

Appropriate Assessment Screening & Natura Impact Statement - Information for a Stage 1 (AA Screening) and Stage 2 (Natura Impact Statement) AA for the Proposed Extension to the Existing Graveyard at Drumcliff, Ennis, Co. Clare.



1st June 2023

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On behalf of: Clare County Council

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Introduction

The following Appropriate Assessment (AA) (Screening Stage) has been prepared by **Altemar Ltd.** at the request of Clare County Council for the proposed extension to the existing graveyard at Drumcliff, Ennis, Co. Clare.

An Appropriate Assessment is an assessment of the potential effects of a proposed project or plan, on its own, or in combination with other plans or projects, on one or more Natura 2000 sites. Natura 2000 sites are those sites designated as Special Areas of Conservation (SAC) or Special Protection Areas (SPA).

The AA Screening stage examines the likely significant effects of a plan or project, either on its own, or in combination with other plans and projects, upon a Natura 2000 site and considers whether, on the basis of objective scientific evidence, it can be concluded that there are not likely to be significant effects on any European site, in view of best scientific knowledge and the conservation objectives of the relevant European sites.

The Natura Impact Statement examines whether the plan or project, either alone, or in combination with other plans and projects, in the view of best scientific knowledge and in view of the sites' conservation objectives, will adversely affect the integrity of the European sites.

Altemar Ltd.

Since its inception in 2001, Altemar has been delivering ecological and environmental services to a broad range of clients. Operational areas include: residential; infrastructural; renewable; oil & gas; private industry; Local Authorities; EC projects; and, State/semi-State Departments. Bryan Deegan, the managing director of Altemar, is an Environmental Scientist and Marine Biologist with 26 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. He is currently contracted to Inland Fisheries Ireland as the sole "External Expert" to environmentally assess internal and external projects. He is also chair of an internal IFI working group on environmental assessment. Bryan Deegan (MCIEEM) holds a MSc in Environmental Science, BSc (Hons.) in Applied Marine Biology, NCEA National Diploma in Applied Aquatic Science and a NCEA National Certificate in Science (Aquaculture). Bryan Deegan carried out all elements of this Appropriate Assessment Screening.

Background to the Appropriate Assessment

The Habitats Directive 92/43/EEC (together with the Birds Directive (2009/1477/EC)) forms the cornerstone of Europe's nature conservation policy. The Habitats Directive protects over 1000 animals and plant species and over 200 "habitat types" which are of European importance. In the Habitats Directive, Articles 3 to 9 provide the legislative means to protect habitats and species of European Community interest through the establishment and conservation of an EU-wide network of conservation sites (NATURA, 2000). These are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Birds Directive, Article 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect European sites (Annex 1.1). Article 6(3) establishes the requirement for Appropriate Assessment:

"Any plan or project not directly connected with or necessary to the management of the [NATURA 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans and 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 implication for the site and subject to the provisions of paragraph 4, the component 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."

As outlined in "Managing European sites, The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC" (European Commission, 21 November 2018) *"The purpose of the appropriate assessment is to assess the implications of the plan or project in respect of the site's conservation objectives, either individually or in combination with other plans or projects. The conclusions should enable the competent authorities to ascertain whether the plan or project will adversely affect the integrity of the site concerned. The focus of the appropriate assessment is therefore specifically on the species and/or the habitats for which the European site is designated."*

As outlined in the EC guidance document on Article 6(4) (January 2007)¹:

“Appropriate assessments of the implications of the plan or project for the site concerned must precede its approval and take into account the cumulative effects which result from the combination of that plan or project with other plans or projects in view of the site’s conservation objectives. This implies that all aspects of the plan or project which can, either individually or in combination with other plans or projects, affect those objectives must be identified in the light of the best scientific knowledge in the field.

Assessment procedures of plans or projects likely to affect European sites should guarantee full consideration of all elements contributing to the site integrity and to the overall coherence of the network, both in the definition of the baseline conditions and in the stages leading to identification of potential impacts, mitigation measures and residual impacts. These determine what has to be compensated, both in quality and quantity. Regardless of whether the provisions of Article 6(3) are delivered following existing environmental impact assessment procedures or other specific methods, it must be ensured that:

- *Article 6(3) assessment results allow full traceability of the decisions eventually made, including the selection of alternatives and any imperative reasons of overriding public interest.*
- *The assessment should include all elements contributing to the site’s integrity and to the overall coherence of the network as defined in the site’s conservation objectives and Standard Data Form, and be based on best available scientific knowledge in the field. The information required should be updated and could include the following issues:*
 - *Structure and function, and the respective role of the site’s ecological assets;*
 - *Area, representativity and conservation status of the priority and nonpriority habitats in the site;*
 - *Population size, degree of isolation, ecotype, genetic pool, age class structure, and conservation status of species under Annex II of the Habitats Directive or Annex I of the Birds Directive present in the site;*
 - *Role of the site within the biographical region and in the coherence of the European network; and,*
 - *Any other ecological assets and functions identified in the site.*
- *It should include a comprehensive identification of all the potential impacts of the plan or project likely to be significant on the site, taking into account cumulative impacts and other impacts likely to arise as a result of the combined action of the plan or project under assessment and other plans or projects.*
- *The assessment under Article 6(3) applies the best available techniques and methods, to estimate the extent of the effects of the plan or project on the biological integrity of the site(s) likely to be damaged.*
- *The assessment provides for the incorporation of the most effective mitigation measures into the plan or project concerned, in order to avoid, reduce or even cancel the negative impacts on the site.*
- *The characterisation of the biological integrity and the impact assessment should be based on the best possible indicators specific to the European assets which must also be useful to monitor the plan or project implementation.”*

¹ European Commission. (2007). Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission;

Stages of the Appropriate Assessment

This Appropriate Assessment screening and Natura Impact Statement was undertaken in accordance with the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC, 2001), Part XAB of the Planning and Development Act 2000, as amended, in addition to the December 2009 publication from the Department of Environment, Heritage and Local Government; 'Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities' and the European Communities (Birds and Natural Habitats) Regulations 2011. In order to comply with the above Guidelines and legislation, the Appropriate Assessment process has been structured as follows:

1) Screening stage:

- Description of plan or project, and local site or plan area characteristics;
- Identification of relevant European sites, and compilation of information on their qualifying interests and conservation objectives
- Identification and description of individual in combination effects likely to result from the proposed project;
- Assessment of the likely significance of the effects identified above. Exclusion of sites where it can be objectively concluded that there will be no likely significant effects; and,
Conclusions

2) Appropriate Assessment (Natura Impact Statement):

- Description of the European sites that will be considered further;
- Identification and description of potential adverse impacts on the conservation objectives of these sites likely to occur from the project or plan; and,
- Mitigation Measures that will be implemented to avoid, reduce or remedy any such potential adverse impacts
- Assessment as to whether, following the implementation of the proposed mitigation measures, it can be concluded, beyond all reasonable scientific doubt, that there will be no adverse impact on the integrity of the relevant European Site in light of its conservation objectives"
- Conclusions.

If it can be demonstrated during the AA screening phase (Stage 1), that the proposed project will not have a significant effect, whether alone or in combination with other plans or projects, on the conservation objectives of a Natura 2000 site, then no further AA (Stage 2) will be required. It is important to note that there is a requirement to apply a precautionary approach to AA screening. Therefore, where effects are possible, certain or unknown at the screening stage, AA will be required.

In addition, it should be noted that Article 6(3) of the Habitats Directive must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an AA of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site.

Stage 1 Screening Assessment

Management of the Site

The plan or project is not directly connected with, or necessary to the management of NATURA 2000 sites.

Description of the Proposed Project

The proposed development comprises improvement works to St Brigid's Section E and the Development of an Extension to the existing Burial Ground at Drumcliff Burial Ground located at the Townlands of Drumcliff, Ennis, Co.Clare

The proposed development comprises:-

- An addition of circa 350 double plots including provision for ash plots.
- Access road improvements including lay-bys, turning circle and traffic calming measures.
- Parking; 23 standard spaces, 6 Wheelchair accessible spaces
- Footpaths
- Drainage
- Planting and landscaping including Columbarium and Reflectance Garden
- Associated Site Works

The proposed site outline, location, site layout plan, and site sections are demonstrated in Figures 1-4.

Landscape

The landscape strategy for the proposed development has been designed by Cormac Langan Landscape Architecture. The proposed landscape plan is demonstrated in Figure 5.

Drainage

A Hydrological and Hydrogeological Assessment has been prepared by Hydro-Environmental Services (HES) to accompany this planning application. This report details the following surface water drainage strategy for the proposed development:

'A detailed drainage design plan has been prepared for the proposed development. The drainage design has taken into account the sloping nature of the site, with drainage features running with the existing ground contours to ensure that all surface waters arising at the site are captured within the drainage system, with no direct unattenuated discharge of surface water from the proposed development site.'

The design of the drainage system incorporates the following measures:

- *Surface water falling on green (grave) areas will infiltrate into green areas. Perforated pipes running below paths across the slope of the land, will collect heavy flows and divert to soak pits at the northeastern boundary of the Section G extension.*
- *Footpaths will be sloped toward adjacent green areas to allow for infiltration. Surface water from footpaths, which does not directly infiltrate to ground, will be collected within the perforated drainage pipes.*
- *Surface water from new roadway will generally be served by an open swale along the roadway. A soak pit area will be provided at the lowest point of the swale run to accommodate any heavy flows of surface water than is not absorbed by the swale itself.*
- *New gullies serving existing roadway/proposed roadway junction area are served by a soak pit.*
- *Main Pedestrian Access Ramp and stairs with non-porous finish to be accommodated by soak pit.*
- *Acco drain to be added to Section E area is to be served by an existing soak pit.'*

The Hydrological and Hydrogeological Assessment concludes:

'There are no direct hydrological connections between the site and downgradient surface water bodies. Standard separation distances (50m) to surface water features are maintained by the proposed cemetery;

➤ *The drainage design incorporated into the proposed development will ensure that surface water will be collected, treated and retained within the site, with infiltration to ground via 5 no. proposed soakaways;*

➤ *The conceptual site model of the site is outlined in Section 4.1 and in summary is conceptualised as a sloping site, underlain by thick clay-rich subsoils (8.5-13.5m) which form a drumlin feature overlying the limestone bedrock which forms the primary groundwater aquifer within the region. Low/moderate permeability rates indicate slow potential infiltration to groundwater within these subsoils into the underlying aquifer.*

From this conceptual model, surface water is considered to be the main potential pathway for potential effects, rather than groundwater;

➤ *Potential topographically downgradient receptors include –*

o 1 no. karst feature (Poulacorey swallow hole) mapped 250m north of the proposed development site. The Poulacorey swallow hole is connected to the Drumcliff Spring PWS (1km south). The recommended separation distance to drinking water supplies is 250m (SEPA Guidelines, refer to Footnote 3), which is maintained in this instance; and,

o The Ballyalia Lake pNHA and SAC and Ballyalia Lough SPA are situated ~200m north of the site.

An assessment of potential impacts on downgradient receptors has been completed within Section 4 of this report. Proven and effective drainage management techniques have been incorporated into the design, to ensure surface water impacts on downgradient receptors will not occur. All surface water runoff generated from hardstanding areas within the site will be retained on-site and allowed to recharge to ground via 5 no. soakaways;

➤ *The impact assessment process has concluded that there will be no significant effects on downgradient surface water bodies as a result of the proposed development;*

➤ *An impact assessment of potential groundwater effects has also been completed. Due to the underlying thickness of subsoils, which provide a substantial protective layer to the underlying aquifer and the geophysical inference of good, clean, non-karstified limestone underlying the proposed extension site, the conclusion of the assessment process is that there will be no significant effects on groundwater quality as a result of the proposed development; and,*

➤ *During the operational phase, the hydrological regime at the site will be controlled by a range of sustainable drainage measures. There will be no cumulative impacts on surface water quality or quantity, with respect to the existing Drumcliff cemetery (Section E) as a result of the proposed development. In terms of groundwater cumulative impacts, the burial and natural breakdown of remains within the proposed extension will lead to increased levels of certain nutrients such as Ammonia and Nitrate within the grave plots. Due to the thickness of subsoils (8.5-13.5m) and the low/moderate permeability of the subsoil, cumulative impacts, with respect to the existing Drumcliff cemetery, are not expected to occur.'*

The proposed site services layout is demonstrated in Figure 6.



