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NATURA IMPACT STATEMENT OF A PROPOSED DEVELOPMENT AT LOCHÁN, BALLYCONNELL, BALLINFULL, CO. SLIGO

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1 INTRODUCTION

1.1 REQUIREMENT FOR AN APPROPRIATE ASSESSMENT

In April 2022, Whitehill Environmental was appointed by Tóg Architecture on behalf of Mr Seamus Egan, to provide the necessary information to allow the competent authority (in this case Sligo County Council) to conduct an Article 6 (3) Appropriate Assessment for a proposed domestic development at a site at Lochán, Ballyconnell, Ballinfull, Co. Sligo. This information is being submitted as a Natura Impact Statement (NIS). This NIS was undertaken on the basis that potential negative impacts and subsequent negative effects may arise on certain European sites from the proposed development. It followed on from a Request for Further Information (NIS Request in accordance with Section 177U(6) of the Planning and Development Act, 2000) regarding this proposed development (Planning File Reference Number: 21:491).

The purpose of the assessment is to determine the appropriateness of the proposed project, in the context of the conservation status of the site or sites. In Ireland, an Appropriate Assessment takes the form of a Natura Impact Statement (NIS), which is a statement of the likely impacts of the plan or project on a Natura 2000 site. The NIS comprises a comprehensive ecological impact assessment of the plan or project and it examines the direct and indirect impacts that the plan or project might have on its own or in combination with other plans or projects on one or more Natura 2000 sites in view of the sites' conservation objectives.

1.2 THE AIM OF THE REPORT

This Natura Impact Statement (NIS) has been prepared in accordance with the current guidance (DoEHLG, 2009, Revised February 2010), and it provides an assessment of the potential impacts of the proposed development on Natura 2000 sites.

An NIS should provide the information required in order to establish whether or not a proposed development is likely to have a significant impact on certain Natura sites in the context of their conservation objectives and specifically on the habitats and species for which the Natura 2000 conservation sites have been designated.

Accordingly, a comprehensive assessment of the ecological impacts of this application was carried out in April 2022 by Noreen McLoughlin, MSc, MCIEEM of Whitehill Environmental. This assessment allowed areas of potential ecological value and potential ecological constraints associated with this proposed development to be identified and it also enabled

potential ecological impacts associated with the proposed development to be assessed and mitigated for.

1.3 REGULATORY CONTEXT

RELEVANT LEGALISATION

The Birds Directive (Council Directive2009/147/EC) recognises that certain species of birds should be subject to special conservation measures concerning their habitats. The Directive requires that Member States take measures to classify the most suitable areas as Special Protection Areas (SPAs) for the conservation of bird species listed in Annex 1 of the Directive. SPAs are selected for bird species (listed in Annex I of the Birds Directive), that are regularly occurring populations of migratory bird species and the SPA areas are of international importance for these migratory birds.

The EU Habitats Directive (92/43/EEC) requires that Member States designate and ensure that particular protection is given to sites (Special Areas of Conservation) which are made up of or support particular habitats and species listed in annexes to this Directive.

Articles 6(3) and 6(4) of this Directive also call for the undertaking of an Appropriate Assessment for plans and projects not directly connected with or necessary to the management of, but which are likely to have a significant effect on any European designated sites (i.e. SACs and SPAs).

The Water Framework Directive (WFD) (2000/60/EC), which came into force in December 2000, establishes a framework for community action in the field of water policy. The WFD was transposed into Irish law by the European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003). The WFD rationalises and updates existing legislation and provides for water management on the basis of River Basin Districts (RBDs). RBDs are essentially administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (i.e. those covering the territory of more than one Member State) assigned to an international RBD. The aim of the WFD is to ensure that waters achieve at least good status by 2021 and that status does not deteriorate in any waters.

Appropriate Assessment and the Habitats Directive

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora – the 'Habitats Directive' - provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats

and species of European Community interest, at a favourable conservation status. Articles 3 - 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as *Natura 2000*. Natura 2000 sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC).

Articles 6(3) and 6(4) of the Habitats Directive sets out the decision-making tests for plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment:

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

Article 6(4) deals with the steps that should be taken when it is determined, as a result of appropriate assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case.

Article 6(4) states:

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

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest."

The Appropriate Assessment Process

The aim of Appropriate Assessment is to assess the implications of a proposal in respect of a designated site's conservation objectives.

The 'Appropriate Assessment' itself is an assessment which must be carried out by the competent authority which confirms whether the plan or project in combination with other plans and projects will have an adverse impact on the integrity of a European site.

