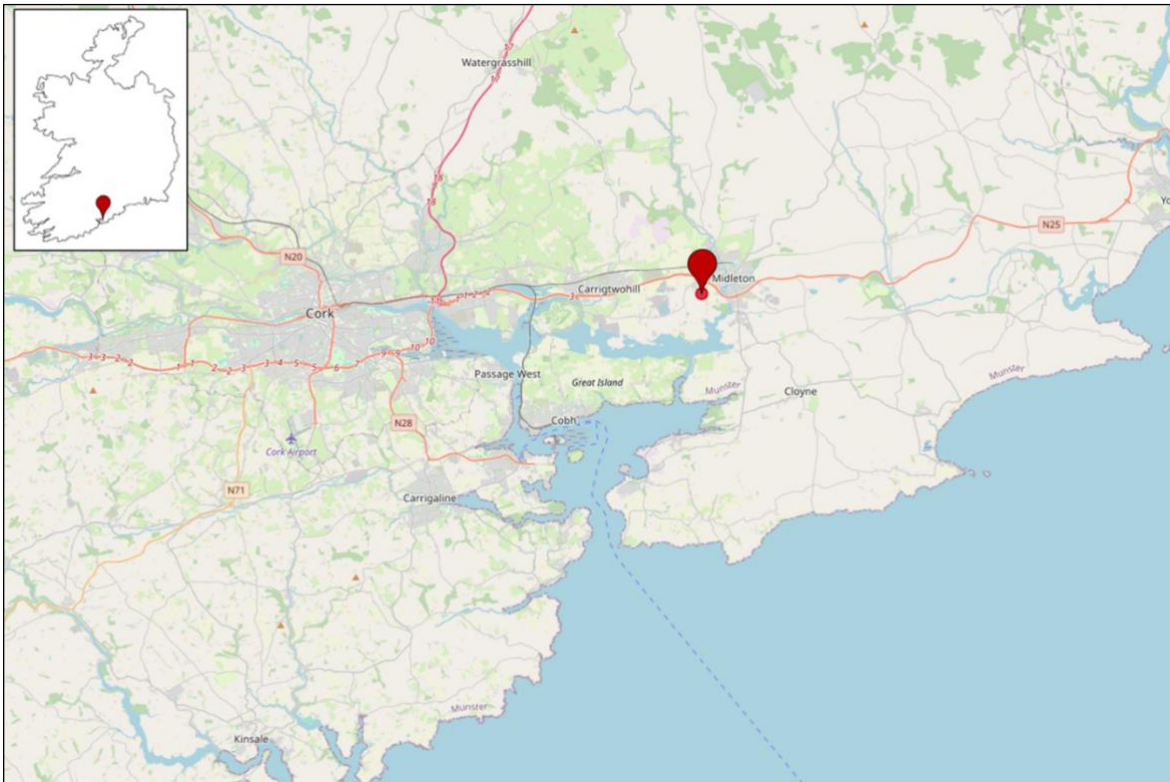


Figure 1.2 – Overview of the location of the proposed large-scale residential development layout.



Figure 1.3 – Proposed large residential development layout.



2 LEGISLATION BACKGROUND AND GUIDANCE DOCUMENTS

2.1 International Legislation

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, better known as the “Habitats Directive” (EC, 1992), provides legal protection for habitats and species of European importance. Articles 3 to 9 provide the legislative means to protect habitats and species of community interest through the establishment and conservation of an EU-wide network of sites known as Natura 2000. These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/ECC) as codified by Directive 2009/147/EC (EC, 2009).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to have a significant effect on or to adversely affect the integrity of European Sites (Annex 1.1). Article 6(3) establishes the requirement for AA:

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

Article 6(4) states:

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

2.1.2 The requirement for AA Screening

Section 42 (1) of S.I. No. 477 of 2011, the European Communities (Birds and Natural Habitats) Regulations 2011 states (ISB, 2011):

“A screening for Appropriate Assessment of a plan or project for which an application for consent is received, or which a public authority wishes to undertake or adopt, and which is not directly connected with or necessary to the management of the site as a European Site, shall be carried out by the public authority to assess, in view of best scientific knowledge and in view of the conservation objectives of the site, if that plan or project, individually or in combination with other plans or projects is likely to have a significant effect on the European site.”

Where the screening process cannot exclude the possibility that a plan or project, individually or in combination with other plans or projects, could have a significant effect on a European site, there is a requirement under Article 42 (9) of these Regulations for the preparation of a Natura Impact Statement to inform the Appropriate Assessment process.

2.1.3 Screening Determination

In accordance with Regulation 42(7) of the Birds and Natural Habitats Regulations 2011 (S.I. No. 477/2011) as amended (ISB, 2011):

“The public authority shall determine that an Appropriate Assessment of a plan or project is not required where the plan or project is not directly connected with or necessary to the management of the site as a European Site and if it can be excluded on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site.”

Further, under Regulation 42(8):

“(a) Where, in relation to a plan or project for which an application for consent has been received, a public authority makes a determination that an Appropriate Assessment is required, the public authority shall give notice of the determination, including reasons for the determination of the public authority, to the following—

- i. the applicant,*
- ii. if appropriate, any person who made submissions or observations in relation to the application to the public authority, or*
- iii. if appropriate, any party to an appeal or referral.*

(b) Where a public authority has determined that an Appropriate Assessment is required in respect of a proposed development it may direct in the notice issued under subparagraph (a) that a Natura Impact Statement is required.”

2.2 National Legislation

The Habitats Directive has been transposed into Irish law by Part XAB of the Planning and Development Act, 2000 – 2015 (Law Reform Commission, 2010) and the European Communities (Birds and Natural Habitats) Regulations 2011 (SI 477/2011) as amended (ISB, 2011).

2.3 Guidance Documents on Appropriate Assessment

Where an AA is necessary, the AA requirements of Article 6(3) of the Habitats Directive 92/43/EEC (EC, 1992) follow a sequential approach as outlined in the following guidance documents:

- Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities. Circular NPWS 1/10 and PSSP 2/10 (NPWS, 2010).
- Appropriate Assessment of Plans and Projects in Ireland – guidance for Planning Authorities. Revised 2010. (DEHLG, 2009).

- Guidelines for Good Practice Appropriate Assessment of Plans Under Article 6(3) Habitats Directive (International Workshop on Assessment of Plans under the Habitats Directive, 2011).
- Managing Natura 2000 Sites: The provisions of Article 6 of the Habitat's Directive 92/43/EEC Commission Notice (EC, 2018).
- 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 (EC, 2021a).
- ANNEX to the 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 (EC, 2021b).
- The Department of the Environment, Heritage, and Local Government guidance “Appropriate Assessment of Plans and Projects in Ireland – guidance for Planning Authorities, 2009” and the European Commission (2001) guidelines “Assessment of plans and projects significantly affecting Natura 2000 sites - Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.
- National Parks and Wildlife Service (NPWS) Protected Areas Maps & Metadata (accessible online at; <https://dahg.maps.arcgis.com/apps/webappviewer/index.html?id=8f7060450de3485fa1c1085536d477ba>)
- National Parks and Wildlife Service (NPWS) Protected Areas Site Synopses and Conservation Objectives Documentation
- EPA maps (accessible online at; <https://gis.epa.ie/EPAMaps/?s=map>)

2.4 Overview of Methodology for Appropriate Assessment

2.4.1 Overview of the stages of Appropriate Assessment

The AA process is a sequential process consisting of four potential stages. If at the first stage in the process it is determined that there will be no significant effect on a European Site, the process is effectively completed. The four stages are as follows:

- Stage 1 – Screening of the proposed plan or project for AA (current stage);
- Stage 2 – An AA of the proposed plan or project;
- Stage 3 – Assessment of alternative solutions; and
- Stage 4 – Imperative Reasons of Overriding Public Interest (IROPI)/ Derogation.