Project: Graveyard Extension
 Location: Drumcliff, Ennis, Co. Clare
 Date: 14th April 2023
 Drawn By: Bryan Deegan (Altamar)

ALTEMAR
 Marine & Environmental Consultancy



Figure 1. Site outline and location



Site Outline

0 50 100 150 200 m

Project: Graveyard Extension
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Figure 2. Site outline

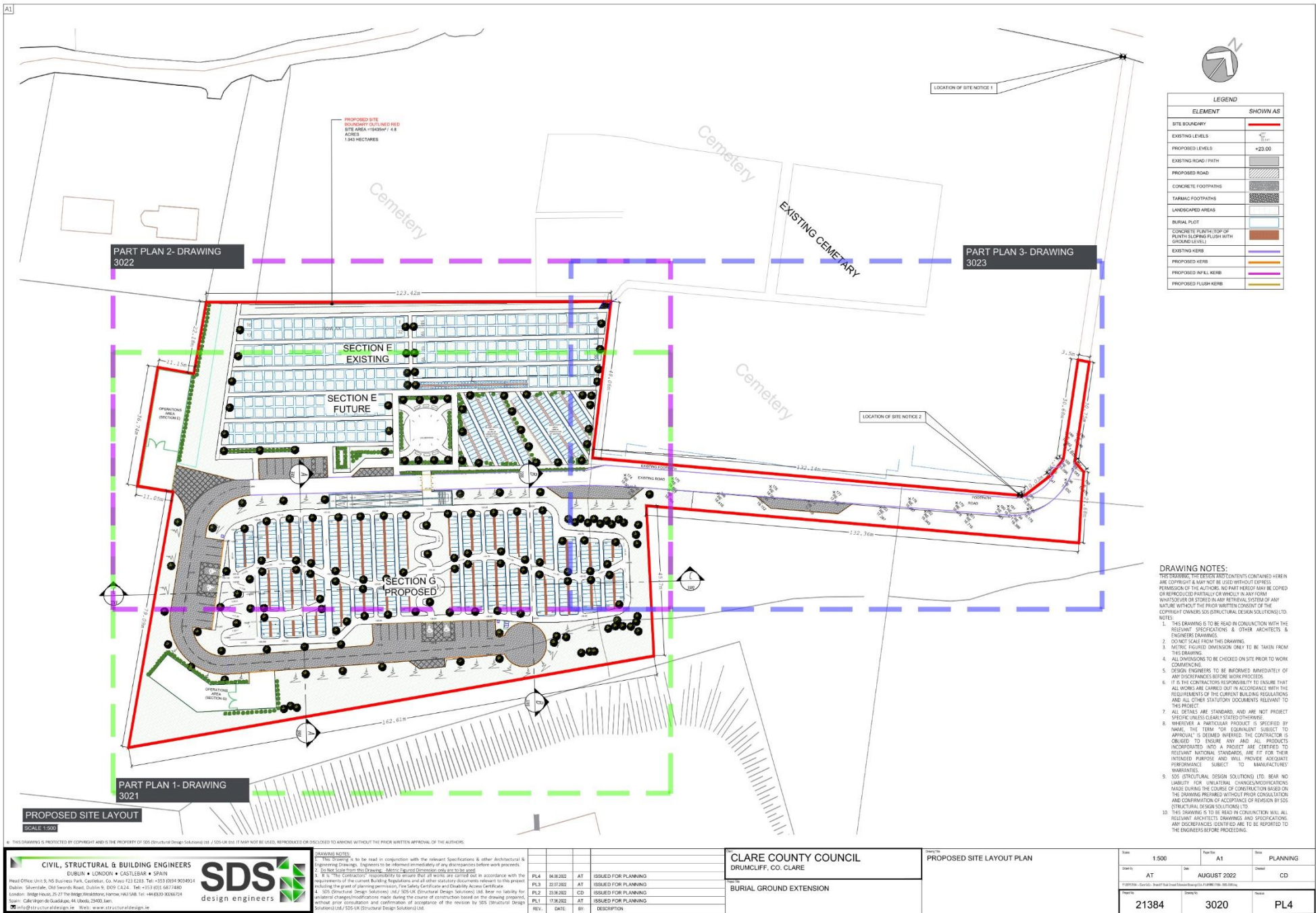
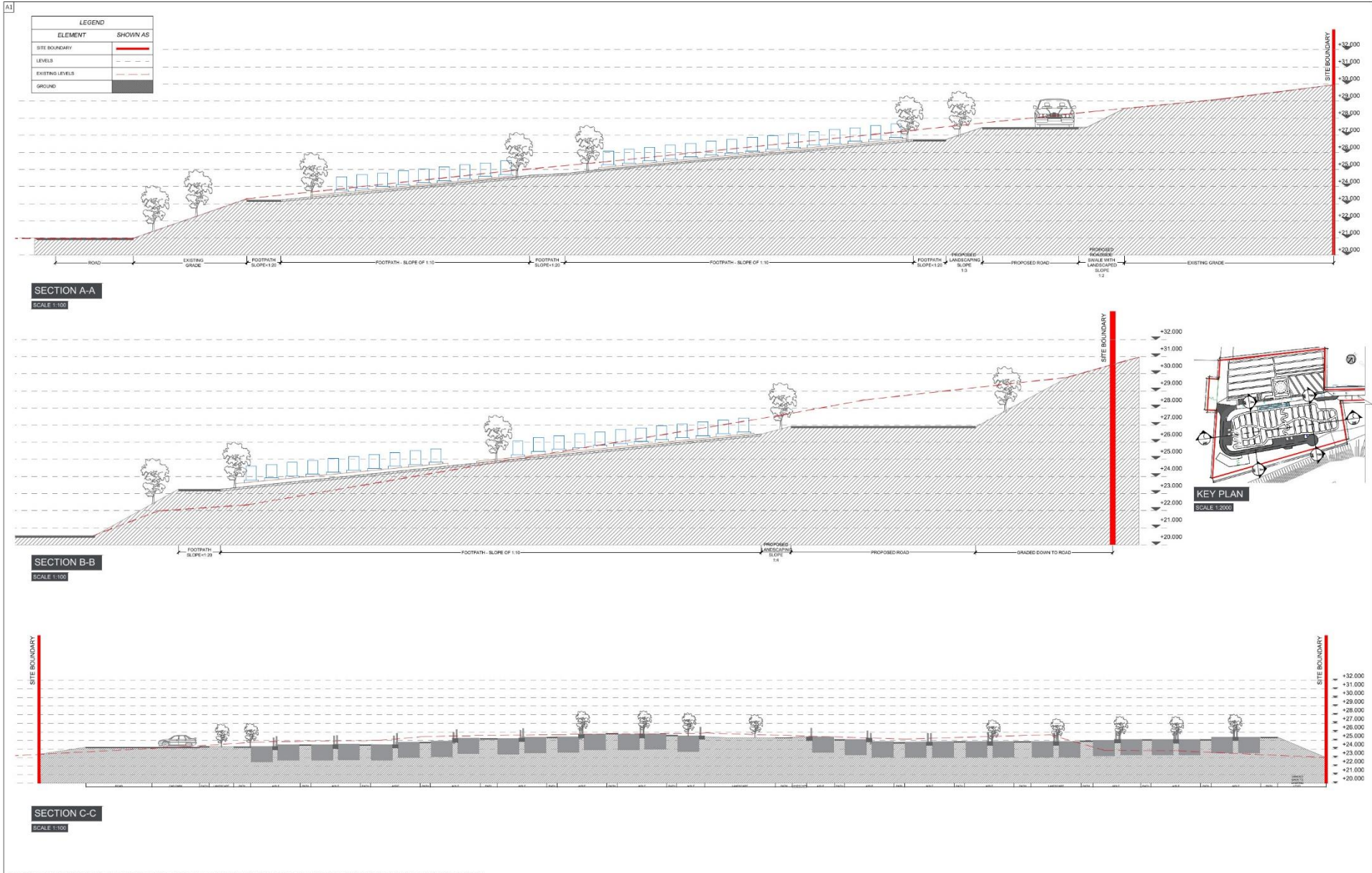


Figure 3. Proposed Site Layout Plan



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	DRAWING NOTES: 1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT SPECIFICATIONS & OTHER ARCHITECTURAL & ENGINEERING DRAWINGS. ENGINEERS TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS. 2. DO NOT SCALE FROM THIS DRAWING. MEASURE DIMENSIONS ONLY AND AS SHOWN. 3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL WORK IS CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT BUILDING REGULATIONS AND ALL OTHER STATUTORY DOCUMENTS RELEVANT TO THIS PROJECT INCLUDING THE GRANT OF PLANNING PERMISSION, FIRE SAFETY CERTIFICATE AND DISABLED ACCESS CERTIFICATE. 4. SDS (STRUCTURAL DESIGN SOLUTIONS) Ltd. / SDS-UK (Structural Design Solutions) Ltd. ASSUME NO LIABILITY FOR UNINTENTIONAL CHANGES/MODIFICATIONS MADE DURING THE COURSE OF CONSTRUCTION BASED ON THE DRAWING PROVIDED, WITHOUT PRIOR CONSULTATION AND CONTRIBUTION OF ACCEPTANCE OF THE REVISION BY SDS (STRUCTURAL DESIGN SOLUTIONS) Ltd. / SDS-UK (Structural Design Solutions) Ltd.		<table border="1"> <thead> <tr> <th>REV.</th> <th>DATE</th> <th>BY</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>PL1</td> <td>17.06.2022</td> <td>AT</td> <td>ISSUED FOR PLANNING</td> </tr> </tbody> </table>	REV.	DATE	BY	DESCRIPTION	PL1	17.06.2022	AT	ISSUED FOR PLANNING	
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PL1	17.06.2022	AT	ISSUED FOR PLANNING									

Figure 4. Proposed Site Sections



LEGEND

-  HEADSTONE PLINTH
-  RETAINING WALL (To Engineers Spec.)
-  GRASSED/LAWN AREAS
-  HEDGE PLANTING MIX
-  GROUNDCOVER & HERBACEOUS PLANTING MIX
-  BULB PLANTING AREAS
-  TREE PLANTING
(See Planting Specification for Details)
-  SITE BOUNDARY
-  ROADWAY
_ Tarmacadam (To Engineers Spec.)
-  PEDESTRIAN PATHWAYS
_ Concrete (To Engineers Spec.)
-  COLUMBARIUM WALL AREA_Hydropave Paving
Colour: Slate & Charcoal Border
-  SEATING
_ Foyle Seat; Larkin Engineering
-  BIKE RACK (To be agreed with client.)
-  LIGHTING STANDARD (To be agreed with client.)

Figure 5. Proposed Landscape Plan



Figure 4. Proposed site services layout

Stage I- Identification of Relevant Natura 2000 Sites

The proposed development site is not within a European site. As outlined in Office of the Planning Regulator (2021) *“The zone of influence of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on the Qualifying Interests of a European site. This should be established on a case-by-case basis using the Source- Pathway-Receptor framework and not by arbitrary distances (such as 15 km).”*

A key factor in the consideration as to whether or not a particular European site is likely to be affected by the proposed development is its distance from the development location. It is generally, but not necessarily, the case that the greater the distance from the plan or project the smaller the likelihood of impacts. In this case, the nearest European sites to the proposed development are 100m away (Ballyallia Lake SAC and Ballyallia Lough SPA). The proposed development site is predominantly a greenfield site located 170m from the nearest watercourse (Drumcliff Stream). It is proposed to collect, treat, and retain surface water drainage within the subject site, with infiltration to ground via 5 no. proposed soakaways.

It should be noted that, as outlined in the Hydrological and Hydrogeological Assessment that accompanies this planning application: *‘There are no surface water features within the site and therefore there are no direct hydrological connections or pathways to downstream surface waterbodies and designated sites’*. However, there are a number of waterbodies (including the Drumcliff Stream and Poulacorry River) located topographically down-gradient to the north of the subject site. This network of waterbodies ultimately outfalls to Ballyallia Lough. Given that surface water drainage will infiltrate into the ground, out of an abundance of caution it is considered that there is an indirect hydrological pathway to European Sites within Ballyallia Lough via surface water drainage to topographically down-gradient waterbodies located to the north of the site. However, as outlined in the Hydrological and Hydrogeological Assessment *‘The impact assessment process has concluded that there will be no significant effects on downgradient surface water bodies as a result of the proposed development.’*

Given the distance between the subject site to the nearest Natura 2000 Sites (100m to Ballyallia Lake SAC and Ballyallia Lough SPA), the proximity of the subject site to the Drumcliff Stream (170m), the nature of the proposed construction works, and the topographical nature of the subject site, it is considered that, out of an abundance of caution, the ZOI of the proposed project includes the site outline and Natura 2000 sites located proximate to the subject site (Ballyallia Lake SAC and Ballyallia Lough SPA). In the absence of mitigation, there is the potential for dust, pollution and surface water runoff to enter the Drumcliff Stream during construction with the potential for downstream impacts on Ballyallia Lake SAC and Ballyallia Lough SPA.