Screening for Appropriate Assessment shall be carried out by the competent authority as set out in Section 177U(1) and (2) of the Planning and Development Act 2000 (as amended) as follows:

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

(2) A competent authority shall carry out a screening for appropriate assessment under subsection (1) before—

(a) a Land use plan is made including, where appropriate, before a decision on appeal in relation to a draft strategic development zone is made, or

(b) consent for a proposed development is given.'

The competent authority shall determine that an Appropriate Assessment is not required if it can be excluded, that the proposed development, individually or in combination with other plans or project will have a significant effect on a European site.

Where the competent authority cannot exclude the potential for a significant effect on a European site, an Appropriate Assessment shall be deemed required.

Where an Appropriate Assessment is required, the conclusions of the Appropriate Assessment Report (Natura Impact Statement (NIS)) should enable the competent authority to ascertain whether the plan or proposed development would adversely affect the integrity of the European site. If adverse impacts on the integrity of a European site cannot be avoided, then mitigation measures should be applied during the appropriate assessment process to the point where no adverse impacts on the site remain. Under the terms of the Habitats Directive consent can only be granted for a project if, as a result of the appropriate

assessment either (a) it is concluded that the integrity of any European sites will not be adversely affected, or (b) after mitigation, where adverse impacts cannot be excluded, there is shown to be an absence of alternative solutions, and there exists imperative reasons of overriding public interest for the project should go ahead.

Section 177(V) of the Planning and Development Act 2000 (as amended) outlines that the competent authority shall carry out the Appropriate Assessment, taking into account the Natura Impact Statement (amongst any other additional or supplemental information). A determination shall then be made by the competent authority in line with the requirements of Article 6(3) of the Habitats Directive as to whether the plan or proposed development would adversely affect the integrity of a European site, prior to consent being given.

2 METHODOLOGY

2.1 APPROPRIATE ASSESSMENT

This NIS has been prepared with reference to the following:

- European Commission (2021). Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC European Commission (2021).
- European Commission (2018). Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.
- European Commission (2006). Nature and Biodiversity Cases: Ruling of the European Court of Justice.
- European Commission (2007). Clarification of the Concepts of: Alternative Solution, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence, Opinion of the Commission.
- Department of Environment, Heritage and Local Government (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities.

The EC Guidance sets out a number of principles as to how to approach decision making during the process. The primary one is 'the precautionary principle' which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty.

When considering the precautionary principle, the emphasis for assessment should be on objectively demonstrating with supporting evidence that:

- There will be no significant effects on a Natura 2000 site;
- There will be no adverse effects on the integrity of a Natura 2000 site;
- There is an absence of alternatives to the project or plan that is likely to have an adverse effect to the integrity of a Natura 2000 site; and
- There are compensation measures that maintain or enhance the overall coherence of Natura 2000.

This translates into a four stage process to assess the impacts, on a designated site or species, of a policy or proposal.

The EC Guidance states that "each stage determines whether a further stage in the process is required". Consequently, the Council may not need to proceed through all four stages in undertaking the Appropriate Assessment.

The four-stage process is:

Stage 1: Screening – The process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether or not these impacts are likely to be significant;

Stage 2: Appropriate Assessment – The consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts;

Stage 3: Assessment of Alternative Solutions – The process which examines alternative ways of achieving objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site;

Stage 4: **Assessment where no alternative solutions exist and where adverse impacts remain –** An assessment of the compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

In complying with the obligations set out in Articles 6(3) and following the guidelines described above, this screening statement has been structured as a stage by stage approach as follows:

- Description of the proposed project;
- Identification of the Natura 2000 sites close to the proposed development;
- Identification and description of any individual and cumulative impacts on the Natura 2000 sites likely to result from the project;
- Assessment of the significance of the impacts identified above on site integrity. Exclusion of sites where it can be objectively concluded that there will be no significant effects;
- Description of proven mitigation measures.

2.2 STATEMENT OF COMPETENCY

This NIS was carried out by Noreen McLoughlin, BA, MSc, MCIEEM. Noreen has an honours degree in Zoology and an MSc in Freshwater Ecology from Trinity College, Dublin and she has been a full member of the Chartered Institute of Ecology and Environmental Management for over sixteen years. Noreen has over 17 years' experience as a professional ecologist in Ireland.