Stage 1 relates to Regulation 42 of the Birds and Natural Habitats Regulations (ISB, 2011); and Stage 2 relates to Article 6(3) of the Habitats Directive; and Stages 3 and 4 to Article 6(4) of the Habitats Directive (EC, 1992).

2.4.2 Stage 1: Screening (current stage)

The aim of screening is to assess if the plan or project is directly connected with or necessary to the management of European Site(s); or in view of best scientific knowledge, if the plan or project, individually or in combination with other

plans or projects, is likely to have a significant effect on a European site. This is done by examining the proposed plan or project and the conservation objectives of any European Sites that might potentially be affected. If screening determines that there are likely to be significant effects, or the significance of effects are uncertain or unknown then it will be recommended that a project is brought forward to full AA.

2.4.3 Stage 2: Appropriate Assessment

The aim of Stage 2 of the AA process is to identify any adverse impacts that the plan or project might have on the integrity of relevant European Sites. As part of the assessment, a key consideration is ‘in combination’ effects with other plans or projects. Where adverse impacts are identified, mitigation measures can be proposed that would avoid, reduce or remedy any such negative impacts and the plan or project should then be amended accordingly, thereby avoiding the need to progress to Stage 3.

2.4.4 Stage 3: Assessment of Alternative Solutions

If it is not possible during the stage 2 to reduce impacts to acceptable, non-significant levels by avoidance and/or mitigation, stage 3 of the process must be undertaken which is to objectively assess whether alternative solutions exist by which the objectives of the plan or project can be achieved. Explicitly, this means alternative solutions that do not have significant negative impacts on the integrity of a European Site. It should also be noted that EU guidance on this stage of the process states that, ‘other assessment criteria, such as economic criteria, cannot be seen as overruling ecological criteria’ (EC, 2002). In other words, if alternative solutions exist that do not have negative impacts on European Sites; they should be adopted regardless of economic considerations.

2.4.5 Stage 4: Imperative Reasons of Overriding Public Interest (IROPI)/Derogation

This stage of the AA process is undertaken when it has been determined that negative impacts on the integrity of a European Site will result from a plan or project, but that no alternatives exist. At this stage of the AA process, it is the characteristics of the plan or project itself that will determine whether the competent authority can allow the plan or project to progress. This is the determination of ‘over-riding public interest’. It is important to note that in the case of European Sites that include in their qualifying features ‘priority’ habitats or species, as defined in Annex I and II of the Directive, the demonstration of ‘overriding public interest’ is not sufficient and it must be demonstrated that the plan or project is necessary for ‘human health or safety considerations’. Where plans or projects meet these criteria, they can be allowed, provided adequate compensatory measures are proposed. Stage 4 of the process defines and describes these compensation measures

3 METHODS

3.1 Desktop Assessment

Sources of data reviewed as part of the screening process for this project included:

- National Parks and Wildlife Service (NPWS); site synopses and conservation objectives for relevant Natura 2000 sites (accessible at <https://www.npws.ie/>)
- Bird of Conservation Concern, Ireland (BoCCI). Species list of bird species outlines for conservation efforts 2020-2026. <https://birdwatchireland.ie/birds-of-conservation-concern-in-ireland/>
- National Biodiversity Data Centre (NBDC) – 1km- and 2km-square species reports (accessed online on 02/08/2023)
- The status of EU Habitats and Species in Ireland 2013, NPWS, ed. D. Lynn
- Article 17 Reports (NPWS, The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview., 2019)
- GIS spatial data

3.2 Development Site Habitat Assessment Methods

A general assessment of the site was carried out by Verde ecologist Dr. Jeff Hean on the 14th of August 2025. The site assessment was in line with the Heritage Council's Best Practice Guidance for Habitat Survey and Mapping (Smith et al., 2011) and habitats were classified to level 3 of the Fossitt (2000) classification system. To illustrate the general habitat quality, photographs were taken using a digital camera. Grid references were recorded using a GPS handset. Site evaluation is based on the guidelines of the Chartered Institute of Ecology and Environmental Management (CIEEM 2019).

The site and immediate surroundings were inspected for the presence of invasive species, as listed in the First Schedule of the Birds and Natural Habitats Regulations (S.I. No. 477/2024). Regulation 49 (2) states that “any person who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow in any place any plant listed in the Third Schedule, shall be guilty of an offence”.

The determination of the presence or absence of Annex I habitats was carried out in consultation with the habitat descriptions provided in the most recent Article 17 Reports (NPWS, The Status of EU Protected Habitats and Species in Ireland. Volume 1: Summary Overview., 2019). The Interpretation Manual of European Union Habitats (EUR 28, April 2013) was also consulted. In addition, the spatial GIS data for the Article 17 Reports were examined to determine the distribution of these habitats (as known to the NPWS) within the study area.

All surveys were completed by qualified specialists and in accordance with relevant legislation, particularly the “Guidelines for Ecological Impact Assessment in the UK and Ireland” (CIEEM, 2018) through the additional recording of specific features indicating the presence, or likely presence, of protected species or other species of nature conservation significance.

3.3 Zone of Influence (Zoi)

The ‘zone of influence’ for a project is defined as “the area over which ecological features may be affected by biophysical changes because of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries” (CIEEM, 2019). Subsequently, the zone of influence will vary for different ecological features depending on their sensitivity to an environmental change (CIEEM, 2018).

Irish guidance (DoEHLG, 2010) states “for the zone of influence, a distance of 15 km is currently recommended in the case of plans derives from UK guidance” (Scott Wilson et al, 2006). The guidance goes on to state that “for projects, the distance could be much less than 15 km, and in some cases less than 100 m, but this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in-combination effects”. Additionally, a practice note issued by the Office of the Planning Regulator (OPR, 2021) further states that “The zone of influence of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. This should be established on a case-by-case basis using the Source-Pathway-Receptor framework and not by arbitrary distances (such as 15 km)”.

The zone of influence for this project was identified through a review of the nature of the project, the type of impacts and effects that could arise as a result, the distance between the project and Natura 2000 sites, the qualifying interests of the Natura 2000 sites, as well as the consideration of the typical movement patterns of these QIs (i.e., sedentary vs highly mobile species).

3.4 Source-Pathway-Receptor (SPR) Model

The likely effects of the proposed development on any European site have been assessed using a source-pathway-receptor model, where:

- A ‘source’ is defined as the individual element of the proposed works that has the potential to impact on a European site, its qualifying features and its conservation objectives.
- A ‘pathway’ is defined as the means or route by which a source can affect the ecological receptor.
- A ‘receptor’ is defined as the SCI of SPAs or QI of SACs for which conservation objectives have been set for the European sites being screened.

Where a source-pathway-receptor link between the proposed development and a European Site exists and there is a potential negative impact, further assessment is required. In accordance with EC Article 6 Guidance Document (EC, Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of

Article 6(3) and (4) of the Habitats Directive 92/43/EEC, 2018), in order to ensure all impacts upon the site are identified, including those direct and indirect impacts that are a result of cumulative impacts, the following steps were completed:

- Identify all projects/ plans which might act in combination: Identify all possible sources of effects from the project or plan under consideration, together with all other sources in the existing environment and any other effects likely to arise from other proposed projects or plans.
- Impacts identification: Identify the types of impacts that are likely to affect aspects of the structure and functions of the site vulnerable to change.
- Define the boundaries for assessment: define boundaries for examination of cumulative effects which will be different for different types of impact and may include remote locations.
- Pathway identification: Identify potential cumulative pathways (e.g., via water, air etc.; accumulations of effects in time or space).
- Prediction: Prediction of magnitude/extent of identified likely cumulative effects.
- Assessment: Comment on whether or not the potential cumulative impacts are likely to be significant.