In the interest of carrying out a thorough assessment in line with both the Habitats Directive, and the precautionary principle, the area of assessment was expanded to include designated sites within 15km of the proposed development site, and sites beyond 15km with the potential for a hydrological connection. This was done in the interest of ensuring that any pathways, however indirect or remote, were taken into account. All Natura 2000 sites within 15km, and beyond 15km with the potential for a hydrological pathway are listed in Table 1. The qualifying interests, and the potential impact of the development on each European site and qualifying interest, are screened in/out in Table 2. SPA’s and SAC’s within 15km are seen in Figures 7 & 8. Waterbodies, SACs, and SPAs within 5km are demonstrated in Figures 9-11.

Table 1. Proximity to designated sites of conservation importance

Site Code	European Site	Distance
Special Areas of Conservation		
IE000014	Ballyallia Lake SAC	100 m
IE002165	Lower River Shannon SAC	400 m
IE002247	Toonagh Estate SAC	3 km
IE000032	Dromore Woods and Loughs SAC	3.9 km
IE000037	Pouladatig Cave SAC	4.5 km
IE002091	Newhall and Edenvale Complex SAC	5 km
IE002246	Ballycullinan, Old Domestic Building SAC	6.3 km
IE000016	Ballycullinan Lake SAC	6.5 km
IE001926	East Burren Complex SAC	7.1 km
IE002010	Old Domestic Building (Keevagh) SAC	8 km
IE000057	Moyree River System SAC	8.4 km
IE000019	Ballyogan Lough SAC	9.8 km
IE002318	Knockanira House SAC	10 km
IE002314	Old Domestic Buildings, Rylane SAC	10.3 km
IE000064	Poulnagordon Cave (Quin) SAC	10.8 km
IE002157	Newgrove House SAC	11 km
IE000051	Lough Gash Turlough SAC	13 km
Special Protection Areas		
IE004041	Ballyallia Lough SPA	100 m
IE004077	River Shannon and River Fergus Estuaries SPA	5.9 km
IE004168	Slieve Aughty Mountains SPA	8 km
IE004220	Corofin Wetlands SPA	8.4 km

Table 2. Initial screening of NATURA 2000 sites within 15km and NATURA 2000 sites within 15km with potential of hydrological connection to the proposed development

European Site code	Name	Screened IN/OUT	Details/Reason
IE000014	Ballyallia Lake SAC	IN	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interest</p> <p>Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150]</p> <p>Potential Impact</p> <p>The proposed development site is located 100m from this SAC on the far side of the existing graveyard to the north of the site. There is no direct hydrological pathway to the SAC.</p> <p>There is an indirect hydrological connection to this SAC via surface water drainage during construction.</p> <p>During the construction phase of development, given the nature of the proposed works (including minor reprofiling, excavations, and earthworks) which will involve the use of machinery and transportation of materials, it is considered that there is the potential for dust and contaminated (silt) surface water runoff to enter topographically down-gradient waterbodies (including Drumcliff Stream and Poulacorry River), which ultimately outfall to the Ballyallia Lough. Mitigation measures are required to ensure that there are no likely significant effects on the Qualifying Interest of this SAC.</p> <p>During operation, surface water drainage will infiltrate to ground via 5 no. proposed soakaways. As detailed in the Hydrological and Hydrogeological Assessment accompanying this planning application: <i>'An impact assessment of potential groundwater effects has also been completed.</i></p> <p><i>Due to the underlying thickness of subsoils, which provide a substantial protective layer to the underlying aquifer and the geophysical inference of good, clean, non-karstified limestone underlying the proposed extension site, the conclusion of the assessment process is that there will be no significant effects on groundwater quality as a result of the proposed development.'</i> Therefore, no significant effects on the Qualifying Interest of this SAC are likely via surface water drainage during operation.</p> <p>In the absence of mitigation measures, and out of an abundance of caution, it is considered that significant effects on the qualifying interests of this SAC are likely via surface water drainage during the construction phase of development.</p> <p>Stage 2 AA (Natura Impact Statement) is Required.</p>

European Site code	Name	Screened IN/OUT	Details/Reason
IE002165	Lower River Shannon SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interest</p> <p>Sandbanks which are slightly covered by sea water all the time [1110] Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Coastal lagoons [1150] Large shallow inlets and bays [1160] Reefs [1170] Perennial vegetation of stony banks [1220] Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>) [6410] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0] <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] <i>Petromyzon marinus</i> (Sea Lamprey) [1095] <i>Lampetra planeri</i> (Brook Lamprey) [1096] <i>Lampetra fluviatilis</i> (River Lamprey) [1099] <i>Salmo salar</i> (Salmon) [1106] <i>Tursiops truncatus</i> (Common Bottlenose Dolphin) [1349] <i>Lutra lutra</i> (Otter) [1355]</p> <p>Potential Impact</p> <p>The proposed development site is located 400m from this SAC on the far side of the Ennis WwTP. There is no direct hydrological pathway to the SAC.</p> <p>There is an indirect hydrological connection to this SAC via surface water drainage during construction and operation. Surface water drainage will infiltrate into the ground and may enter topographically down-gradient waterbodies (including Drumcliff Stream and Poulacorry River), which ultimately outfall to the Ballyallia Lough. Given the scale of the proposed development, natural infiltration of groundwater through subsoils, and distance to this SAC across a complex watercourse network that outfalls to the Ballyallia Lough, no significant effects on the Qualifying Interests of this SAC are likely. Any silt or pollutants that may enter topographically down-gradient waterbodies will settle, be dispersed, or diluted within the ground (infiltration through subsoils), the existing watercourse network, and within Ballyallia Lough. In the absence of mitigation, the construction</p>

European Site code	Name	Screened IN/OUT	Details/Reason
			<p>and operation of the proposed development will not impact on the conservation interests of the site.</p> <p>Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE002247	Toonagh Estate SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p><i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303]</p> <p>Potential Impact</p> <p>The proposed development is located 3 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE000032	Dromore Woods and Loughs SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interest</p> <p>Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels [6430] Limestone pavements [8240] <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303] <i>Lutra lutra</i> (Otter) [1355]</p> <p>Potential Impact</p> <p>The proposed development is located 3.9 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>

European Site code	Name	Screened IN/OUT	Details/Reason
IE000037	Pouladatig Cave SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interest</p> <p>Caves not open to the public [8310] <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303]</p> <p>Potential Impact</p> <p>The proposed development is located 4.5 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE002091	Newhall and Edenvale Complex SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p>Caves not open to the public [8310] <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303]</p> <p>Potential Impact</p> <p>The proposed development is located 5 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE002246	Ballycullinan, Old Domestic Building SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p><i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303]</p> <p>Potential Impact</p> <p>The proposed development is located 6.3 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation</p>

European Site code	Name	Screened IN/OUT	Details/Reason
			<p>measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE000016	Ballycullinan Lake SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p>Calcareous fens with <i>Cladium mariscus</i> and species of the Caricion <i>davallianae</i> [7210]</p> <p>Potential Impact</p> <p>The proposed development is located 6.5 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE001926	East Burren Complex SAC		<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p>Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. [3140]</p> <p>Turloughs [3180]</p> <p>Water courses of plain to montane levels with the Ranunculion <i>fluitantis</i> and Callitriche-Batrachion vegetation [3260]</p> <p>Alpine and Boreal heaths [4060]</p> <p>Juniperus communis formations on heaths or calcareous grasslands [5130]</p> <p>Calaminarian grasslands of the <i>Violetalia calaminariae</i> [6130]</p> <p>Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210]</p> <p>Lowland hay meadows (<i>Alopecurus pratensis</i>, <i>Sanguisorba officinalis</i>) [6510]</p> <p>Calcareous fens with <i>Cladium mariscus</i> and species of the Caricion <i>davallianae</i> [7210]</p> <p>Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220]</p> <p>Alkaline fens [7230]</p> <p>Limestone pavements [8240]</p> <p>Caves not open to the public [8310]</p> <p>Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0]</p> <p><i>Euphydryas aurinia</i> (Marsh Fritillary) [1065]</p> <p><i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303]</p>

European Site code	Name	Screened IN/OUT	Details/Reason
			<p><i>Lutra lutra</i> (Otter) [1355]</p> <p>Potential Impact</p> <p>The proposed development is located 7.1 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE002010	Old Domestic Building (Keavagh) SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p><i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303]</p> <p>Potential Impact</p> <p>The proposed development is located 8 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE000057	Moyree River System SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p>Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation [3260] Alkaline fens [7230] Limestone pavements [8240] Caves not open to the public [8310] <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303] <i>Lutra lutra</i> (Otter) [1355]</p> <p>Potential Impact</p> <p>The proposed development is located 8.4 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>

European Site code	Name	Screened IN/OUT	Details/Reason
IE000019	Ballyogan Lough SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p>Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210]</p> <p>Limestone pavements [8240]</p> <p>Potential Impact</p> <p>The proposed development is located 9.8 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE002318	Knockanira House SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p><i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303]</p> <p>Potential Impact</p> <p>The proposed development is located 10 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE002314	Old Domestic Buildings, Rylane SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p><i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303]</p> <p>Potential Impact</p> <p>The proposed development is located 10.3 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate</p>

European Site code	Name	Screened IN/OUT	Details/Reason
			<p>environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE000064	Poulnagordon Cave SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p>Caves not open to the public [8310]</p> <p><i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303]</p> <p>Potential Impact</p> <p>The proposed development is located 10.8 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE002157	Newgrove House SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p><i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303]</p> <p>Potential Impact</p> <p>The proposed development is located 11 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE000051	Lough Gash Turlough SAC	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p>Turloughs [3180]</p> <p>Rivers with muddy banks with <i>Chenopodium rubri</i> p.p. and <i>Bidention</i> p.p. vegetation [3270]</p>

European Site code	Name	Screened IN/OUT	Details/Reason
			<p>Potential Impact</p> <p>The proposed development is located 13 km from the SAC. There is no direct or indirect hydrological pathway to the SAC. Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
Special Protection Areas			
IE004041	Ballyallia Lough SPA	IN	<p>Conservation Objectives</p> <p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.</p> <p>To maintain or restore the favourable conservation condition of the wetland habitat at Ballyallia Lough SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.</p> <p>Qualifying Interests</p> <p>Wigeon (<i>Anas penelope</i>) [A050] Gadwall (<i>Anas strepera</i>) [A051] Teal (<i>Anas crecca</i>) [A052] Mallard (<i>Anas platyrhynchos</i>) [A053] Shoveler (<i>Anas clypeata</i>) [A056] Coot (<i>Fulica atra</i>) [A125] Black-tailed Godwit (<i>Limosa limosa</i>) [A156] Wetland and Waterbirds [A999]</p> <p>Potential Impact</p> <p>The proposed development site is located 100m from this SPA on the far side of the existing graveyard to the north of the site. There is no direct hydrological pathway to the SPA.</p> <p>There is an indirect hydrological connection to this SPA via surface water drainage during construction.</p> <p>During the construction phase of development, given the nature of the proposed works (including minor reprofiling, excavations, and earthworks) which will involve the use of machinery and transportation of materials, it is considered that there is the potential for dust and contaminated (silt) surface water runoff to enter topographically down-gradient waterbodies (including Drumcliff Stream and Poulacorry River), which ultimately outfall to the Ballyallia Lough. Mitigation measures are required to ensure that there are no likely significant effects on the Qualifying Interest of this SPA.</p> <p>During operation, surface water drainage will infiltrate to ground via 5 no. proposed soakaways. As detailed in the Hydrological and Hydrogeological Assessment accompanying this planning application: <i>'An impact assessment of potential groundwater effects has also been completed.</i></p> <p><i>Due to the underlying thickness of subsoils, which provide a substantial protective layer to the underlying aquifer and the geophysical inference of good, clean, non-karstified limestone underlying the proposed extension site, the conclusion of the assessment process is that there</i></p>