2.3 DESK STUDIES & CONSULTATION

Information on the site and the area of the proposed development was studied prior to the completion of this statement. The following data sources were accessed in order to complete a thorough examination of potential impacts:

- National Parks and Wildlife Service - aerial photographs and maps of designated sites, information on habitats and species within these sites and information on protected plant or animal species; conservation objectives, site synopses and standard data forms for relevant designated sites.
- Environmental Protection Agency (EPA)- Information pertaining to water quality, geology and licensed facilities within the area;
- National Biodiversity Data Centre (NBDC) – Information pertaining to protected plant and animal species within the study area;
- Tóg Architecture – Information regarding the proposed development including site plans and specifications;
- Sligo County Council – Information on planning history in the area. Further Information Request.

2.4 ASSESSMENT METHODOLOGY

The proposed development was assessed to identify its potential ecological impacts and from this, the Zone of Influence (ZoI) of the proposed development was defined. Based on the potential impacts and their ZoI, the Natura 2000 sites potentially at risk from direct, indirect or in-combination impacts were identified. The assessment considered all potential impact sources and pathways connecting the proposed development to Natura 2000 sites, in view of the conservation objectives supporting the favourable conservation condition of the site's Qualifying Interests (QIs) or Special Conservation Interests (SCIs).

The conservation objectives relating to each Natura 2000 site and its QIs/SCIs are cited generally for SACs as "to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or Annex II species for which the SAC has been selected", and for SPAs "to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA".

As defined in the Habitat's Directive, the favourable conservation status of a habitat is achieved when:

- Its natural range and area it covers within that range is stable or increasing;
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future;

The favourable conservation status of a species is achieved when:

- The population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future;
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Where site-specific conservation objectives (SSCOs) have been prepared for a European site, these include a series of specific attributes and targets against which effects on conservation condition, or integrity, can be measured. Where potential significant effects are identified, then these SSCOs should be considered in detail.

3 SCREENING

3.1 DEVELOPMENT DESCRIPTION

In December 2021, Seamus Egan applied to Sligo County Council for planning permission for a development on an existing 0.74ha domestic site in Lochán, Ballyconnell, Ballinfull, Co. Sligo F91 F720. Planning permission is being sought here for the demolition of an existing single storey extension, the renovation of the existing cottage to include the construction of a new extension consisting of two single storey elements, the provision of a new wastewater treatment system and percolation area, along with landscaping and other ancillary works

An extract from the planning drawings can be seen in Figure 1.

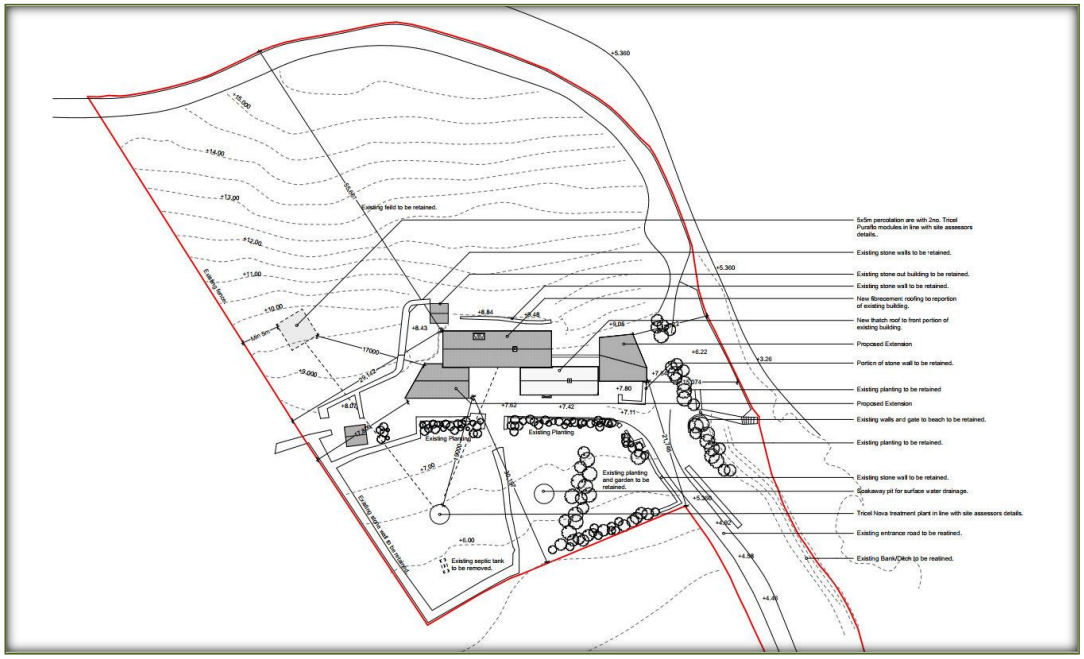


Figure 1 – Extract from Planning Drawings Submitted (as prepared by Tóg Architecture)

Wastewater Treatment

The application site is located within a locally important aquifer (Li) with extreme vulnerability. The site has an R2[1] groundwater protection response, which means that the proposed risk is acceptable subject to normal good practice and providing certain additional criteria are met. The existing property is serviced by a septic tank with no percolation area. Under current guidelines, this is not satisfactory and this system is likely to be a risk to groundwater and the environment.