3.5 Screening Assessment of European Sites

This chapter provides a Preliminary Screening Assessment to identify SACs and SPAs to be assessed fully in the Screening of Potential Impacts (Section 7). As per the outcomes of the Judgement in Case C-721/21: Keegan Land Holdings vs. An Bord Pleanála, this screening assessment has been completed with consideration of “Article 6(3) of Directive 92/43 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”.

3.6 Cumulative and In-combination Impacts

It is a requirement of screening for Appropriate Assessment that the cumulative or in-combination effects of the proposed development together with other plans or projects are assessed. Cumulative impacts can be defined as a project/plan/programme likely to have a significant effect thereon, either individually or in combination with other plans or projects.

4 RESULTS

4.1 The AA Zone of Influence

Under the SPR model, works associated with the construction and the operation of the proposed development represent the source of potential impacts. Pathways that can arise as a result of develop projects and lead to offsite / downstream impacts are listed below and an appraisal of the potential for these pathways to connect the proposed development to Natura 2000 Sites and their qualifying features of interest (which represent the receptors under the SPR model) is also provided:

- Emissions to surface water: In the absence of a suitable design and control measures the proposed development will have the potential to result in emissions to surface waters. Where receiving surface waters establish a connection between the proposed development and Natura 2000 Sites downstream then a hydrological pathway will be established. EPA sub-catchment and rivers and streams digital baseline mapping was used to identify hydrological pathways between the proposed development and Natura 2000 Sites.
- Noise and vibration emissions: Noise and vibration emissions are considered to have the potential to result in negative impacts to biodiversity up to a maximum distance of 200m from the emission source.
- Emissions to air (dust): the proposed development will have the potential to result in dust emissions, specifically during the construction phase of works. Given the proximity of the proposed development to 2000 Sites, the potential for an air emission impact pathway is evident.
- Visual emissions: Certain qualifying species of Natura 2000 Sites can be sensitive to visual changes in the landscape and visual disturbance as a result of new structures. Examples of species that are sensitive to such disturbance are waders and wildfowl in the form of geese and swans of SPAs in the wider surrounding area. The potential for visual disturbance during the operation phase to result in a negative effect to Natura 2000 Sites.
- Mobile species pathway: Development projects that are located outside of Natura 2000 Sites can also result in *ex-situ* impacts to mobile species of Natura 2000 Sites that may rely on habitats occurring within / near the proposed development site (a.k.a, “mobile species pathway”). When considering the mobile species pathways for over-wintering / migratory bird species, the following publications were used to identify their presence within the zone of influence of the proposed development.
- For bird species:
 - Scottish Natural Heritage (SNH, now Natural Scotland) guidance document “Assessing connectivity with Special Protection Areas (SPA) (2016) and McGuinness et al. (2015) for a range of waterbirds were used as the principal sources for establishing foraging range distances. Where no distances for certain species are reported in these two sources, the other sources listed below were used.
 - The Bird Foraging Table (version 6th Jan. 2020), prepared for DAFM, Forestry Division, available at <https://assets.gov.ie/96741/2601fdbba-420a-45da-948a-ac2b5b0babe3.docx>
 - Thaxter et al. (2012) for seabirds.

- Gillings & Fuller (1999) for golden plover and lapwing were used to identify connectivity between the Proposed Development site and SPAs in the wider surrounding area.
- For otters,
 - a mobile species pathway was examined with respect to the presence/absence of suitable habitat for this species occurring within the Proposed Development site.
- Disturbance pathway: Human disturbance, *ex-situ* of a Proposed Development site, to a Natura 2000 Sites is representative of an indirect impact arising as a result of land use activities generated by a project. An example of such an indirect impact is an increase in human presence and associated pressures within a Natura 2000 Sites. New developments in areas outside of, but proximal to Natura 2000 Sites, can result in an increase in the presence of people within Natura 2000 Sites, such as for recreational activities. the potential for the Proposed Development to result in increased levels of human activity within surrounding Natura 2000 Sites is considered as a potential impact pathway under Table 4.1 below.

In light of all of the above listed considerations, a **15 km zone of influence** has been determined necessary for the proposed Drumcliffe Road Housing development.

4.2 Summary of Natura 2000 sites within the 15 km Zone of Influence

Figure 4.1 provides an overview of Natura 2000 sites within the 15 km ZoI. Table 4.1 provides a summary of the Natura 2000 sites and their associated qualifying interests (QIs) and Species of Conservation Interest within the 15 km ZoI, as well as a preliminary assessment of whether there is evidence of connectivity between the proposed development site and Natura 2000 sites, based on the site assessment and supported by desktop based available evidence.

4.3 Natura 2000 Sites within the 15km Zone of Influence

The following Natura 2000 sites occur within the 15km ZoI designated for this proposed LRD site.

- Great Island Channel SAC (001058)
- Cork Harbour SPA (004030)

Table 4.1 Habitats and / or Species identified for Natura 2000 Sites within the 15 km Zol.

Natura 2000 Site	Habitats / Species	Connectivity to Development Site
Great Island Channel SAC (001058)	Mudflats and sandflats not covered by seawater at low tide [1140] Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330]	Downstream Hydrological -Yes
		Air (Noise & Dust)– Yes
		Land – No
		Mobile Species - Yes
		Human Disturbance - Yes
Cork Harbour SPA (004030)	Little Grebe (Tachybaptus ruficollis) [A004]	Downstream Hydrological -Yes
	Great Crested Grebe (Podiceps cristatus) [A005]	
	Cormorant (Phalacrocorax carbo) [A017]	
	Grey Heron (Ardea cinerea) [A028]	
	Shelduck (Tadorna tadorna) [A048]	
	Teal (Anas crecca) [A052]	Air (Noise & Dust)– Yes
	Pintail (Anas acuta) [A054]	
	Red-breasted Merganser (Mergus serrator) [A069]	
	Oystercatcher (Haematopus ostralegus) [A130]	
	Golden Plover (Pluvialis apricaria) [A140]	
	Grey Plover (Pluvialis squatarola) [A141]	Land – No (c. 1,5km)
	Lapwing (Vanellus vanellus) [A142]	
	Dunlin (Calidris alpina) [A149]	
	Black-tailed Godwit (Limosa limosa) [A156]	
	Bar-tailed Godwit (Limosa lapponica) [A157]	
	Curlew (Numenius arquata) [A160]	Mobile Species – Yes
	Redshank (Tringa totanus) [A162]	
	Black-headed Gull (Chroicocephalus ridibundus) [A179]	
	Common Gull (Larus canus) [A182]	
	Lesser Black-backed Gull (Larus fuscus) [A183]	
Common Tern (Sterna hirundo) [A193]	Human Disturbance – Yes	
Wigeon (Mareca penelope) [A855]		
Shoveler (Spatula clypeata) [A857]		



Figure 4.1 – Natura 2000 sites within the 15km Zone of Influence.

4.4 Habitats

The following habitats were observed on or in the immediate vicinity of the Baneshane LRD site,

- Buildings and Artificial Surfaces (BL3)
- Spoil and bare ground (ED2)
- Recolonising Bare Ground (ED3)
- Scrub (WS1)
- Hedgerows (WL1)
- Improved Agricultural Grassland (GA1)
- Amenity Grasslands (GA2)
- Ornamental shrub (WS3)
- Lowland/Depositing River (FW2)
- Drainage Ditch (FW4)

The site is primarily comprised of Buildings and Artificial Surfaces (BL3), typified by concrete surfaces, storage tanks, fences and ancillary facilities.