European Site code	Name	Screened IN/OUT	Details/Reason
			<p><i>will be no significant effects on groundwater quality as a result of the proposed development.</i></p> <p>During the construction phase of development, given the nature of the proposed works (including site levelling, excavations, and earthworks) which will involve the use of machinery and transportation of materials, it is considered that there is the potential for contaminated surface water runoff to enter topographically down-gradient waterbodies (including Drumcliff Stream and Poulacorry River), which ultimately outfall to the Ballyallia Lough. Mitigation measures are required to ensure that there are no likely significant effects on the Qualifying Interest of this SPA.</p> <p>Given that this SPA is located 100m from the proposed development site, within the environs of an existing graveyard, the qualifying interests of the site would be accustomed to the activity, including excavators, in the intervening areas. It is unlikely that noise levels during construction and operation will impact on the designated qualifying interests of this site which is on the far side of an existing graveyard.</p> <p>In the absence of mitigation measures, and out of an abundance of caution, it is considered that significant effects on the qualifying interests of this SPA are likely via surface water drainage during the construction phase of development.</p> <p>Stage 2 AA (Natura Impact Statement) is Required.</p>
IE004077	River Shannon and River Fergus Estuaries SPA	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p>Cormorant (<i>Phalacrocorax carbo</i>) [A017] Whooper Swan (<i>Cygnus cygnus</i>) [A038] Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] Shelduck (<i>Tadorna tadorna</i>) [A048] Wigeon (<i>Anas penelope</i>) [A050] Teal (<i>Anas crecca</i>) [A052] Pintail (<i>Anas acuta</i>) [A054] Shoveler (<i>Anas clypeata</i>) [A056] Scaup (<i>Aythya marila</i>) [A062] Ringed Plover (<i>Charadrius hiaticula</i>) [A137] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Grey Plover (<i>Pluvialis squatarola</i>) [A141] Lapwing (<i>Vanellus vanellus</i>) [A142] Knot (<i>Calidris canutus</i>) [A143] 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] Greenshank (<i>Tringa nebularia</i>) [A164] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Wetland and Waterbirds [A999]</p>

European Site code	Name	Screened IN/OUT	Details/Reason
			<p>Potential Impact</p> <p>The proposed development is located 5.9 km from the SPA. There is no direct or indirect hydrological pathway to the SPA.</p> <p>Given the minimum distance to this SPA (5.9 km), no significant noise or vibration impacts on the qualifying interests of this SPA are foreseen.</p> <p>Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE004168	Slieve Aughty Mountains SPA	OUT	<p>Conservation Objectives</p> <p>The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.</p> <p>Qualifying Interests</p> <p>Hen Harrier (<i>Circus cyaneus</i>) [A082] Merlin (<i>Falco columbarius</i>) [A098]</p> <p>Potential Impact</p> <p>The proposed development is located 8 km from the SPA. There is no direct or indirect hydrological pathway to the SPA.</p> <p>Given the minimum distance to this SPA (8 km), no significant noise or vibration impacts on the qualifying interests of this SPA are foreseen.</p> <p>Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>
IE004220	Corofin Wetlands SPA	OUT	<p>Conservation Objectives</p> <p>To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.</p> <p>To maintain or restore the favourable conservation condition of the wetland habitat at Corofin Wetlands SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.</p> <p>Qualifying Interests</p> <p>Little Grebe (<i>Tachybaptus ruficollis</i>) [A004] Whooper Swan (<i>Cygnus cygnus</i>) [A038] Wigeon (<i>Anas penelope</i>) [A050] Teal (<i>Anas crecca</i>) [A052] Black-tailed Godwit (<i>Limosa limosa</i>) [A156] Wetland and Waterbirds [A999]</p> <p>Potential Impact</p> <p>The proposed development is located 8.4 km from the SPA. There is no direct or indirect hydrological pathway to the SPA.</p>

European Site code	Name	Screened IN/OUT	Details/Reason
			<p>Given the minimum distance to this SPA (8.4 km), no significant noise or vibration impacts on the qualifying interests of this SPA are foreseen.</p> <p>Impacts caused by the proposed development, in the absence of any mitigation measures, would be expected to be localised to the immediate environs of the site. No lighting is proposed on site. No impacts on the qualifying interests of this European site are foreseen.</p> <p>No significant effects are likely.</p>

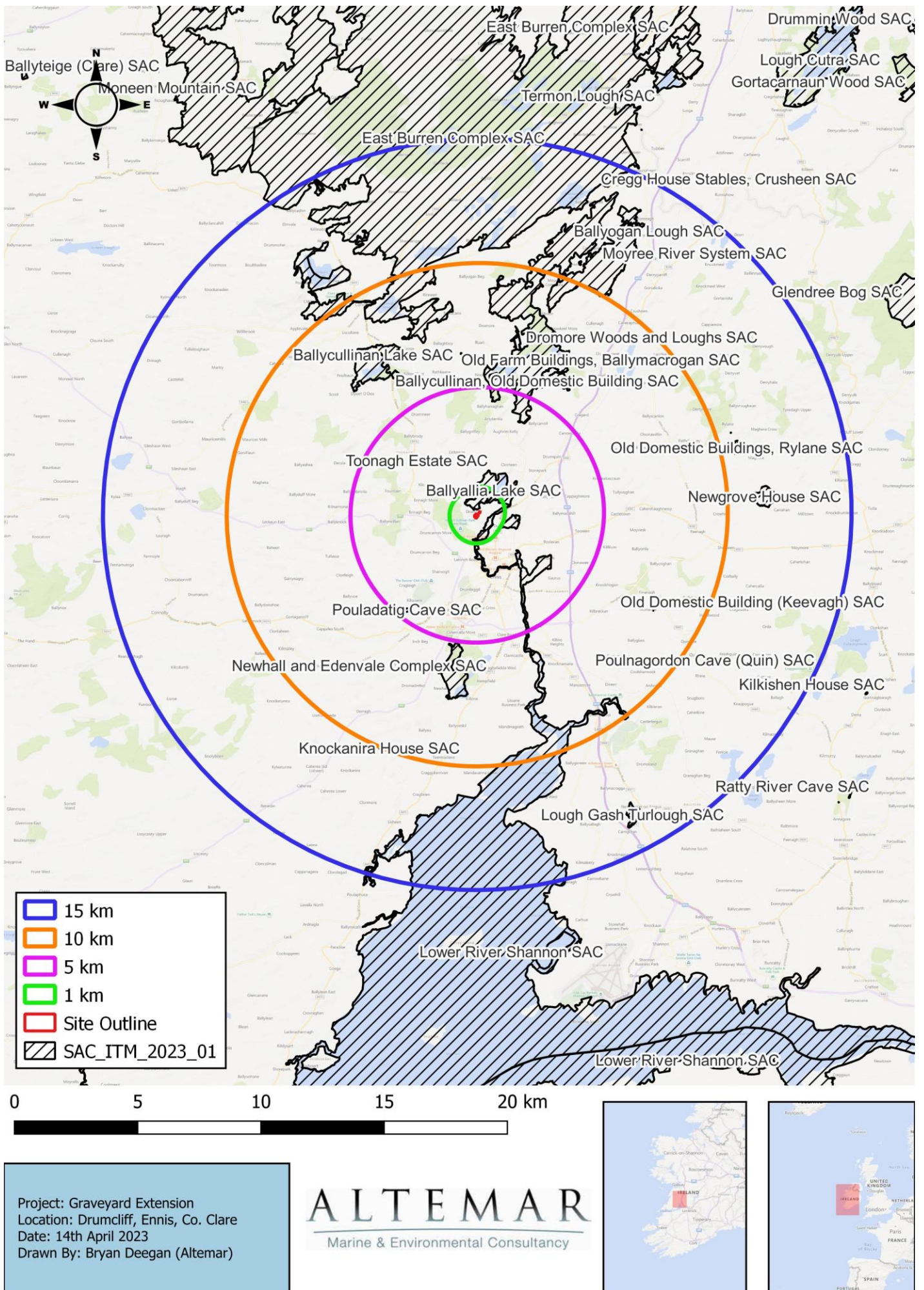


Figure 7. Special Areas of Conservation located within 15km of the proposed development

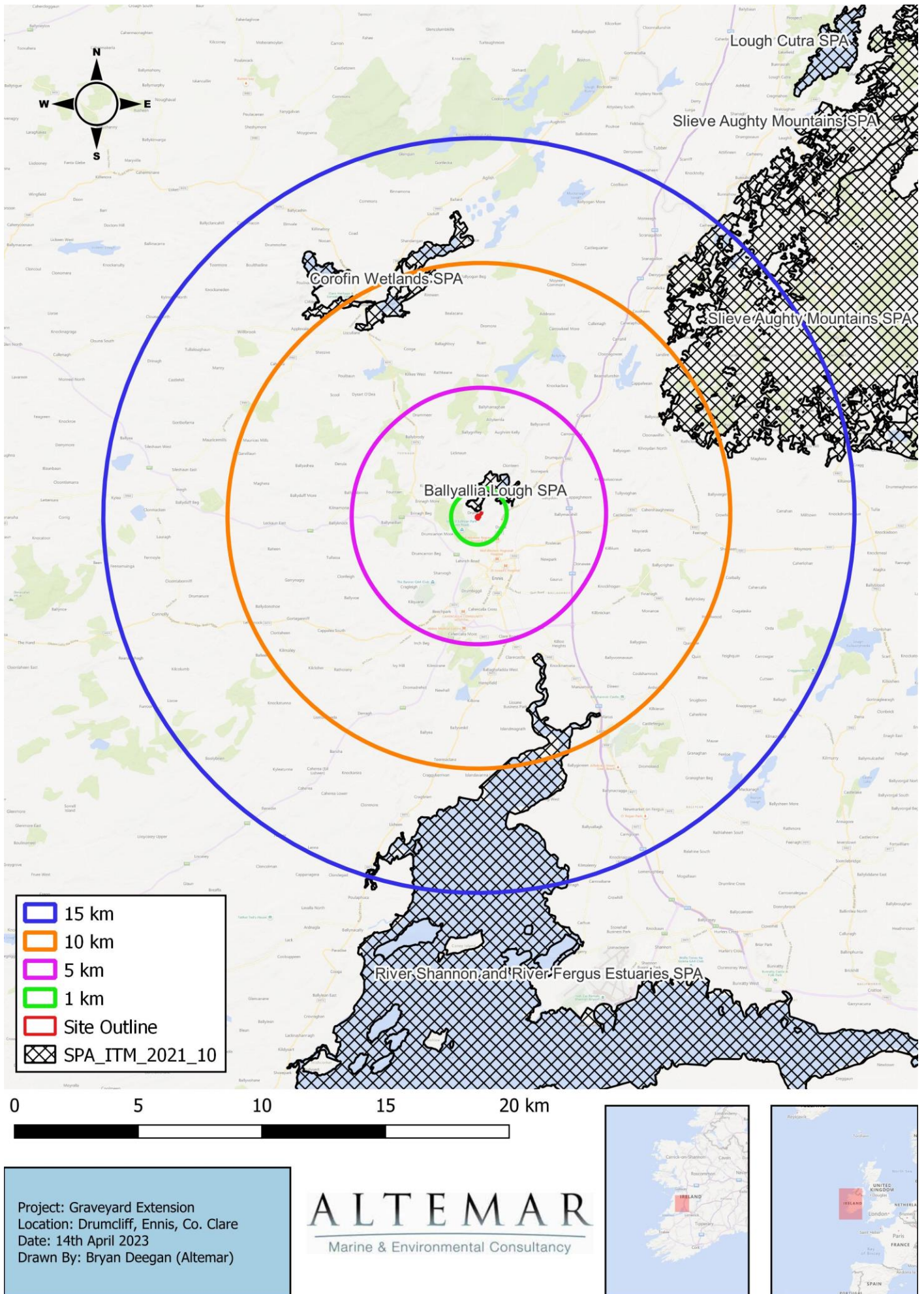
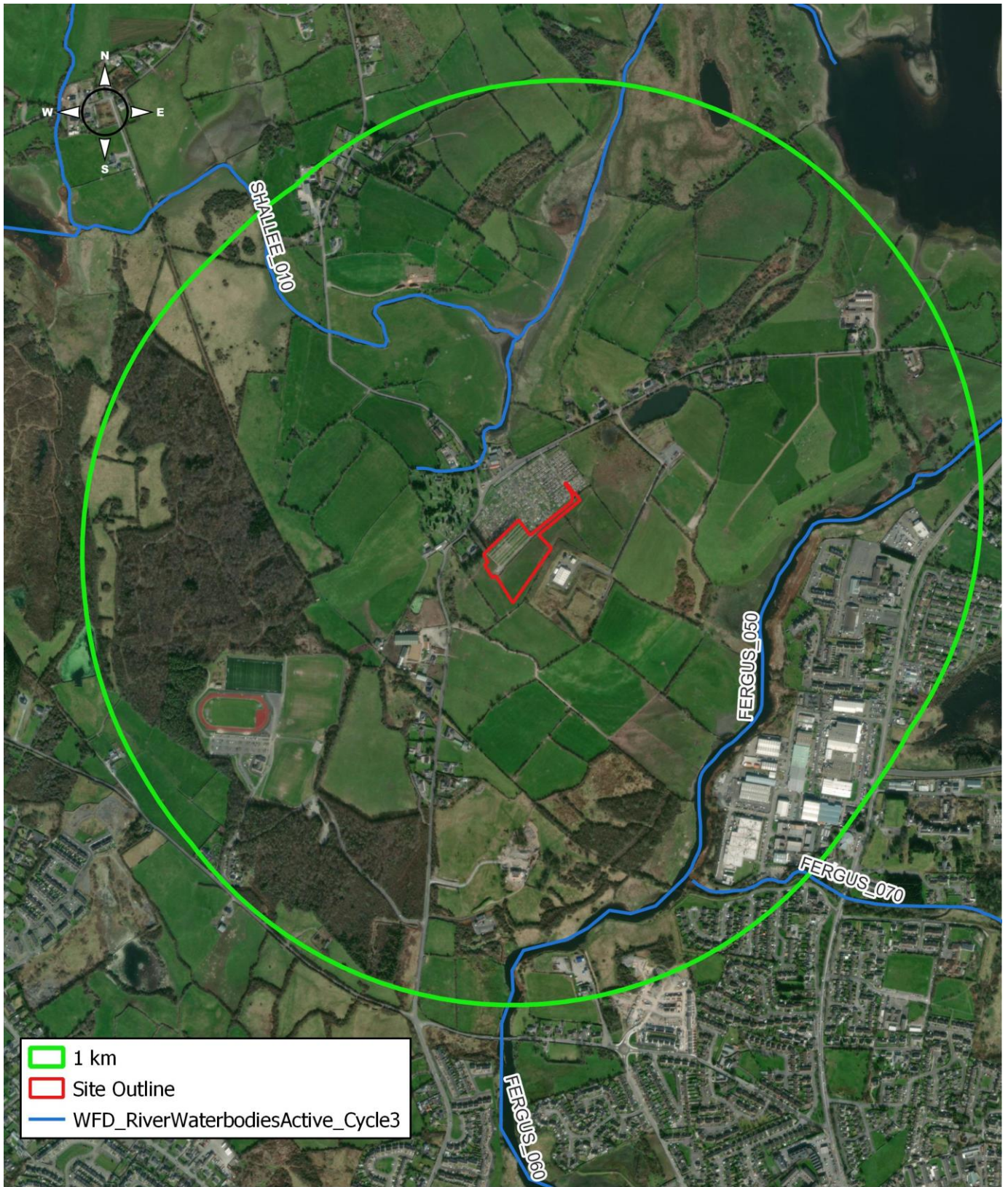
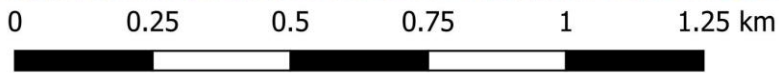