The site characterisation form pertaining to the development (as prepared by Brian Roche, Consulting Engineer) has recommended that the dwelling is serviced by a tertiary treatment system and infiltration / treatment area. A Tricel Nova P6 system has been recommended.

This will be constructed and operated in accordance with the EPA (2021) Guidelines. It will discharge to groundwater, which in this area is likely to flow in a northerly direction.

Surface water Treatment

Clean surface and roof water from the dwelling will be discharged to soakaway to the front of the site.

3.2 SITE LOCATION AND SURROUNDING ENVIRONMENT

The site in question is 0.74ha and it is located within a rural area, within the townland of Ballyconnell, at the tip of a peninsula between the coastal areas of Lackmeeltaun to the south/south-west and Pollnaleam to the north-east. The site is accessed via a cul-de-sac that serves the existing cottage, which has existed on the site for many years. The site is 5.6km west of Ballinfull and 10km south-west of Grange.

The site is located in an area where the dominant land use is low intensity agriculture and improved and semi-improved agricultural grasslands are the dominant habitats locally. Other habitats represented in the area include neutral/calcareous/unimproved grasslands, wet grasslands and marsh, along with hedgerows, stone walls and scattered trees. The site is adjacent to the coastal habitats of Ballyconnell Head, and these habitats include sea cliffs, shingle banks and associated littoral habitats.

Site location maps are shown in Figures 2 and 3, whilst an aerial photograph of the site and its surrounding habitats is shown in Figure 4.

Figure 2 – Site Location Map (Site is Pinned)

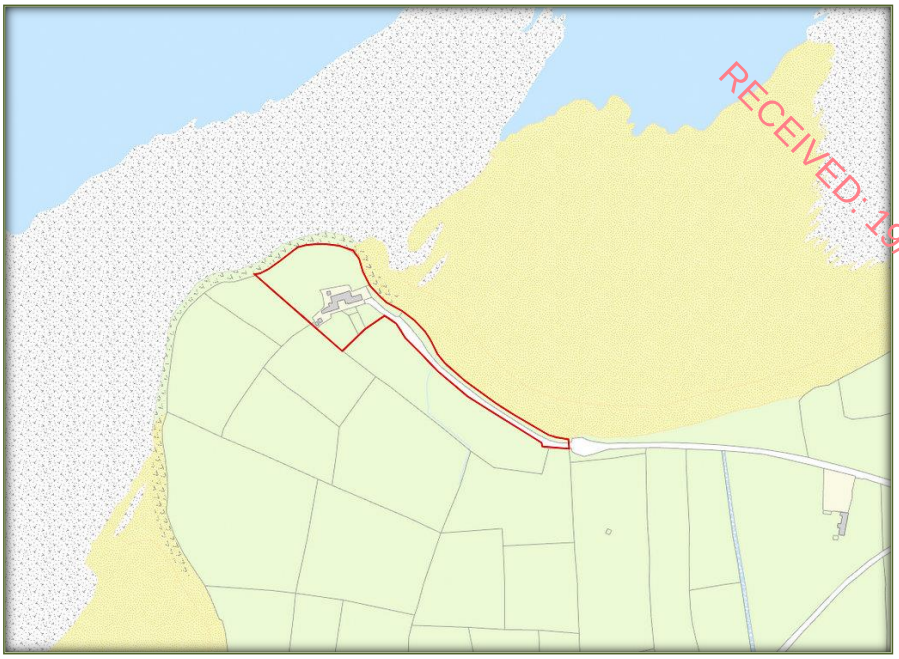


Figure 3 – Site Location Map (Site is Outlined in Red)

HABITATS WITHIN THE STUDY AREA

A domestic dwelling has historically existed on this site. This dwelling and the associated outbuildings, sheds, access roads and paths around the house fall into the buildings and artificial surfaces category. There is also a small garden (amenity grassland, flower beds and borders) to the front of the cottage. To the side and back of the cottage there is an area of un-intensively managed grassland. There is an ornamental hedgerow to the west of the house, partially along the access road.