Scrub (WS1) was the predominant habitat type observed within the boundaries of the LRD site, with patches of dry calcareous grassland (GS2) interspersed throughout. Typical species observed within scrub include Hawthorn, bramble (*Rubus fruticosus*), hedge bindweed (*Hypericum Calystegia sepium*), ivy (*Hedera spp*), ash (*Fraxinus excelsior*), grey willow (*Salix cinerea*). Typical species within dry calcareous grassland include bents (*Agrostis spp.*), meadow grass (*Poa spp.*), Cocks foot (*Dactylis glomerata*), clovers (*Trifolium spp.*), plantain (*Plantago spp.*), Yorkshire-fog (*Holcus lanatus*), thistle (*Cirsium vulgare*) and nettles (*Urtica dioica*).

Spoil and Bare Ground (ED2) and Recolonising bare ground (ED3) was observed along the north-western boundary of the LRS site, with common floral species observed included Herb Robert (*Geranium robertianum*), Broad leaved dock (*Rumex obtusifolius*), Spear thistle (*Cirsium vulgare*), Nettle (*Urtica dioica*), Willowherb (*Epilobium angustifolium*), Ragwort (*Jacobaea vulgaris*), Dandelion (*Taraxacum spp.*), Creeping buttercup (*Ranunculus repens*), and Ribwort plantain (*Plantago lanceolata*).

Lands surrounding the site to the South are dominated by improved agricultural grasslands, divided by hedgerows. A newly completed residential housing development (“The Orchards”) is located on lands adjacent west of the proposed LRD, whilst a residential housing development is currently under construction on lands adjacent east of the proposed LRD site. Lands to the north of the proposed LRD site are a mix of scrub and improved agricultural lands. Typical species observed within hedgerows include ash, grey willow, bramble, hedge bindweed, and Hawthorn. A series of ornamental hedgerows (WS3) were observed along the RockBrook road and Ballintubber Road in the vicinity of the “The Orchards” residential estate.

Images 4.1 – 4.4, overleaf, provide an overview of habitats observed on and near the proposed development site.

Image 4.1 – Views of the Scrub (WS1) Habitat observed within the site boundary.



Image 4.2 – Examples of patches of Dry Calcareous Grassland (GS1) observed within the LRD site



Image 4.3 – Examples of Recolonising Bare Ground (ED3) and Spoilt & Bare Ground (ED2) observed within /near the LRD site

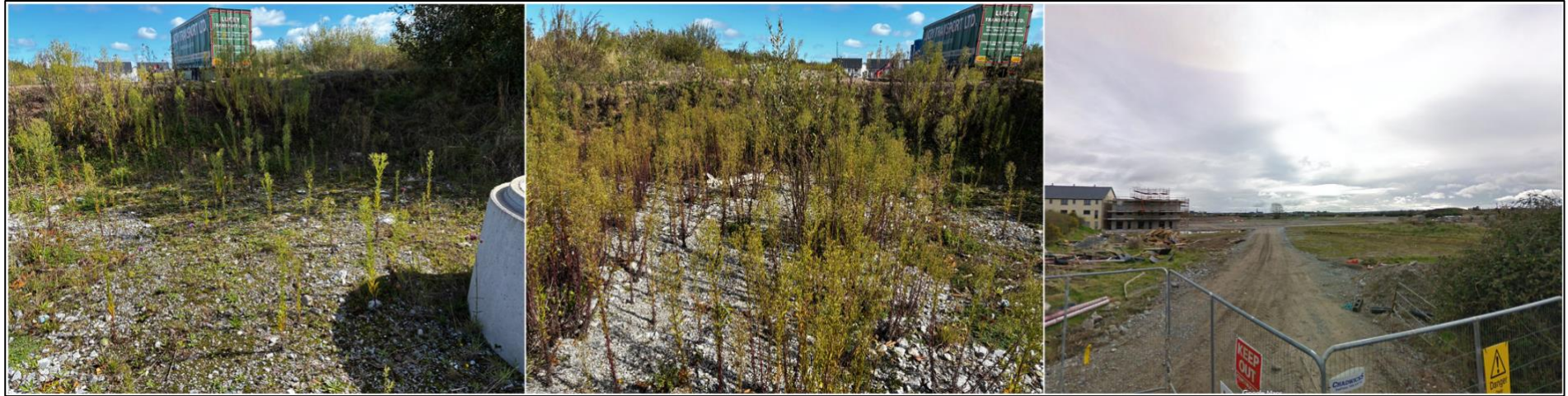


Image 4.3 – Examples of Buildings and Artificial Surfaces (BL3) and Amenity Grassland (GA2) on lands adjacent to the LRD site



Image 4.4 – Examples of Hedgerows (WL1) observed along roadways adjacent to the LRD site



Image 4.5 – Views of Improved Agricultural Grassland (GA1) observed on lands adjacent to the LRD site



4.5 Hydrology

4.5.1 Surface Water

A drainage ditch (FW4) is located along the RockBrook road, which forms the western boundary of the proposed LRD s western boundary. The Oatencake stream (IE_SW_19O030500), a depositing lowland watercourse (FW2) is located c.140m from the north-eastern corner of the proposed LRD development (at the nearest point). Moreover, the Oatencake stream is a tributary of the Owennacurra River (IE_SW_19O030500), which traverses through Midleton town. The confluence of these two watercourses is located c. 1,35 km south-east of the LRD site (from the nearest point). Ultimately, the Oatencake and Owennacurra River flow into Cork Harbour to the south of Midleton town.

4.5.2 Water Framework Directive status

According to the WFD Riverbody status (2016-2021), the Oatencake stream is currently classified as having “moderate” water quality status. Similarly, the Owennacurra River is rated as having “moderate” water quality status (River Waterbody WFD Status 2016-2021). However, according to the most recent Q-values (2023), the Owenacurra River is rated as having “poor” water quality. The Dungourney stream, a tributary of the Owennacurra River, which traverses the landscape to the east of Midleton town, is recorded as having “poor” water quality (River Waterbody WFD Status 2016-2021). Furthermore, the latest Q-value water quality rating for the Dungourney stream suggested “moderate” water quality (Q-value = 3-4; 2023)

Moreover, the Owenacurra estuary is recorded as having “moderate” water quality. The Cork Harbour has been assigned “moderate” water quality status (WFD, 2016-2021), whilst the EPA recognises that the Cork Harbour estuary is “at risk” (Coastal Waterbodies Risk, 2016-2021). According to the EPA, Cork Harbour is of “moderate” ecological status/potential. Figure 4.2, below, provides an overview of the hydrological connectivity of the proposed development site.

Figure 4.5 – Hydrological Connectivity of the Baneshane LRD site, near Midleton, Co. Cork.



4.6 Invasive Species

No invasive species listed in the First Schedule of the Birds and Natural Habitats Regulations (S.I. No. 477/2024) were noted within or in the general vicinity of the site during the site visit on 17th June 2025. However, winter heliotrope (*Petasites pyrenaicus*) was observed along the RockBrook road, whilst Butterfly bush (*Buddleja davidii*) was observed sporadically throughout the site and on lands adjacent to the LRD site (see Figure 4.6 below).