Figure 8. Special Protected Areas located within 15km of the proposed development



- 1 km
- Site Outline
- WFD_RiverWaterbodiesActive_Cycle3



Project: Graveyard Extension
 Location: Drumcliff, Ennis, Co. Clare
 Date: 14th April 2023
 Drawn By: Bryan Deegan (Altamar)



Figure 9. Watercourses proximate to the proposed development

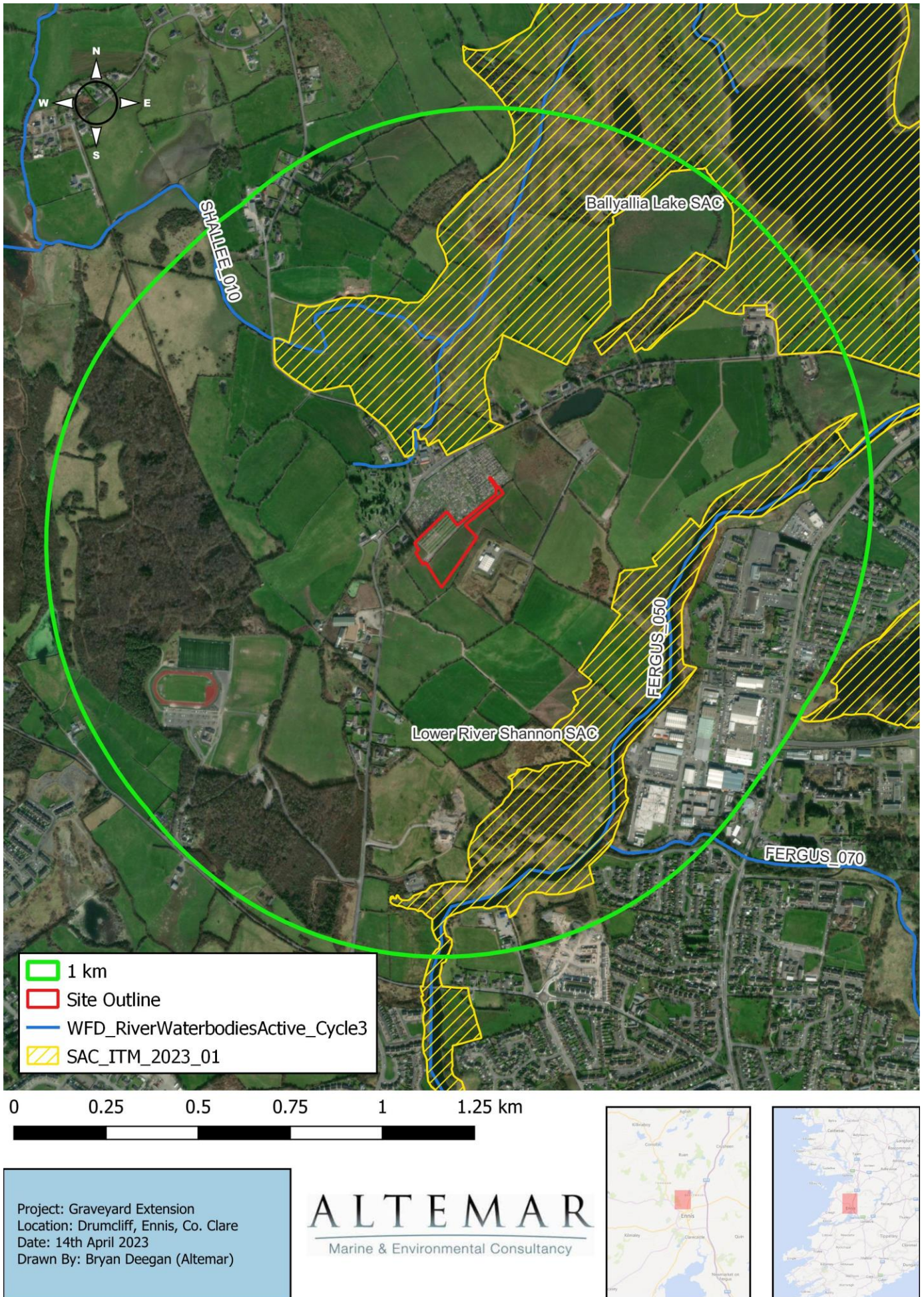
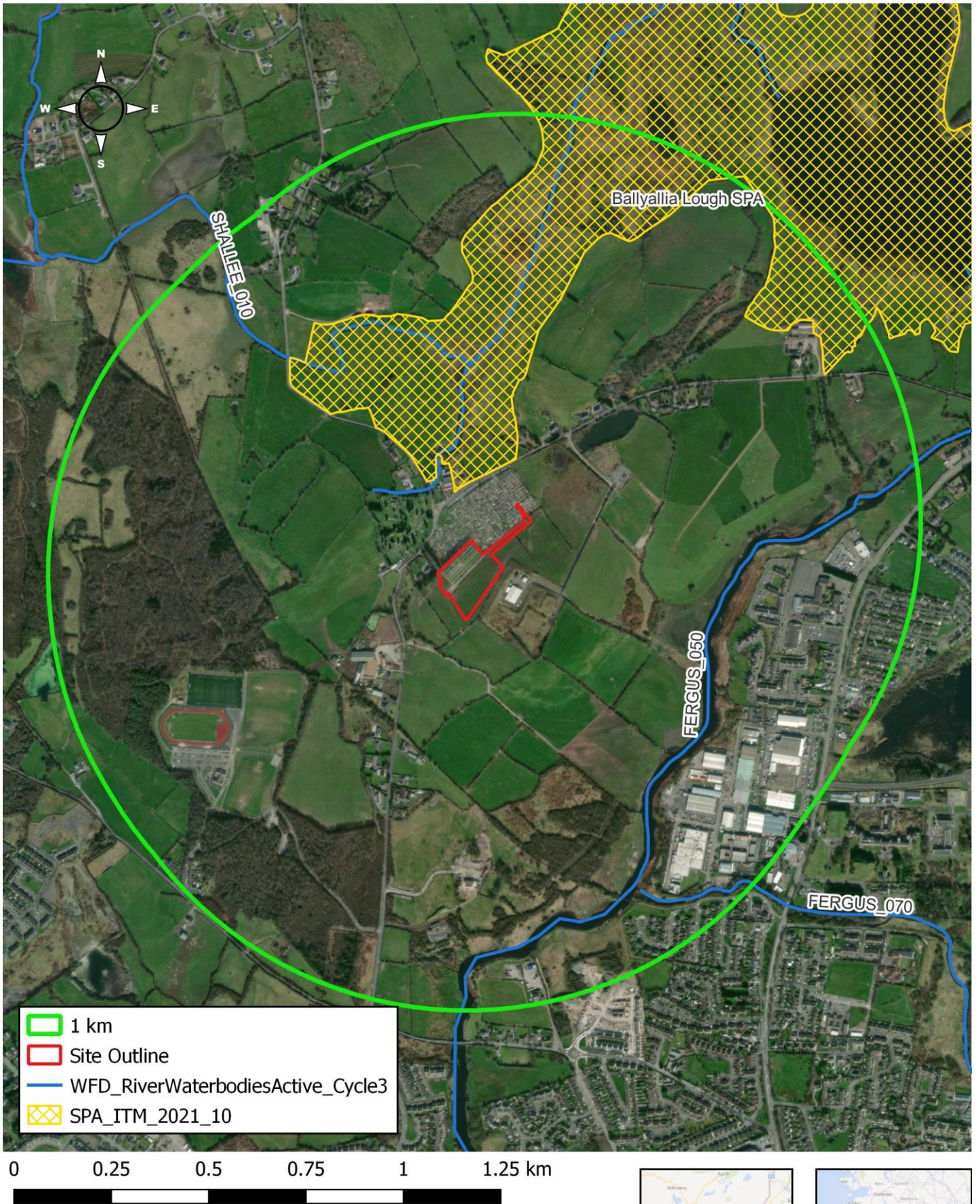


Figure 10. Watercourses and SACs in proximity to the proposed development



Project: Graveyard Extension
 Location: Drumcliff, Ennis, Co. Clare
 Date: 14th April 2023
 Drawn By: Bryan Deegan (Altamar)

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 Marine & Environmental Consultancy



Figure 11. Watercourses and SPAs in proximity to the proposed development

In-Combination Effects

There are several proposed developments located in the area surrounding the subject site. The following is a list of planning applications as identified on the Department of Housing, Local Government and Heritage's 'National Planning Application Database' portal²:

Table 3. In-combination Effects Assessed

Ref. No.	Address	Proposal
21664	Ballymaley, Ennis, Co Clare	for development at Ballymaley, Ennis, Co Clare. The proposed development will consist of 24 No. 4 bedroom detached houses, comprising 19 No. 2 storey houses with second floor dormer rooms (Type A) 2 No. 2 storey houses (Type B), 3 No. 2 storey houses, Type B1, new site entrances, roads, paths, driveways, boundary walls, pedestrian walkway, landscaping, drainage with attenuation tank and associated site works.
20297	Drumcliff, Ennis, Co. Clare	the development will consist of: demolition of an existing dwelling house and construction of a single replacement dwelling house, provision of a new vehicular access onto the Drumcliff Road, provision of a new waste water treatment system, percolation area, and connections ancillary to the residential development, appropriate landscaping and boundary treatments, as well as all associated site development works and services

It is considered that in combination effects with other existing and proposed developments in proximity to the application area would be unlikely, neutral, not significant and localised. It is concluded that no significant effects on Natura 2000 sites will be seen as a result of the proposed development alone or combination with other projects.