NOTABLE SPECIES

An examination of the website of the National Biodiversity Data Centre revealed that there are no records for the presence of any protected terrestrial mammals from within the relevant 1km grid square (G5646) of the proposed development.

Figure 4a – Aerial Photograph of the Site (Outlined in Red) and its Surrounding Habitats

Figure 4b – Recent Drone Shot of the Site

WATER FEATURES AND QUALITY

The application site is within the Sligo Bay and Drowse Hydrometric Area (35) and Catchment (35), the Grange Sub-Catchment (010) and the Breaghwy Sub-Basin (010). There is a small stream which passes under the access road into the house and this discharges to the coastal habitat adjacent to the site. The site is surrounded by the coastal area of Donegal Bay South (as referred by the EPA). The EPA have not assigned an ecological status to this area. However, it is generally considered to be Not at Risk, i.e., it is likely to achieve good status as required under the Water Framework Directive.

The site is also within the Yellow Strand Groundwater body, and the overall status of this groundwater body is noted as good.

3.3 NATURA 2000 SITES IDENTIFIED

In accordance with the guidelines, a list of Natura 2000 sites within 15km of the proposed development have been identified and described according to their site synopsis, qualifying interests and conservation objectives. In addition, any other sites further than this, but potentially within its Zone of Influence were also considered. The Zone of Influence may be determined by an assessment of the connectivity between the application site and the designated areas by virtue of hydrological connectivity, atmospheric emissions, flight paths, ecological corridors etc.

For significant effects to arise, there must be a potential impact facilitated by having a source, i.e., the proposed development and activities arising out of its construction or operation, a receptor, i.e., the European site and its qualifying interests and a subsequent pathway or connectivity between the source and receptor, e.g., a water course. The likelihood for significant effects on the European site will largely depend on the characteristics of the source (e.g., nature and scale of the construction works), the characteristics of the existing pathway and the characteristics of the receptor, e.g., the sensitivities of the Qualifying Interests (habitats or species) to changes in water quality.

There are thirteen Natura 2000 designated sites within 15km of the application site. These designated areas and their closest points to the proposed development site are outlined in Table 1 and a map and aerial photograph showing their locations relative to the application site is shown in Figures 5 and 6.

Site Name & Code	Distance	Qualifying Interests	Potential Impacts / Effects
Cummeen Strand/Drumcliff Bay SAC 000627	Site Boundary Overlaps with SAC Boundary	• Estuaries • Mudflats and sandflats not covered by seawater at low tide • Embryonic shifting dunes • Shifting dunes along the shoreline with *Ammophila arenaria* • Fixed coastal dunes with herbaceous vegetation • *Juniperus communis* formations on heaths or calcareous grasslands • Petrifying springs with tufa formation (Cratoneurion) • *Vertigo angustior* (Narrow-mouthed Whorl Snail) • *Petromyzon marinus* (Sea Lamprey)	*Having regards to the location of the application site proximate to this SAC, potential significant effects upon this site and its QI arising from construction and operation cannot be ruled out conclusively.*

		• *Lampetra fluviatilis* (River Lamprey) • *Phoca vitulina* (Common Seal)	
Ballintemple and Ballygilgan SPA 004234	1.4km south	• Barnacle Goose *(Branta leucopsis)*	*There is no ecological or hydrological connectivity between the application site and this SPA, therefore significant effects upon this SPA and its QIs will not arise during construction or operation.*
Ardboline Island and Horse Island SPA 004135	1.8km south	• Barnacle Goose *(Branta leucopsis)* • Cormorant (*Phalacrocorax carbo)*	*There is no ecological or hydrological connectivity between the application site and this SPA, therefore significant effects upon this SPA and its QIs will not arise during construction or operation.*
Drumcliff Bay SPA 004013	3.7km south-east	• Bar-tailed Godwit (*Limosa lapponica)* • Sanderling (*Calidris alba)*	*There is no ecological or hydrological connectivity between the application site and this SPA, therefore significant effects upon this SPA and its QIs will not arise during construction or operation.*
Inishmurray SPA 004068	7km north	• Herring Gull (*Larus argentatus)* • Shag (*Phalacrocorax aristotelis)* • Barnacle Goose (*Branta leucopsis*) • Arctic Tern (*Sterna paradisaea*)	*There is no ecological or hydrological connectivity between the application site and this SPA, therefore significant effects upon this SPA and its QIs will not arise during construction or operation.*
Streedagh Point Dunes SAC 001680	7.2km north-east	• Mudflats and sandflats not covered by seawater at low tide • Perennial vegetation of stony banks • Atlantic salt meadows (Glauco-Puccinellietalia maritimae) • Mediterranean salt meadows (*Juncetalia maritimi*) • Shifting dunes along the shoreline *with Ammophila arenaria* (white dunes) • Fixed coastal dunes with herbaceous vegetation (grey dunes) • *Vertigo angustior* (Narrow-mouthed Whorl Snail)	*There is no ecological or hydrological connectivity between the application site and this SAC, therefore significant effects upon this SAC and its QIs will not arise during construction or operation.*