5 Source-Pathway-Receptor Model

The Source-Pathway-Receptor (SPR) model provides a standardised approach for describing the flow of environmental pollutants from a source through different pathways to potential receptors and provides a basis for the determination of environmental risk assessments. The SPR model considers sources, transport routes (pathways) and receptors of environmental pollution as separate entities. By defining these sections, the application of the SPR model can be better structured and gradually expanded to suit each individual project. A major advantage of the SPR model is its simplicity and flexibility, and the ability of the SPR model to identify relations in complex systems.

A key aspect of the SPR model is that the definition of pathways and receptors is relative to the project. For example, components of the environment surrounding a given project location may act as pathways as well as receptors, such as watercourses and/or drainage lines can act as receptors but can also act as direct pathways to other sensitive receptor habitats. Consequently, the components of the SPR model as they pertain the proposed development (this project) are detailed in the sections hereunder. It must be noted that the sections hereunder portray the potential significant effects of various sources in worse case scenarios, and do not explicitly depict the specific sources and / or volumes of specific sources from the proposed development.

5.1 Sources

5.1.1 Sediment & Pollutant Influxes and Dust Emissions

Construction and / or development works can result in sediment influx into adjacent environments, which can have various environmental impacts. This is particularly concerning when rivers, streams or marine habitats are the potential receptors of sediment run-off influxes. Although sedimentation is a natural process that forms a key component of nutrient transfer between terrestrial and marine habitats, excessive sedimentation can result in is the alteration of water quality, as sediment can reduce water clarity, reduce water quality through nutrient influxes, and in worse case scenarios disrupt aquatic plant growth, and result in the deterioration of habitats for aquatic mammals, fish, crustaceans and invertebrates.

The activities surrounding the proposed development primarily include the construction of houses, apartments, and associated ancillary facilities. Construction activities will include excavations, earthmoving works, construction of foundations, landscaping, concrete pouring / placement, cutting of materials leading to dust generation, and general movement of construction vehicle and HGV's on / near the development site. In applying this information in the context of the proposed works, consideration was given to the following:

- The Oatencake stream is located c. 140 m northeast of the boundary of the proposed LRD site. The watercourse originates on lands West of the LRD site and appears to be heavily modified wherein surface water flow is regulated by several culverts and bank reinforcement along its length.

- Additionally, although the Oatencake is a tributary of the Owennacurra River, which ultimately flows into Cork Harbour, the Midleton wastewater treatment plant (WWTP) releases treated effluent directly into the Oatencake stream. The most recent compliance report for the Midleton WWTP (EPA, 2023) revealed that the plant experienced organic overload in 2022, and has since remained non-compliant in emission limit values (ELV's) since, with faecal coliforms being of particular concern.
- According to the latest WFD information, water quality along the Oatencake stream and the Owenacurra River are classified as having “moderate” water quality, whilst the Dungourney stream is classified as having “poor” water quality.
- The topography of the landscape on and surrounding the proposed development site is flat (<5% gradient), whereby surface run-off will be slow.

5.1.2 Hydrocarbons

Hydrocarbon spills into adjacent terrestrial and aquatic habitats can have severe environmental impacts. Hydrocarbon spills are particularly toxic to biota, including aquatic fauna such as fish, crustaceans, amphibians and insects. Hydrocarbon spills can impact the physical and chemical properties of water, leading to significant changes in water quality, which can result in the death of aquatic plants and fauna. Influxes of hydrocarbon in significant amounts (e.g., > 1L) into the aquatic ecosystem may result in deterioration of water quality, including low dissolved oxygen and altered pH, resulting in aquatic fauna die-offs. The toxins from hydrocarbon spills can also accumulate in food webs, whereby unlike suspended sediment, which (depending on particle size) can drop out of solution in areas of reduced flow velocities, petroleum-range hydrocarbons are largely insoluble in water and will float on the surface, thereby allowing for greater potential for downstream transport (see Brown et al, 2017). Hydrocarbons may absorb onto soil particles on the bankside or riverbed, which can lead to delayed leaching into the environment and localised effects on soil-dwelling organisms (e.g., Pu et al, 2022).

Sources of hydrocarbons include fuels, hydraulic fluids and oils from construction machinery, excavators, and/ or construction vehicles used to undertake the proposed development works, and although infrequent and rare, improper maintenance and/or on-site incidents may result in the discharge of hydrocarbons from construction machinery.

However, the potential for incidents of hydrocarbon spills during typical construction works is considered minimal because hydrocarbon spills from vehicles and machinery is rare, especially where machinery and plant is regularly maintained.

5.1.3 Noise and Vibration

The proposed development works consist of the construction works including excavations, earth moving and landscaping, concrete pouring and / or placement, assembly of construction components, grinding and cutting of materials, amongst others. Typical machinery associated with this type of activity include excavators, plant and construction vehicles, which

will be the primary sources of noise and vibration impacts. The noise and vibration emissions generated from construction activities, in severe instances, can cause significant disturbance to local fauna such as birds, mammals (aquatic and terrestrial), fish, and amphibians.

The de facto daytime noise limit, as recommended by most local authorities in Ireland, is a sound pressure level (SPL) of 55 decibels (dB) (see British Standard BS 5228:2009+A1:2014). It must be noted that the Baneshane LRD site is located near (< 100m) from the N25 highway, a motorway that exhibits daily high volume vehicle traffic. Consequently, noise and vibration emissions of the immediate surrounding landscape are already elevated above ambient levels.

5.2 Pathways

The Oatencake stream is located c. 140 m northeast of the proposed development site, which flows into the Owennacurra River located c. 1,35 km south-east of the LRD site (from the nearest point), which ultimately flows into Cork Harbour SPA and Great Channel Island SAC within Cork Harbour River. The drainage ditch along the RockBrook road offers no hydrological connectivity between the proposed development site and any other watercourses or water bodies. Similarly, the proposed LRD site does not overlap nor is proximal (< 500 m) from any Natura 2000 site.

5.3 Receptors

The connectivity of each Natura 2000 site to the proposed development site through hydrological connectivity is provided, below. Habitats and species detailed in Natura 2000 sites identified within the 10 km ZOI as sites that are likely to receive impacts from the proposed development are provided in the sections hereunder.

5.3.1 Great Island Channel SAC (001058)

According to the site synopsis (NPWS, 2013), *“The Great Island Channel stretches from Little Island to Midleton, with its southern boundary being formed by Great Island. It is an integral part of Cork Harbour which contains several other sites of conservation interest. The site is of major importance for the two habitats (Tidal mudflats & Atlantic Salt Meadows) listed on Annex I of the E.U. Habitats Directive, as well as for its important numbers of wintering waders and wildfowl”*.

This SAC is of high conservation value for the following qualifying interests (QIs).

Habitats

- 1140 Mudflats and sandflats not covered by seawater at low tide
- 1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

5.3.2 Cork Harbour SPA (004030)

According to the site synopsis (NPWS, 2014), “Cork Harbour is a large, sheltered bay system, with several river estuaries. Owing to the sheltered conditions, the intertidal flats are often muddy in character. Cork Harbour is of major ornithological significance, being of international importance both for the total numbers of wintering birds (i.e. > 20,000) and also for its populations of Black-tailed Godwit and Redshank. In addition, it supports nationally important wintering populations of 22 species, as well as a nationally important breeding colony of Common Tern. Several of the species which occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Whooper Swan, Little Egret, Golden Plover, Bar-tailed Godwit, Ruff, Mediterranean Gull and Common Tern. The site provides both feeding and roosting sites for the various bird species that use it. Cork Harbour is also a Ramsar Convention site and part of Cork Harbour SPA is a Wildfowl Sanctuary”. This SPA is of high conservation value for the following qualifying interests (QIs).