From a review of the above, it is concluded that no projects in the vicinity of the proposed development would be seen to have a significant in combination effect on Natura 2000 sites.

² <https://housinggov.ie/maps.arcgis.com/apps/webappviewer/index.html?id=9cf2a09799d74d8e9316a3d3a4d3a8de>

Conclusions

An initial screening of the proposed works, using the precautionary principle (without the use of any standard construction phase controls or mitigation measures) and the Source/Pathway/Receptor links between the proposed works and Natura 2000 sites with the potential to result in significant effects on the conservation objectives and features of interest of the Natura 2000 sites was carried out in Table 2. Based on best scientific knowledge and objective information and assessment, the possibility of significant effects caused by the proposed project was excluded for the following Natura 2000 sites:

Special Areas of Conservation

- Lower River Shannon SAC
- Toonagh Estate SAC
- Dromore Woods and Loughs SAC
- Pouladatig Cave SAC

Given the distance between the subject site to the nearest Natura 2000 Sites (100m to Ballyallia Lake SAC and Ballyallia Lough SPA), the proximity of the subject site to the Drumcliff Stream (170m), the nature of the proposed construction works, and the topographical nature of the subject site, it is considered that, out of an abundance of caution, the ZOI of the proposed project includes the site outline and Natura 2000 sites located proximate to the subject site (Ballyallia Lake SAC and Ballyallia Lough SPA). In the absence of mitigation, there is the potential for dust, pollution and surface water runoff to enter topographically down-gradient waterbodies (including Drumcliff Stream and Poulacorry River) during construction with the potential for downstream impacts on Ballyallia Lake SAC and Ballyallia Lough SPA.

As detailed in the Hydrological and Hydrogeological Assessment accompanying this planning application: *'Due to the underlying thickness of subsoils, which provide a substantial protective layer to the underlying aquifer and the geophysical inference of good, clean, non-karstified limestone underlying the proposed extension site, the conclusion of the assessment process is that there will be no significant effects on groundwater quality as a result of the proposed development.'*

Acting on a strictly precautionary basis, an NIS is required in respect of the effects of the project Ballyallia Lake SAC and Ballyallia Lough SPA because it cannot be excluded on the basis of best objective scientific information following screening, in the absence of control or mitigation measures that the plan or project, individually and/or in combination with other plans or projects, will have a significant effect on the named European Site/s.

An NIS or Stage 2 Appropriate Assessment is not required for the effects of the project on all other listed Natura sites and those beyond 15km because it can be excluded on the basis of the best objective scientific information following screening that the plan or project, individually and/or in combination with other plans or projects, will have a significant effect on the European Site/s.

A Natura Impact Statement is required for the proposed development.

Stage 2: Natura Impact Statement

A Natura Impact Statement (NIS) is Stage 2 of the Appropriate Assessment process. In the case of the proposed extension to the existing graveyard at Drumcliff, Ennis, Co. Clare, acting on a strictly precautionary basis an NIS is required in respect of the effects of the project on the Ballyallia Lake SAC and Ballyallia Lough SPA (downstream impacts during construction) because it cannot be excluded on the basis of best objective scientific information, in the absence of control or mitigation measures, following screening that the plan or project, individually and/or in combination with other plans or projects, will have a significant effect on the named European Site/s.

A Stage 2 Appropriate Assessment or NIS is not required for the effects of the project on all other listed Natura sites because it can be excluded on the basis of the best objective scientific information following screening that the plan or project, individually and/or in combination with other plans or projects, will have a significant effect on the European Site/s.

The NIS evaluates the potential for direct, indirect effects, alone or in combination with other plans and projects having taken into account the use of mitigation measures. A further review of the Conservation Objectives and features of interest is necessary to determine if significant effects are likely to impact the SAC and/or SPA.

Ballyallia Lake SAC (Site code: 000014)

As outlined in the Ballyallia Lake SAC Site Synopsis (NPWS, Version date 20.06.2013)³:

'Ballyallia Lake is a relatively small, shallow lake situated on the River Fergus approximately 4 km north of Ennis, Co. Clare. It is a naturally eutrophic lake, a habitat listed on Annex I of the E.U. Habitats Directive. The lake, which is base-rich with relatively clear water, is set amongst heavily farmed land to the north and south, with a low-lying floodplain of wet grassland and rough grazing to the west.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (= priority; numbers in brackets are Natura 2000 codes):*

[3150] Natural Eutrophic Lakes

*Habitat and species diversity around the lake is low and only a few emergent plants are found, e.g. Common Club-rush (*Scirpus lacustris*) and Common Reed (*Phragmites australis*). Lough Girroga, about 1 km to the south of Ballyallia, is included in the site. It is a small lake with a high diversity of vegetation communities and plant species. Here there is a well-developed reed fringe with a fen-like community of Great Fensedge (*Cladium mariscus*), Common Club-rush, Purple Moor-grass (*Molinia caerulea*) and the less common Black Bog-rush (*Schoenus nigricans*). A well-established Hazel (*Corylus avellana*) woodland slopes down to the northern lakeshore.*

Ballyallia Lake is also a Special Protection Area (SPA) for birds and a Wildfowl Sanctuary. The lake and the floodplain to the west hold nationally important numbers of Shoveler (120), Wigeon (1,200), Coot (300), Mallard (600) and Gadwall (76). Significant numbers of Whooper Swan (80), an Annex I species under the Birds Directive, also use the site. Other regular wintering species include Teal (170), Lapwing (1100), Tufted Duck (188), Pintail (35) and Little Grebe (38) (all counts are maxima from 1994/95 - 1995/96).

Agricultural improvement to the lands surrounding the lakes poses a significant threat to the water quality of the system.'

³ <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY000014.pdf>

Ballyallia Lough SPA (Site code: 004041)

As outlined in the Ballyallia Lough SPA Site Synopsis (NPWS, Version date 07.07.2014)⁴:

*'Ballyallia Lough is a relatively small lake located on the River Fergus, a little north of Ennis town, Co. Clare. It is a shallow system but can rise substantially during winter floods. Habitat and species diversity around the lake is fairly low and only a few emergent plants are found, such as Common Club-rush (*Scirpus lacustris*) and Common Reed (*Phragmites australis*). A low-lying flood plain of wet grassland and rough pasture grazing land to the west is included within the site. The lake is used for a range of recreational activities.*

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Wigeon, Gadwall, Teal, Mallard, Shoveler, Coot and Black-tailed Godwit. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

The site supports a good diversity of wintering waterfowl, including swans, dabbling duck, diving duck and some waders. Seven of the species have populations of national importance (all figures given are mean peaks for the 4 winters 1995/96-1998/99): Wigeon (1,469), Gadwall (68), Mallard (502), Teal (863), Shoveler (288), Coot (331) and Black-tailed Godwit (278). The Shoveler population is the largest in the country (9.6% of the All-Ireland total), while that of Gadwall is also very notable (10.3% of the All-Ireland total). Other species which occur include Little Grebe (37), Whooper Swan (65), Pintail (18), Pochard (33), Tufted Duck (153), Lapwing (930), Mute Swan (28), Grey Heron (11), Cormorant (13), Greylag Goose (9) and Black-headed Gull (443).

The quality of the habitat for the birds is good and the site provides both feeding and roost sites for them. Some of the birds, especially Black-tailed Godwit, commute to the nearby River Fergus-River Shannon estuary.

Ballyallia Lough SPA is of considerable conservation significance for wintering waterfowl, having seven species with populations of national importance, those of Shoveler and Gadwall being of especial note. Also of note is the occurrence of Whooper Swan, a species that is listed on Annex I of the E.U. Birds Directive. Ballyallia Lough is a Ramsar Convention site and a Wildfowl Sanctuary.'

The Qualifying Interests (QI) (Features of Interest), Special Conservation Interests (SCIs) for the SPA site and the National conservation status of the QI of the Natura 2000 site subject to the NIS are seen in Table 4. The site specific conservation Objectives for the Natura 2000 sites are seen in Table 5.

⁴ <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004041.pdf>

Table 4. Qualifying Interests, Conservation Status, Management Objectives, Conditions underpinning site integrity for relevant European sites

Qualifying Interests, Conservation Status, Management Objectives, Conditions underpinning site integrity for relevant European sites		
Natura 2000 Site Name & Code	Qualifying Interests	Current Conservation Status & Trend
Special Areas of Conservation (SAC)		
Ballyallia Lake SAC [000014]	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150]	Inadequate
Special Protection Areas (SPA)		
Ballyallia Lough SPA [004041]	Wigeon (<i>Anas penelope</i>) [A050] Gadwall (<i>Anas strepera</i>) [A051] Teal (<i>Anas crecca</i>) [A052] Mallard (<i>Anas platyrhynchos</i>) [A053] Shoveler (<i>Anas clypeata</i>) [A056] Coot (<i>Fulica atra</i>) [A125] Black-tailed Godwit (<i>Limosa limosa</i>) [A156] Wetland and Waterbirds [A999]	Amber Amber Amber Green Red Amber Amber N/A

Table 5. Detailed Conservation Objectives for Natura 2000 site

Ballyallia Lake SAC [000014]		
Attribute	Measure	Target
3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation To maintain the favourable conservation condition		
Habitat area	Hectares	Area stable or increasing, subject to natural processes
Habitat distribution	Occurrence	No decline, subject to natural processes.
Typical species	Occurrence	Typical species present, in good condition, and demonstrating typical abundances and distribution
Vegetation composition: characteristic zonation	Occurrence	All characteristic zones should be present, correctly distributed and in good condition
Vegetation distribution: maximum depth	Metres	Maintain maximum depth of vegetation, subject to natural processes
Hydrological regime: water level fluctuations	Metres	Maintain appropriate natural hydrological regime necessary to support the habitat
Lake substratum quality	Various	Maintain appropriate substratum type, extent and chemistry to support the vegetation
Water quality: transparency	Metres	Maintain appropriate Secchi transparency. There should be no decline in Secchi depth/transparency
Water quality: nutrients	µg/l P; mg/l N	Maintain the concentration of nutrients in the water column at sufficiently low levels to support the habitat and its typical species
Water quality: phytoplankton biomass	µg /l Chlorophyll a	Maintain appropriate water quality to support the habitat, including good chlorophyll a status
Water quality: phytoplankton composition	EPA phytoplankton composition metric	Maintain appropriate water quality to support the habitat, including good phytoplankton composition status
Water quality: attached algal biomass	Algal cover and EPA phytobenthos metric	Maintain trace/absent attached algal biomass (<5% cover) and good phytobenthos status
Water quality: macrophyte status	EPA macrophyte metric (The Free Index)	Maintain good macrophyte status
Acidification status	pH units; mg/l	Maintain appropriate water and sediment pH, alkalinity and cation concentrations to support the habitat, subject to natural processes
Water colour	mg/l	Maintain appropriate organic carbon levels to support the habitat
Turbidity	Nephelometric turbidity units/ mg/l SS/ other appropriate units	Maintain appropriate turbidity to support the habitat
Fringing habitat: area and condition	Hectares	Maintain the area and condition of fringing habitats necessary to support the natural structure and functioning of the lake habitat
Ballyallia Lough SPA [004041]		
Attribute	Measure	Target
[A050] Wigeon (<i>Anas penelope</i>); [A051] Gadwall (<i>Anas strepera</i>); [A052] Teal (<i>Anas crecca</i>); [A053] Mallard (<i>Anas platyrhynchos</i>); [A056] Shoveler (<i>Anas clypeata</i>); [A125] Coot (<i>Fulica atra</i>); [A156] Black-tailed Godwit (<i>Limosa limosa</i>) To maintain / restore the favourable conservation condition		
Population trend	Percentage change	Long term population trend stable or increasing
Distribution	Range, timing and intensity of use of areas	There should be no significant decrease in the range, timing or intensity of use of areas by Great Northern Diver, other than that occurring from natural patterns of variation
A999 Wetlands		
Wetland habitat area	Hectares	The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 10,461ha, other than that occurring from natural patterns of variation

Analysis of the Potential Impacts

Clare County Council intend to apply for planning permission for the proposed extension to the existing graveyard at Drumcliff, Ennis, Co.