Cummeen Strand SPA 004035	8.6km south-east	• Light-bellied Brent Goose (*Branta bernicla hrota)* • Oystercatcher (*Haematopus ostralegus)* • Redshank (*Tringa totanus)* • Wetland and Waterbirds	*There is no ecological or hydrological connectivity between the application site and this SPA, therefore significant effects upon this SPA and its QIs will not arise during construction or operation.*
Aughris Head SPA 004133	10.9km south-west	• Kittiwake *Rissa tridactyla*	*There is no ecological or hydrological connectivity between the application site and this SPA, therefore significant effects upon this SPA and its QIs will not arise during construction or operation.*
Ballysadare Bay SAC 000622	11.2km south	• Estuaries • Mudflats and sandflats not covered by seawater at low tide • Embryonic shifting dunes • Shifting dunes along the shoreline with *Ammophila arenaria* • Fixed coastal dunes with herbaceous vegetation • Humid dune slacks • *Vertigo angustior* (Narrow-mouthed Whorl Snail) • *Phoca vitulina* (Common Seal)	*There is no ecological or hydrological connectivity between the application site and this SAC, therefore significant effects upon this SAC and its QIs will not arise during construction or operation. This site is hydrologically upstream of the application site and is outside of its Zone of Influence.*
Ballysadare Bay SPA 004129	11.1km south	• Light-bellied Brent Goose (*Branta bernicla hrota)* • Grey Plover *(Pluvialis squatarola)* • Dunlin (*Calidris alpina*) • Bar-tailed Godwit *(Limosa lapponica)* • Redshank (*Tringa totanus)* • Wetland and Waterbirds	*There is no ecological or hydrological connectivity between the application site and this SPA, therefore significant effects upon this SPA and its QIs will not arise during construction or operation.*
Sligo/Leitrim Uplands SPA 004187	11.2km east	• Peregrine *(Falco peregrines)* • Chough *(Pyrrhocorax pyrrhocorax)*	*There is no ecological or hydrological connectivity between the application site and this SPA, therefore significant effects upon this SPA and its QIs will not arise during construction or operation.*
Ben Bulben, Gleniff And Glenade Complex SAC 000623	11.2km east	• European dry heaths • Alpine and Boreal heaths • Calcareous rocky slopes with chasmophytic vegetation • Calcareous and calcshist screes of the montane to alpine levels (Thlaspietea rotundifolii)	*There is no ecological or hydrological connectivity between the application site and this SAC, therefore significant effects upon this SAC and its QIs will not arise during construction or operation. This site is hydrologically upstream of*

		• *Juniperus communis* formations on heaths or calcareous grasslands • Petrifying springs with tufa formation (Cratoneurion) • Water courses of plain to montane levels with the *Ranunculion fluitantis* and Callitricho-Batrachion vegetation	*the application site and is outside of its Zone of Influence.*
Bunduff Lough And Machair/Trawalua/ Mullaghmore SAC 000625	12.4km north-east	• Mudflats and sandflats not covered by seawater at low tide • Large shallow inlets and bays • Reefs • Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) • Fixed coastal dunes with herbaceous vegetation (grey dunes) • Humid dune slacks • Machairs (* in Ireland) • Juniperus communis formations on heaths or calcareous grasslands • Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) • Alkaline fens • *Euphydryas aurinia* (Marsh Fritillary) • *Petalophyllum ralfsii* (Petalwort)	*There is no ecological or hydrological connectivity between the application site and this SAC, therefore significant effects upon this SAC and its QIs will not arise during construction or operation. This site is hydrologically upstream of the application site and is outside of its Zone of Influence.*