Species

- Little Grebe (*Tachybaptus ruficollis*) [A004]
- Great Crested Grebe (*Podiceps cristatus*) [A005]
- Cormorant (*Phalacrocorax carbo*) [A017]
- Grey Heron (*Ardea cinerea*) [A028]
- Shelduck (*Tadorna tadorna*) [A048]
- Teal (*Anas crecca*) [A052]
- Pintail (*Anas acuta*) [A054]
- Red-breasted Merganser (*Mergus serrator*) [A069]
- Oystercatcher (*Haematopus ostralegus*) [A130]
- Golden Plover (*Pluvialis apricaria*) [A140]
- Grey Plover (*Pluvialis squatarola*) [A141]
- Lapwing (*Vanellus vanellus*) [A142]
- Dunlin (*Calidris alpina*) [A149]
- Black-tailed Godwit (*Limosa limosa*) [A156]
- Bar-tailed Godwit (*Limosa lapponica*) [A157]
- Curlew (*Numenius arquata*) [A160]
- Redshank (*Tringa totanus*) [A162]
- Black-headed Gull (*Chroicocephalus ridibundus*) [A179]
- Common Gull (*Larus canus*) [A182]
- Lesser Black-backed Gull (*Larus fuscus*) [A183]
- Common Tern (*Sterna hirundo*) [A193]
- Wigeon (*Mareca penelope*) [A855]
- Shoveler (*Spatula clypeata*) [A857]

5.4 Assessment of Likely Effects

Table 5.1, below, provides a summary of the assessment of the likelihood of significant effects on the Natura 2000 sites identified within the 10km Zol. Specifically, the assessment of likely significant effects considers whether the construction and /or operational phase of the proposed business park development works are likely or unlikely to have significant negative effects on the conservation objectives of habitats and species identified for each Natura 2000 site, alone or in combination with other plans / project. In this instance, although the proposed business park development does not overlap or encroach on the boundaries of any of the identified Natura 2000 sites, there is nearby connectivity through surface water and air pathways linking the site and nearby Natura 2000 sites. The full assessment of likely significant effects on each QI identified for each nearby Natura 2000 site can be found in Table 5.3.

Table 5.1 – Summary of Connectivity Between the Baneshane LRD site and Nearby Natura 2000 Sites.

Natura 2000 Site	Distance From Development Site	Connectivity to Development Site
Great Channel Island SAC (001058)	4.8km	Hydrological - Yes (< 2 km)
		Air – Yes (< 1 km)
		Land – No
		Mobile Species – None
Cork Harbour SPA (004030)	0.05km	Hydrological – Yes (< 2 km)
		Air – Yes (< 1 km)
		Land – No
		Mobile Species – Yes

Table 5.2 – Summary of Assessment of Likelihood of Significant Effects to Natura 2000 Sites within the 10 km Zol.

SPA / SAC	Distance from Proposed Development (direct)	Significant Effects through Surface water / Pollutant Pathways?	Significant Effects through Noise & Vibration Emissions?	Significant Effects through Habitat loss / Loss of Habitat Connectivity?
Great Channel Island SAC (001058)	0,91 km	Likely	Unlikely	Unlikely
Cork Harbour SPA (004030)	0,91 km	Likely	Unlikely	Unlikely

Table 5.3 – Assessment of Likely Significant Effects to the Conservation Objectives of QIs and SCIs of Natura 2000 Sites within the ZoI.

GREAT ISLAND CHANNEL SAC (001058)		
QI	CONSERVATION OBJECTIVES	ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS
<p>Mudflats and sandflats not covered by seawater at low tide [1140]</p>	<p>According to the site synopsis (NPWS, 2015), <i>“the Great Island Channel stretches from Little Island to Midleton, with its southern boundary being formed by Great Island. It is an integral part of Cork Harbour which contains several other sites of conservation interest. The site is of major importance for the two habitats listed on Annex I of the E.U. Habitats Directive, as well as for its important numbers of wintering waders and wildfowl”</i>.</p> <p>The conservation objectives (NPWS, 2011) of mudflats and sandflats not covered by seawater at low tide are achieved when:</p> <ul style="list-style-type: none"> ● The permanent habitat area (~723 ha) is stable or increasing and subject to natural processes ● The community distribution and community type (Intertidal sand with <i>Scolecopsis squamata</i> and <i>Pontocrates spp.</i> community; and Intertidal sand to mixed sediment with polychaetes, molluscs and crustaceans’ community complex) remains in a natural condition 	<p>The Oatencake Stream is located c. 140 m from northeastern boundary of the LRD site. However, another completed housing development lies between the LRD site and the Oatencake stream, wherein there are completed roads with suitable surface water drainage infrastructure. Moreover, the topography of the LRD site and neighbouring lands is considered flat (< 5% gradient), whereby surface water and sediment run-off would be limited or slow. Moreover, it should be noted that the Oatencake Stream is already heavily modified, and already exhibits heavy sediment loading and anthropogenic alteration of flow via culverts and bank hardening.</p> <p>Considering the size, extent and proposed layout of the development, it is determined that soil and / or contaminant run-off will be low - moderate volume and short- medium term. Additionally, the flow of the Oatencake into the Owennacurra River offers and other adjoining watercourses offer some dilution effect. However, the Oatencake is a tributary of the Owenacurra River and flows directly into the Cork Harbour SPA and Great Channel Island SAC.</p> <p>Consequently, significant effects to the conservation objectives of mudflats and sandflats not covered by seawater at low tide through surface and groundwater pathways are determined to be Likely.</p> <p>The proposed development is located c. 0,91km from the Great Channel Island SAC (at the nearest point). Noise and vibration emissions are typical sourced from construction works including excavations, earthmoving and landscaping, operation of plant, and movement of vehicles.</p> <p>However, the majority of noise and vibration effects are dissipated at 200m. Mudflats and sandflats are located 0,91km from the LRD site via hydrological connectivity, wherein noise and vibration effects will be completely dissipated. Moreover, the N25 highway traverses the landscape and intersects the SPA and SAC sites near Midleton town, and wherein ambient noise levels for the area can be considered above ambient (i.e., 55dB).</p> <p>Consequently, significant effects to the conservation objectives of mudflats and sandflats not covered by seawater at low tide through noise and vibration pathways are determined to be unlikely.</p> <p>The LRD site is located c. 0,91km from the Great Channel Island SAC (at the nearest point), whereby the proposed development will not overlap nor infringe on the boundary of the SAC, and will therefore not infringe on the distribution, extent, connectivity or other natural processes of estuarine habitats.</p>