Impacts of the proposed works

The proposed development is not within a designated conservation site. The nearest Natura 2000 sites are Ballyallia Lake SAC and Ballyallia Lough SPA, located 100m north of the proposed works. Given the distance between the subject site to the nearest Natura 2000 Sites (100m to Ballyallia Lake SAC and Ballyallia Lough SPA), the proximity of the subject site to the Drumcliff Stream (170m), the nature of the proposed construction works, and the topographical nature of the subject site, it is considered that, out of an abundance of caution, the ZOI of the proposed project includes the site outline and Natura 2000 sites located proximate to the subject site (Ballyallia Lake SAC and Ballyallia Lough SPA). In the absence of mitigation, there is the potential for dust, pollution and surface water runoff to enter topographically down-gradient waterbodies (including Drumcliff Stream and Poulacorry River) during construction with the potential for downstream impacts on the integrity of Ballyallia Lake SAC and Ballyallia Lough SPA.

The potential impacts on Natura 2000 sites are seen in Table 6. The proposed construction works would impact on the existing ecology of the site and the surrounding area. Out of an abundance of caution it is considered that, in the absence of mitigation, this could lead to the transportation of dust, pollution and contaminated surface water runoff to topographically down-gradient waterbodies with the potential for downstream impacts on Ballyallia Lake SAC and Ballyallia Lough SPA.

Construction phase mitigation measures are required on site particularly as clearance of the site is proposed which will remove all existing terrestrial habitats and in the absence of mitigation could lead to silt laden and contaminated runoff entering topographically down-gradient waterbodies (including Drumcliff Stream and Poulacorry River) and downstream Natura 2000 sites. Mitigation measures are required to ensure compliance with the Water Pollution Acts and Inland Fisheries Ireland guidance⁵.

Mitigation Measures

Construction and operational mitigation will be incorporated into the proposed development project to minimise the potential negative impacts within the Zone of Influence (ZOI) including the downstream Ballyallia Lake SAC and Ballyallia Lough SPA (Table 7).

⁵ <https://www.fisheriesireland.ie/documents/624-guidelines-on-protection-of-fisheries-during-construction-works-in-and-adjacent-to-waters/file.html>

Table 6. Potential for adverse effects on the qualifying interests and conservation objectives of Natura 2000 sites

Natura 2000 Site & Site Code	Qualifying Interests	Potential for Adverse Effects on Natura 2000 Sites
Ballyallia Lake SAC [000014]	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150]	<p>Works on site, dust and surface water runoff on site during construction may lead to silt or contaminated materials from site entering the Drumcliff Stream watercourse network and ultimately this SAC. Concrete, silt or pollution could enter topographically down-gradient waterbodies (including Drumcliff Stream and Poulacorry River) during enabling works including site clearance and reprofiling, if required during construction.</p> <p>The use of plant and machinery, as well as the associated temporary storage of construction materials, oils, fuels and chemicals could lead to pollution on site or in topographically down-gradient waterbodies. The storage of topsoil or works onsite could lead to dust, soil or silt laden runoff entering topographically down-gradient waterbodies. The use of haul roads could lead to silt laden runoff or dust with downstream effects on the SAC.</p> <p>Given the nature of the works, all of these effects would be expected to be localised in nature restricted to the immediate vicinity of the site and would have little effect on European sites. However, without the presence of mitigation measures there is a potential for downstream effects if significant quantities of pollution or silt were introduced into topographically down-gradient waterbodies (including Drumcliff Stream and Poulacorry River), leading to the Ballyallia Lake SAC.</p> <p>Given the nature of the potential effects outlined above, the proposed project could affect the:</p> <ol style="list-style-type: none"> Habitat area, Habitat distribution, Typical species, Vegetation composition: characteristic zonation, Vegetation distribution: maximum depth, Hydrological regime: water level fluctuations, Lake substratum quality, Water quality: transparency, Water quality: nutrients, Water quality: phytoplankton biomass, Water quality: phytoplankton composition, Water quality: attached algal biomass, Water quality: macrophyte status, Acidification status, Water colour, Turbidity, and Fringing habitat: area and condition of Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation <p>Mitigation measures are required during construction to limit the effect of the project on the qualifying interests of the proposed development site.</p>

Table 6. Potential for adverse effects on the qualifying interests and conservation objectives of Natura 2000 sites

Natura 2000 Site & Site Code	Qualifying Interests	Potential for Adverse Effects on Natura 2000 Sites
Ballyallia Lough SPA [004041]	<p>Wigeon (<i>Anas penelope</i>) [A050]</p> <p>Gadwall (<i>Anas strepera</i>) [A051]</p> <p>Teal (<i>Anas crecca</i>) [A052]</p> <p>Mallard (<i>Anas platyrhynchos</i>) [A053]</p> <p>Shoveler (<i>Anas clypeata</i>) [A056]</p> <p>Coot (<i>Fulica atra</i>) [A125]</p> <p>Black-tailed Godwit (<i>Limosa limosa</i>) [A156]</p> <p>Wetland and Waterbirds [A999]</p>	<p>Works on site, dust and surface water runoff on site during construction may lead to silt or contaminated materials from site entering the Drumcliff Stream watercourse network and ultimately this SPA. Concrete, silt or pollution could enter topographically down-gradient waterbodies (including Drumcliff Stream and Poulacorry River) during enabling works including site clearance and reprofiling, if required during construction. If on-site concrete production is required or cement works are carried out onsite, there is potential for downstream impacts on topographically down-gradient waterbodies and this SPA.</p> <p>The use of plant and machinery, as well as the associated temporary storage of construction materials, oils, fuels and chemicals could lead to pollution on site or in topographically down-gradient waterbodies. The storage of topsoil or works onsite could lead to dust, soil or silt laden runoff entering topographically down-gradient waterbodies. The use of haul roads could lead to silt laden runoff or dust with downstream effects on the SPA.</p> <p>Given the nature of the works, all of these effects would be expected to be localised in nature restricted to the immediate vicinity of the site and would have little effect on European sites. However, without the presence of mitigation measures there is a potential for downstream effects if significant quantities of pollution or silt were introduced into topographically down-gradient waterbodies (including Drumcliff Stream and Poulacorry River), leading to the Ballyallia Lough SPA.</p> <p>Given the nature of the potential effects outlined above, the proposed project could affect the:</p> <ol style="list-style-type: none"> 1. Distribution and Range, timing and intensity of use of areas of the SPA for [A050] Wigeon (<i>Anas penelope</i>); [A051] Gadwall (<i>Anas strepera</i>); [A052] Teal (<i>Anas crecca</i>); [A053] Mallard (<i>Anas platyrhynchos</i>); [A056] Shoveler (<i>Anas clypeata</i>); [A125] Coot (<i>Fulica atra</i>); [A156] Black-tailed Godwit (<i>Limosa limosa</i>) <p>Mitigation measures are required to limit the effect of the project on the qualifying interests of the proposed development site.</p>

Table 7. Mitigation Measures

Sensitive Receptors	Potential Impacts	Mitigation Measures
<p>Ballyallia Lake SAC [00014]</p> <p>Ballyallia Lough SPA [004041]</p>	<ul style="list-style-type: none"> • Habitat degradation • Dust deposition • Pollution • Silt ingress from site runoff • Downstream impacts 	<p>As detailed in the “Memo: Drumcliff PWS and Proposed Drumcliff Burial Ground” prepared by Hydro-Environmental Services to accompany this application, the following mitigation measures will be implemented during the construction phase of development:</p> <p><i>‘Management of surface water runoff and subsequent treatment before release off-site will be undertaken during construction work as follows:</i></p> <ul style="list-style-type: none"> • <i>lines of silt fencing will be constructed along the northern boundary of the site during construction;</i> • <i>All stockpiles will be damped down or covered in a sheet of polythene, as required, which will prevent the creation of nuisance dust, and will also prevent sediment runoff in times of heavy precipitation; and,</i> • <i>Restricting construction to within well marked areas, adherence to the non-carrying out of construction after or during heavy rainfall.</i> <p><i>The following measures in relation to the management of hydrocarbons and related oils/fuels will be implemented:</i></p> <ul style="list-style-type: none"> • <i>All plant and machinery will be serviced before being mobilised to site;</i> • <i>No plant maintenance will be completed on site, any broken down plant will be removed from site to be fixed;</i> • <i>Refuelling will be completed in a controlled manner using drip trays at all times;</i> • <i>Any fuel and chemical stores including tanks and drums will be regularly inspected for leaks and signs of damage;</i> • <i>Drip-trays will be used for fixed or mobile plant such as pumps and generators in order to retain oil leaks and spills;</i> • <i>Only designated trained operators will be authorised to refuel plant on site;</i> • <i>Procedures and contingency plans will be set up to deal with emergency accidents or spills; and,</i> • <i>An emergency spill kit with oil boom, absorbers etc. will be kept on-site for use in the event of an accidental spill.</i> <p><i>The following measures in relation to the management of cement-based products will be implemented:</i></p> <ul style="list-style-type: none"> • <i>No batching of wet-cement products will occur on site. Ready-mixed supply of wet concrete products and where possible, emplacement of pre-cast elements, will take place;</i> • <i>No washing out of any plant used in concrete transport or concreting operations will be allowed on-site;</i> • <i>The contractor will use weather forecasting to plan dry days for pouring concrete; and,</i> • <i>The pour site will be free of standing water, and plastic covers will be ready in case of a sudden rainfall event.’</i>

Further, as outlined in the Hydrological and Hydrogeological Assessment, the following mitigation measures will be implemented:

'Earthworks and Drainage Network Construction

Management of surface water runoff and subsequent treatment before release off-site will be undertaken during construction work as follows:

- *2 lines of silt fencing will be constructed along the northern boundary of the site during construction;*
- *All stockpiles will be damped down or covered in a sheet of polythene, as required, which will prevent the creation of nuisance dust, and will also prevent sediment runoff in times of heavy precipitation; and,*
- *Restricting construction to within well marked areas, adherence to the non-carrying out of construction after or during heavy rainfall.*

Potential Release of Hydrocarbon

- *All plant and machinery will be serviced before being mobilised to site;*
- *No plant maintenance will be completed on site, any broken down plant will be removed from site to be fixed;*
- *Refuelling will be completed in a controlled manner using drip trays at all times;*
- *Any fuel and chemical stores including tanks and drums will be regularly inspected for leaks and signs of damage;*
- *Drip-trays will be used for fixed or mobile plant such as pumps and generators in order to retain oil leaks and spills;*
- *Only designated trained operators will be authorised to refuel plant on site;*
- *Procedures and contingency plans will be set up to deal with emergency accidents or spills; and,*
- *An emergency spill kit with oil boom, absorbers etc. will be kept on-site for use in the event of an accidental spill.*

Release of Cement-Based Products

- *No batching of wet-cement products will occur on site. Ready-mixed supply of wet concrete products and where possible, emplacement of pre-cast elements, will take place;*
- *No washing out of any plant used in concrete transport or concreting operations will be allowed on-site;*
- *The contractor will use weather forecasting to plan dry days for pouring concrete; and,*
- *The pour site will be free of standing water, and plastic covers will be ready in case of a sudden rainfall event.'*

Additionally, the following mitigation measures will be implemented.

- A project ecologist will be appointed to oversee works from prior to commencement of works on site to the completion of all drainage elements.
- Local silt traps established throughout site.
- Mitigation measures on site include dust control, stockpiling away from drains
- Stockpiling of loose materials will be kept to a minimum of 20m from drains.

- Stockpiles and runoff areas following clearance will have suitable barriers to prevent runoff of fines into the drainage system.
- Fuel, oil and chemical storage will be sited within a bunded area. The bund will be at least 50m away from drains, excavations and other locations where it may cause pollution.
- Bunds will be kept clean and spills within the bund area will be cleaned immediately to prevent groundwater contamination.
- Fuel, oil and chemical storage will be sited within a bunded area.
- Bunds will be kept clean and spills within the bund area will be cleaned immediately to prevent groundwater contamination.
- During the construction works, silt traps will be put in place in the vicinity of all runoff channels to prevent sediment entering the Drumcliff Stream watercourse network.
- Sufficient onsite cleaning of vehicles prior to leaving the site and on nearby roads, will be carried out, particularly during groundworks.
- The Site Manager will be responsible for the pollution prevention programme and will ensure that at least daily checks are carried out to ensure compliance. A record of these checks will be maintained.
- The site compound will include a dedicated bund for the storage of dangerous substances including fuels, oils etc. Refuelling of vehicles/machinery will only be carried out within the bunded area.
- Concrete trucks, cement mixers or drums/bins are only permitted to wash out in designated wash out area greater than 50m from sensitive receptors including drains.
- Spill containment equipment shall be available for use in the event of an emergency. The spill containment equipment shall be replenished if used and shall be checked on a scheduled basis.