Table 1 – Natura 2000 Sites Within 15km of the Proposed Site

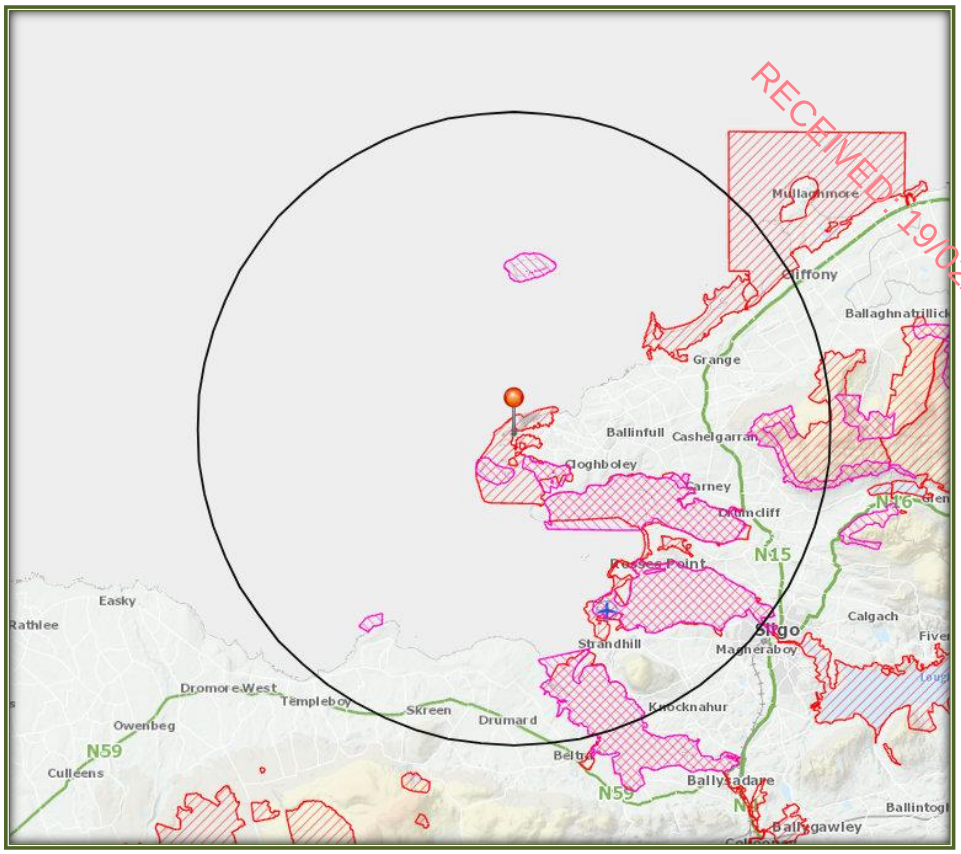


Figure 5 – The Application Site in relation to the Natura 2000 Sites within 15km (SACs – Rad Hatching, SPAs – Pink Hatching)

Figure 6 – The Application Site (Outlined in Blue) in relation to the Cummeen Strand/Drumcliff Bay SAC (Red Hatching)

NATIONALLY DESIGNATED SITES

Although Natural Heritage Areas (NHAs) are not part of the Natura 2000 network and are therefore not subject to Appropriate Assessment under Article 6 of the Habitats Directive, they often provide an important supporting role to the Natura 2000 network, particularly for mammal, bird or invertebrate species that cross the SAC / SPA site boundaries into the adjacent habitats.

The application site is partially within the Cummeen Strand/Drumcliff Bay (Sligo Bay) proposed Natural Heritage Area (pNHA 00027). This site largely follows the same boundary as the SAC. The habitats of the pNHA within the application site include those described previously in Section 3.2.

Figure 6 – The Application Site (Outlined in Red) in relation to the Cummeen Strand/Drumcliff Bay pNHA (Blue Hatching)

3.4 IDENTIFICATION OF POTENTIAL IMPACTS

The proposed development at Ballyconnell will occur on a site that is partially within the Cummeen Strand/Drumcliff Bay SAC. Therefore, potential impacts upon this SAC arising from the construction and operation of this proposed development cannot be ruled out at this point.

Only those features of the development that have the potential to affect the integrity and conservation objectives of the identified Natura 2000 site and its protected habitats have been considered. A number of factors were examined at this stage and dismissed or carried forward for Appropriate Assessment as relevant. The following areas were examined in relation to potential impacts from the proposed development on the Natura 2000 site identified:

1. Significant effects upon the QIs of this SAC.
2. Habitat loss or fragmentation of the habitats within the SAC.
3. Deteriorations in water quality in the SAC arising from construction and operational activities.
4. Cumulative impacts with other proposed/existing developments.

3.5 SCREENING CONCLUSIONS

The proposed development is not directly connected with or necessary to the nature conservation management of the designated site. Therefore, following consideration of the location of the Cummeen Strand/Drumcliff Bay SAC in relation to the proposed development at Ballyconnell, and the potential impacts that may occur, this project must proceed to the next stage of Appropriate Assessment, namely the Natura Impact Assessment.