		<p>Consequently, significant effects to the conservation objectives of mudflats and sandflats not covered by seawater at low tide through habitat loss or physical connectivity pathways are determined to be unlikely.</p>
<p>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]</p>	<p>According to the site synopsis (NPWS, 2015), “saltmarsh can be found near Castlebridge, which is typically dominated by Mediterranean salt meadows. A significant area of Atlantic salt meadows also occurs at Castlebridge. This habitat is characterised by the presence of grassy upper saltmarsh vegetation communities dominated by Red Fescue and/or Creeping Bent-grass”.</p> <p>The conservation objectives (NPWS, 2011) of Atlantic and Mediterranean are achieved when:</p> <ul style="list-style-type: none"> ● The total area of the habitats is stable or increasing. ● There is no decline or change in habitat distribution, subject to natural processes ● The natural circulation of sediments and organic matter is maintained, without any physical obstructions ● Creek and pan structure are maintained, subject to natural processes, including erosion and succession ● The natural tidal flooding regime is maintained ● The range of coastal habitats including transitional zones is maintained, subject to natural processes including erosion and succession ● The structural variation within sward is maintained ● More than 90% of the saltmarsh area remains vegetated ● There is no significant expansion of common cordgrass (<i>Spartina anglica</i>), with an annual spread of less than 1%. 	<p>The Oatencake Stream is located c. 140 m from northeastern boundary of the LRD site. However, another completed housing development lies between the LRD site and the Oatencake stream, wherein there are completed roads with suitable surface water drainage infrastructure. Moreover, the typography of the LRD site and neighbouring lands is considered flat (< 5% gradient), whereby surface water and sediment run-off would be limited or slow. Moreover, it should be noted that the Oatencake Stream is already heavily modified, and already exhibits heavy sediment loading and anthropogenic alteration of flow via culverts and bank hardening.</p> <p>Considering the size, extent and proposed layout of the development, it is determined that soil and / or contaminant run-off will be low-volume and short-term. Additionally, the flow of the Oatencake into the Owennacurra River offers and other adjoining watercourses offer a significant dilution effect. Moreover, no Atlantic salt meadows were observed within the estuarine reaches of the Owennacurra River (Jeff Hean, pers. Obs. 2025). However, the Oatencake is a tributary of the Owenacurra River and flows directly into the Cork Harbour SPA and Great Channel Island SAC.</p> <p>Consequently, significant effects to the conservation objectives of Atlantic salt meadows through surface and groundwater pathways are determined to be Likely.</p> <p>The proposed development is located c. 0,91km from the Great Channel Island SAC (at the nearest point). Noise and vibration emissions are typical sourced from construction works including excavations, earthmoving and landscaping, operation of plant, and movement of vehicles.</p> <p>However, the majority of noise and vibration effects are dissipated at 200m. Mudflats and sandflats are located 0,91km from the LRD site via hydrological connectivity, wherein noise and vibration effects will be completely dissipated. Moreover, the N25 highway traverses the landscape and intersects the SPA and SAC sites near Middleton town, and wherein ambient noise levels for the area can be considered above ambient (i.e., 55dB).</p> <p>Consequently, significant effects to the conservation objectives of Atlantic salt meadows through noise and vibration pathways are determined to be unlikely.</p> <p>The LRD site is located c. 0,91km from the Great Channel Island SAC (at the nearest point), whereby the proposed development will not overlap nor infringe on the boundary of the SAC, and will therefore not infringe on the distribution, extent, connectivity or other natural processes of estuarine habitats.</p>

		Consequently, significant effects to the conservation objectives of Atlantic salt meadows through habitat loss or physical connectivity pathways are determined to be unlikely.
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CORK HARBOUR SPA (004030)		
OI	CONSERVATION OBJECTIVES	ASSESSMENT OF LIKELY SIGNIFICANT EFFECTS
<p>Little Grebe (<i>Tachybaptus ruficollis</i>) [A004] Great Crested Grebe (<i>Podiceps cristatus</i>) [A005] Cormorant (<i>Phalacrocorax carbo</i>) [A017] Grey Heron (<i>Ardea cinerea</i>) [A028] Shelduck (<i>Tadorna tadorna</i>) [A048] Teal (<i>Anas crecca</i>) [A052] Pintail (<i>Anas acuta</i>) [A054] Red-breasted Merganser (<i>Mergus serrator</i>) [A069] Oystercatcher (<i>Haematopus ostralegus</i>) [A130] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Grey Plover (<i>Pluvialis squatarola</i>) [A141] Lapwing (<i>Vanellus vanellus</i>) [A142] Dunlin (<i>Calidris alpina</i>) [A149] Black-tailed Godwit (<i>Limosa limosa</i>) [A156] Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Curlew (<i>Numenius arquata</i>) [A160] Redshank (<i>Tringa totanus</i>) [A162] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182] Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] Common Tern (<i>Sterna hirundo</i>) [A193]</p>	<p>According to the site synopsis (NPWS, 2015), “Cork Harbour is a large, sheltered bay system, with several river estuaries - principally those of the Rivers Lee, Douglas, Owenboy and Owennacurra. Owing to the sheltered conditions, the intertidal flats of the Cork Harbour are often muddy in character, which in turn support a range of macro-invertebrates. Cork Harbour is of major ornithological significance, being of international importance both for the total numbers of wintering birds (i.e. > 20,000) and also for its populations of Black-tailed Godwit and Redshank. In addition, it supports nationally important wintering populations of 22 species, as well as a nationally important breeding colony of Common Tern.”</p> <p>The conservation objectives (NPWS, 2012) of shallow inlets and bays are achieved when:</p> <ul style="list-style-type: none"> ● The long-term population trends are stable or increasing ● There is no significant decrease in the numbers or range of areas used waterbird species, other 	<p>The Oatencake Stream is located c. 140 m from northeastern boundary of the LRD site. However, another completed housing development lies between the LRD site and the Oatencake stream, wherein there are completed roads with suitable surface water drainage infrastructure. Moreover, the topography of the LRD site and neighbouring lands is considered flat (< 5% gradient), whereby surface water and sediment run-off would be limited or slow. Moreover, it should be noted that the Oatencake Stream is already heavily modified, and already exhibits heavy sediment loading and anthropogenic alteration of flow via culverts and bank hardening. However, the Oatencake is a tributary of the Owenacurra River and flows directly into the Cork Harbour SPA and Great Channel Island SAC.</p> <p>Consequently, significant effects to the conservation objectives of bird species through surface and groundwater pathways are determined to be Likely.</p> <p>The proposed development is located c. 0,91km from the Great Channel Island SAC (at the nearest point). Noise and vibration emissions are typical sourced from construction works including excavations, earthmoving and landscaping, operation of plant, and movement of vehicles.</p> <p>However, the majority of noise and vibration effects are dissipated at 200m. Mudflats and sandflats are located 0,91km from the LRD site via hydrological connectivity, wherein noise and vibration effects will be completely dissipated. Moreover, the N25 highway traverses the landscape and intersects the SPA and SAC sites near Midleton town, and wherein ambient noise levels for the area can be considered above ambient (i.e., 55dB).</p> <p>The site of the LRD currently does not offer supporting habitat for wintering marine birds. Agricultural grasslands within neighbouring lands adjacent to the site may offer supporting habitat to marine wintering birds that may be affected my noise and vibration effects from the proposed development. However, the landscape surrounding the LRD site offers agricultural lands in abundance and hence an abundance of this habitat type. Any incidental disturbance of wintering birds on nearby agricultural lands adjacent to the LRD would be short-term and very localised.</p> <p>Consequently, significant effects to the conservation objectives of bird species through noise and vibration pathways are determined to be unlikely.</p>

<p>Wigeon (<i>Mareca penelope</i>) [A855] Shoveler (<i>Spatula clypeata</i>) [A857]</p>	<p>than that occurring from natural patterns of variation</p>	<p>The LRD site is located c. 0,91km from the Great Channel Island SAC (at the nearest point), whereby the proposed development will not overlap nor infringe on the boundary of the SAC, and will therefore not infringe on the distribution, extent, connectivity or other natural processes of estuarine habitats</p> <p>Consequently, significant effects to the conservation objectives of bird species through habitat loss or physical connectivity pathways are determined to be unlikely.</p>
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5 IN-COMBINATION EFFECTS

It is a requirement of AA that the cumulative or in-combination effects of the proposed development together with other plans or projects are assessed. Cumulative impacts can be defined as a project/plan/programme likely to have a significant effect thereon, either individually or in combination with other plans or projects.

The following sources were consulted in order to determine if there were any other plans or projects in the area which could result in cumulative impacts:

- DHPLG EIA Portal <https://www.housing.gov.ie/planning/environmental-assessment/environmental-impact-assessment-eia/eia-portal>
- Cork County Council - Planning System <https://maps.cork.ie/planningenquiry>

Only those applications which give rise to potential impacts to the QI habitats and species within the corresponding Natura 2000 sites have been considered. All other committed/approved developments are for individual residential properties, all of which are not considered to be a risk of in-combination effects given that none will involve further modification of the SPA.