Air & Dust

Dust may enter the Drumcliffe Stream watercourse network via air or surface water with potential downstream impacts. Mitigation measures will be carried out reduce dust emissions to a level that avoids the possibility of adverse effects on downstream biodiversity. The main activities that may give rise to dust emissions during construction include the following:

- Excavation of material;
- Materials handling and storage;
- Movement of vehicles (particularly HGV's) and mobile plant.
- Contaminated surface runoff

Mitigation measures to be in place:

- Consultation will be carried with an ecologist throughout the construction phase;
- Trucks leaving the site with any excavated material will be covered so as to avoid dust emissions along the haulage routes.
- Speed limits on site (15kmh) to reduce dust generation and mobilisation.

		<p><i>Site Management</i></p> <ul style="list-style-type: none"> • Regular inspections of the site and boundary should be carried out to monitor dust, records and notes on these inspections should be logged. • Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and record the measures taken. • Make the complaints log available to the local authority when asked. • Record any exceptional incidents that cause dust and/or air emissions, either on- or offsite, and the action taken to resolve the situation in the log book. <p><i>Monitoring</i></p> <ul style="list-style-type: none"> • Undertake daily on-site and off-site inspection, where receptors are nearby, to monitor dust, record inspection results, and make the log available to the local authority when asked. This should include regular dust soiling checks of surfaces within 100 m of site boundary, integrity of the silt control measures, with cleaning and / or repair to be provided if necessary. <p><i>Preparing and Maintaining the Site</i></p> <ul style="list-style-type: none"> • Plan site layout so that machinery and dust causing activities are located away from receptors, as far as is possible. • Avoid site runoff of water or mud. • Remove materials that have a potential to produce dust from site as soon as possible, unless being re-used on site. If they are being re-used on-site cover as described below. • Cover, seed or fence stockpiles to prevent wind whipping. • Hard surface roads will be swept to remove mud and aggregate materials from their surface while any un-surfaced roads will be restricted to essential site traffic. • Any road that has the potential to give rise to fugitive dust will be regularly watered, as appropriate, during dry and/or windy conditions. <p><i>Operations</i></p> <ul style="list-style-type: none"> • Only use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems. • Ensure an adequate water supply on the site for effective dust/particulate matter suppression/mitigation, using non-potable water where possible and appropriate. • Use enclosed chutes and conveyors and covered skips. • Ensure equipment is readily available on site to clean any dry spillages and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods. <p><i>Waste</i></p> <ul style="list-style-type: none"> • Avoid bonfires and burning of waste materials.
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		<p><i>Measures Specific to Earthworks</i></p> <ul style="list-style-type: none"> • Re-vegetate earthworks and exposed areas/soil stockpiles to stabilise surfaces as soon as practicable. • Use Hessian, mulches or trackifiers where it is not possible to re-vegetate or cover with topsoil, as soon as practicable. • Only remove the cover in small areas during work and not all at once. • During dry and windy periods, and when there is a likelihood of dust nuisance, a bowser will operate to ensure moisture content is high enough to increase the stability of the soil and thus suppress dust. • The Contractor will be required to consult with an ecologist prior to the beginning of works to identify any additional measures that may be appropriate and/or required. <p><i>Storage/Use of Materials, Plant & Equipment</i></p> <ul style="list-style-type: none"> • Materials, plant and equipment shall be stored in the proposed site compound location; • All oils, fuels and other hazardous liquid materials shall be clearly labelled and stored in an upright position in an enclosed bunded area within the proposed development site compound. The capacity of the bunded area shall conform with EPA Guidelines – hold 110% of the contents or 110% of the largest container whichever is greater; • Fuel may be stored in the designated bunded area or in fuel bowsers located in the proposed compound location. Fuel bowsers shall be double skinned and equipped with certificates of conformity or integrity tested, in good condition and have no signs of leaks or spillages; • Smaller quantities of fuel may be carried/stored in clearly labelled metal Jeri cans. Green for diesel and red for petrol and mixes. The Jeri cans shall be in good condition and have secure lockable lids. The Jeri cans shall be stored in a drip tray when not in use. • Drip trays will be turned upside down if not in use to prevent the collection of rainwater; • Plant and equipment to be used during works, will be in good working order, fit for purpose, regularly serviced/maintained and have no evidence of leaks or drips.
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Adverse Effects on Natura 2000 site conservation objectives likely from the project (post mitigation)

A robust series of mitigation measures will be carried out. These would ensure that dust and surface water that may enter topographically down-gradient waterbodies (including Drumcliff Stream and Poulacorry River) is clean and uncontaminated. Early implementation of ecological supervision on site at initial mobilisation and enabling works is seen as an important element to the project, particularly in relation to the implementation of surface water runoff mitigation.

With the successful implementation of the outlined mitigation measures to limit surface water impacts on downstream sites, no significant impacts are foreseen from the construction of the proposed project. Residual impacts of the proposed project will be localised to the immediate vicinity of the proposed works. The construction mitigation proposed for the development satisfactorily addresses the potential impacts on designated conservation sites through the application of the construction and operational phase controls as outlined above. In particular, mitigation measures to ensure compliance with Water Pollution Acts and prevent silt and pollution entering topographically down-gradient waterbodies will satisfactorily address the potential impacts on downstream biodiversity and Natura 2000 sites. No significant adverse impacts on the conservation objectives of Natura 2000 sites are likely following the implementation of the mitigation measures outlined above.

In-combination Effects

There are several proposed developments located in the area surrounding the subject site. The following is a list of planning applications as identified on the Department of Housing, Local Government and Heritage's 'National Planning Application Database' portal⁶:

Table 8. In-combination Effects Assessed

Ref. No.	Address	Proposal
21664	Ballymaley, Ennis, Co Clare	for development at Ballymaley, Ennis, Co Clare. The proposed development will consist of 24 No. 4 bedroom detached houses, comprising 19 No. 2 storey houses with second floor dormer rooms (Type A) 2 No. 2 storey houses (Type B), 3 No. 2 storey houses, Type B1, new site entrances, roads, paths, driveways, boundary walls, pedestrian walkway, landscaping, drainage with attenuation tank and associated site works.
20297	Drumcliff, Ennis, Co. Clare	the development will consist of: demolition of an existing dwelling house and construction of a single replacement dwelling house, provision of a new vehicular access onto the Drumcliff Road, provision of a new waste water treatment system, percolation area, and connections ancillary to the residential development, appropriate landscaping and boundary treatments, as well as all associated site development works and services

It is considered that in combination effects with other existing and proposed developments in proximity to the application area would be unlikely, neutral, not significant and localised. It is concluded that no significant effects on Natura 2000 sites will be seen as a result of the proposed development alone or combination with other projects.

From a review of the above, it is concluded that no projects in the vicinity of the proposed development would be seen to have a significant in combination effect on Natura 2000 sites.

⁶ <https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=9cf2a09799d74d8e9316a3d3a4d3a8de>

Conclusion

In a strict application of the precautionary principle, it has been concluded that significant effects on Ballyallia Lake SAC and Ballyallia Lough SPA are likely from the proposed construction works in the absence of mitigation measures, primarily due to the potential for contaminated dust and surface water runoff to enter topographically down-gradient waterbodies (including Drumcliff Stream and Poulacorry River) during construction, and transport to downstream European Sites within Ballyallia Lough. As a result, there is potential for downstream impacts from the project during site clearance, enabling, construction, landscaping and drainage works. For this reason, a NIS was carried out to assess whether the proposed project, either alone or in combination with other plans or projects, in view of best scientific knowledge and in view of the sites' conservation objectives, will adversely affect the integrity of the European Site. All other Natura 2000 sites were screened out at initial screening.

Construction on this site will create localised light and noise disturbance. This would not impact Natura 2000 sites. However, mitigation measures will be in place to ensure that no silt or pollutants enters topographically down-gradient waterbodies (including Drumcliff Stream and Poulacorry River) that leads to conservation sites.

Following the implementation of the mitigation measures outlined, the construction of this development would not be deemed to have a significant impact on the integrity of Natura 2000 sites. No significant impacts are likely on Natura 2000 sites, alone in combination with other plans and projects based on the implementation of standard construction phase mitigation measures.

This report presents a Stage 1 Appropriate Assessment Screening and Stage 2 NIS for the Proposed Development, outlining the information required for the competent authority to screen for appropriate assessment and to determine whether or not the Proposed Development, either alone or in combination with other plans and projects, in view of best scientific knowledge, is likely to have a significant effect on any European or Natura 2000 site.

On the basis of the content of this report, the competent authority is enabled to conduct an assessment for Appropriate Assessment and consider whether, in view of best scientific knowledge and in view of the conservation objectives of the relevant European sites, the Proposed Development, individually or in combination with other plans or projects is likely to have a significant effect on any European site.

No significant effects are likely on Natura 2000 sites, their features of interest or conservation objectives. The proposed project will not will adversely affect the integrity of European sites.

Data used for the AA Screening/NIS Assessment

NPWS site synopses and Conservation objectives of sites within 15km were examined. No Natura 2000 sites beyond 15km has a direct pathway to the proposed development site. The most recent SAC and SPA boundary shapefiles were downloaded and overlaid on Bing terrain maps and satellite imagery.

References

1. Department of Environment Heritage and Local Government Circular NPW 1/10 and PSSP 2/10 on Appropriate Assessment under Article 6 of the Habitats Directive – Guidance for Planning Authorities March 2010.
2. Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government 2009;
www.npws.ie/publications/archive/NPWS_2009_AA_Guidance.pdf
3. Managing NATURA 2000 Sites: the provisions of Article 6 of the Habitats Directive 92/43/EEC, European Commission 2000;
ec.europa.eu/environment/nature/Natura2000/management/docs/art6/provision_of_art6_en.pdf
4. 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;
ec.europa.eu/environment/nature/Natura2000management/docs/art6/Natura_2000_assess_en.pdf
5. Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission;
ec.europa.eu/environment/nature/Natura2000/management/docs/art6/guidance_art6_4_en.pdf
6. Guidance document on the implementation of the birds and habitats directive in estuaries and coastal zones with particular attention to port development and dredging;
ec.europa.eu/environment/nature/Natura2000/management/docs/guidance_doc.pdf
7. The Status of EU Protected Habitats and Species in Ireland.
www.npws.ie/publications/euconservationstatus/NPWS_2007_Conservation_Status_Report.pdf
8. NPWS (2012) Conservation objectives Lower River Shannon SAC [002165]. Generic Version 8.0. Department of Housing, Local Government and Heritage.
9. NPWS (2017) Conservation Objectives: Ballyallia Lake SAC 000014. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht
10. NPWS (2018) Conservation Objectives: Toonagh Estate SAC 002247. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
11. NPWS (2018) Conservation Objectives: Dromore Woods and Loughs SAC 000032. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
12. NPWS (2018) Conservation Objectives: Pouladatig Cave SAC 000037. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
13. NPWS (2018) Conservation Objectives: Newhall and Edenvale Complex SAC 002091. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.
14. NPWS (2018) Conservation Objectives: Ballycullinan, Old Domestic Building SAC 002246. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.
15. NPWS (2018) Conservation Objectives: Ballycullinan Lake SAC 000016. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.
16. NPWS (2022) Conservation Objectives: East Burren Complex SAC 001926. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
17. NPWS (2018) Conservation Objectives: Old Domestic Building (Keevagh) SAC 002010. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.
18. NPWS (2018) Conservation Objectives: Moyree River System SAC 000057. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.
19. NPWS (2018) Conservation Objectives: Ballyogan Lough SAC 000019. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.
20. NPWS (2018) Conservation Objectives: Knockanira House SAC 002318. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.
21. NPWS (2018) Conservation Objectives: Old Domestic Buildings, Rylane SAC 002314. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.
22. NPWS (2018) Conservation Objectives: Poulmagordon Cave (Quin) SAC 000064. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.

23. NPWS (2018) Conservation Objectives: Newgrove House SAC 002157. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht.
24. NPWS (2017) Conservation Objectives: Lough Gash Turlough SAC 000051. Version 1. National Parks and Wildlife Service, Department of Culture, Heritage and the Gaeltacht
25. NPWS (2022) Conservation objectives for Ballyallia Lough SPA [004041]. First Order Sitespecific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.
26. NPWS (2012) Conservation Objectives: River Shannon and River Fergus Estuaries SPA 004077. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
27. NPWS (2022) Conservation Objectives: Slieve Aughty Mountains SPA 004168. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
28. NPWS (2022) Conservation objectives for Corofin Wetlands SPA [004220]. First Order Sitespecific Conservation Objectives Version 1.0. Department of Housing, Local Government and Heritage.