Table 6.1, overleaf, provides a summary of new or approved planning applications within 1 km radius of the Baneshane LRD site that may have in-combination effects.

Table 6.1 – Summary of Relevant Planning Applications.

Applicant [Application Number]	Status {Approval Date]	Development Description	Likelihood for in-Combination Effects
Seamus & Clare Burke [254442]	New Application [24/03/2025]	Permission to remove from existing residential dwelling the existing dormer roof and construct a new first floor two storey extension onto the existing dwelling along the external window and door alterations, a new single storey side and rear extensions onto the existing dwelling, a detached single storey domestic garage and all associated site works and services	<p>The proposed development has potential to generate low-moderate volumes of dust, sediment and surface water run-off, as well as noise and vibration emissions.</p> <p>As such, the following should be considered:</p> <ul style="list-style-type: none"> • The proposed development is located c. 670m west of the Baneshane LRD site, whereby noise and vibration emissions will be completely dissipated. Moreover, the N25 highway transects the landscape between the planning permission and the Baneshane LRD site, resulting in ambient noise levels already being elevated. • The approved planning development is located within a peri-urban setting and is surrounded by amenity grassland and agricultural lands which offer a natural buffer to sediment and surface water run-off. • Moreover, municipal drainage and stormwater management infrastructure will be found along the adjacent and nearby roadways, further reducing uncontrolled surface water and sediment influx into the Oatencake stream and ultimately Cork Harbour. <p>Consequently, it is determined that the proposed planning development has low likelihood for in-combination effects with the Baneshane LRD site to nearby Natura 2000 sites during the construction or operational phase of the projects.</p>
Margaret McDonnell [246072]	Approved – Conditional [27/02/2025]	Permission to extend an existing two-storey dwelling by the conversion of an existing attached single-storey outhouse to a two-storey habitable space with a single storey extension to the front, elevational changes to the existing to include 1 no. new roof light as well as all associated site works	<p>The proposed development has potential to generate low-moderate volumes of dust, sediment and surface water run-off, as well as noise and vibration emissions.</p> <p>As such, the following should be considered:</p> <ul style="list-style-type: none"> • The proposed development is located c. 430m southwest of the Baneshane LRD site, whereby noise and vibration emissions will be completely dissipated. Moreover, the N25 highway transects the landscape between the planning permission and the Baneshane LRD site, resulting in ambient noise levels already being elevated. • The approved planning development is located within a peri-urban setting and is surrounded by amenity grassland and agricultural lands which offer a natural buffer to sediment and surface water run-off.

			<ul style="list-style-type: none"> Moreover, municipal drainage and stormwater management infrastructure will be found along the adjacent and nearby roadways, further reducing uncontrolled surface water and sediment influx into the Oatencake stream and ultimately Cork Harbour. <p>Consequently, it is determined that the proposed planning development has low likelihood for in-combination effects with the Baneshane LRD site to nearby Natura 2000 sites during the construction or operational phase of the projects.</p>
Rock Gate Property Developments Ltd [235170]	Approved – Conditional [01/08/2023]	Construction of 65 no. dwelling units and all associated ancillary development works including acces, parking, drainage (including pumping station) and landscaping. Extension of Duration of Planning Reference Number 17/6604	<p>The proposed development has potential to generate moderate volumes of dust, sediment and surface water run-off, as well as noise and vibration emissions.</p> <p>As such, the following should be considered:</p> <ul style="list-style-type: none"> The proposed development is located c. 50m east of the Baneshane LRD, whereby noise and vibration emissions will be completely dissipated. The approved planning development is located within a peri-urban setting and is surrounded by amenity grassland and agricultural lands which offer a natural buffer to sediment and surface water run-off. Several appropriate sediment and dust control measures have been observed within the approved planning development site, which assist in mitigating likely significant effects from sediment, surface water and dust emissions. <p>Consequently, it is determined that the proposed planning development has low likelihood for in-combination effects with the Baneshane LRD site to nearby Natura 2000 sites during the construction or operational phase of the projects.</p>
Uisce Éireann	Approved – Conditional [15/05/2025]	Permission for the Midleton Wastewater Loading Diversion Project which will consist of the provision of a new foul pumping station and rising main connection to Water-Rock WWPS. The works include: 1. New foul pumping station (Midleton South) located within the existing Bailick No.1 wastewater pumping station site, to include wet well, valve chamber, flowmeter chamber, mcc kiosk, wash water kiosk, lighting, vent stack and all necessary mechanical and civil works to accommodate the proposal. 2. Alterations to the existing site access at Bailick No.1 WWPS site will require removal of sections of the existing wall /	<p>The proposed development has potential to generate moderate - high volumes of dust, sediment and surface water run-off, as well as noise and vibration emissions.</p> <p>As such, the following should be considered:</p> <ul style="list-style-type: none"> The proposed development is located c. 1,3 km east of the Baneshane LRD site, whereby noise and vibration emissions will be completely dissipated. The approved planning development is located within a urban setting and is surrounded by amenity grassland, urban drainage and stormwater management infrastructure, and agricultural lands which offer a natural buffer to sediment and surface water run-off. Several appropriate sediment and dust control measures have been observed within the approved planning development site, which assist in mitigating likely significant effects from sediment, surface water and dust emissions.

		<p>hedgerow. To be replaced with a new fence behind the visibility lines. 3. Approximately 1,800m of rising main connecting the Midleton South WWPS to the Water-Rock WWPS, to include air / scoure valve chambers and 6m vent stack at Kennedy Park. The route will travel along Bailick Road, Kennedy Park and Riverside Way. Adjacent to Midleton Gyratory, the route will cross the Owenacurra river using trenchless methods and run along Market Green Plaza to Market Green. A Natura Impact Statement will be submitted to the planning authority with the application. The Natura Impact Statement will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy during office hours at the office of the relevant planning authority.</p>	<ul style="list-style-type: none"> The approved planning permission for the Uisce Éireann development is accompanied by an AA Screening and NIS report, that provides appropriate mitigation measures to avoid impacts to the Cork Harbour complex and Natura 2000 sites within. <p>Consequently, it is determined that the proposed planning development has low likelihood for in-combination effects with the Baneshane LRD site to nearby Natura 2000 sites during the construction or operational phase of the projects.</p>
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6 SCREENING STATEMENT

The screening exercise was completed in compliance with the relevant EC and national guidelines. Article 42 (7) of the European Communities (Birds and Natural Habitats) Regulations 2011 states that: *“The public authority shall determine that an Appropriate Assessment of a plan or project is not required [...] if it can be excluded on the basis of objective scientific information following screening under this Regulation, that the plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site.”*

The potential impacts from the proposed large-scale residential development (LRD) on lands at Baneshane, Midleton, Co. Cork, alone and in-combination with other developments, have been considered in the context of the European Sites potentially affected and the conservation objectives of their Qualifying Interests/Special Conservation Interests.

Considering the extent, nature and location of the proposed works, the nature of the current state of the proposed site, and the embedded best practice and/or control measures contained within the proposed works methods, and consideration that the nearby watercourse, the Oatencake Stream, flows directly into the Cork Harbour SPA and Great Channel Island SAC, it has been determined that significant effects to the conservation objectives of QIs and SCI of nearby Natura 2000 sites stemming from the proposed Baneshane LRD site is Likely.

A Natura Impact Statement (NIS) is therefore required for this project.

7 REFERENCES

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