4 STAGE II – APPROPRIATE ASSESSMENT

4.1 INTRODUCTION

The main objective of this stage (Stage 2, Natura Impact Statement) in the Appropriate Assessment process is to determine whether the proposed development at Ballyconnell (either alone or in combination with other plans, programmes and projects) will result in significant adverse impacts to the integrity of the Cummeen Strand/Drumcliff Bay SAC with respect to this site's structure, species, functions and/or conservation objectives. This stage also outlines the mitigation measures that should be taken in order to avoid any negative effects of this application, should it receive consent.

In this section, the European site identified in the previous section will be described in greater detail in terms of its site characteristics and conservation objectives.

range of areas used by the species, other than that occurring from natural patterns of variation.

4.2 NATURA 2000 SITES IDENTIFIED

CUMMEEN STAND / DRUMCLIFF BAY SAC

Site Summary

The NPWS describes the site (Natura 2000 Standard Data Form 2017) as a large coastal site, which is made up largely of two estuarine bays, Sligo Harbour and Drumcliff Bay. These are the estuaries of the Garavoge and Drumcliff Rivers respectively. The estuaries are well sheltered and have extensive intertidal sand and mud flats. Coney Island provides the main shelter for Sligo Harbour, while a sandy/grassy spit protrudes from the Rosses peninsula and provides shelter for inner Drumcliff Bay. The site continues to the north-west of Drumcliff Bay to include the shallow marine waters of Brown's Bay. A series of small islands, notably Ardbolin, occur here. Other coastal habitats are represented, including sand dunes, saltmarshes, sandy and boulder beaches, and bedrock shoreline. In addition, there is a scattering of dry grassland, wet grassland, swamp vegetation and broad-leaved woodland. Improved grassland is included for the benefit of wintering geese. The site is largely underlain by Carboniferous limestone, but acidic rocks are also found at Rosses Point. An excellent series of fossilised corals occur at Serpent Rock in the north west of the site. The town of Sligo, a substantial urban centre with a regional port, is located along the eastern boundary of the Sligo Harbour section of the site. Agriculture is the dominant landuse in the surrounding catchments.

The estuarine and intertidal sand and mud flat habitats at this site are extensive in area, generally of good quality and show a good diversity of species and biotopes. *Zostera* spp. occur. These habitats are considered typical for the north-west region. The fixed dunes and shifting Ammophila dunes are small in area and only of moderate quality, though embryonic dunes are well represented. The site has a good example of petrifying springs with tufa formations, with several species of bryophyte typical of the Cratoneurion. The springs occur along seepage zones in clay sea cliffs. The site supports an area of Juniper scrub. The site has a nationally important colony of *Phoca vitulina*. The site is important for occurrence of the Annex II mollusc *Vertigo angustior* and the lamprey species *Petromyzon marinus* and *Lampetra fluviatilis*. There is a good diversity of waterfowl winter at site, notably internationally important populations of *Branta leucopsis* and *Branta berniclahrota*. The site has regular populations of *Pluvialis apricaria* and *Limosa lapponica*, both Annex I Bird Directive species, and eight other species winter in nationally important numbers. *Phalacro corax carbo* has a nationally important breeding colony and small numbers of other breeding seabirds occur.

Cummeen Strand / Drumcliff Bay SAC – Threats and Pressures

The NPWS Natura 2000 Standard Data Form for this site outlines the main threats and pressures to this site from both inside and outside influences. The threat with the highest negative influence on this site is intensive fish farming, followed by medium level threats including invasive species, port areas, walking, horse-riding and non-motorised vehicles, golf, dispersed habitation, off-road motoring, shipping lanes, ports and marine construction and agricultural intensification.

Site Specific Conservation Objectives

In 2013, the NPWS published Site Specific Conservation Objectives (SSCOs) for the Cummeen Strand / Drumcliff Bay SAC. These conservation objectives were also supported by a number of other documents relating to the coastal and marine habitats within the SAC. These SSCOs aim to define the favourable conservation condition for the particular habitats or species at that site. The maintenance of habitats and species within the Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at national level.

For each Qualifying Interest of the SAC and SPA, the specific conservation objective is to "*maintain the favourable conservation condition*" of that interest, by defining a list of attributes and targets which are indicative of the conservation status of that interest. For

habitats, the main attributes include habitat area; habitat and community distribution; vegetation structure/composition and physical structure. The main target is to ensure that the habitats are stable or increasing in area and that the other attributes are maintained or restored. For the bird species of an SPA, the main attributes are population trend and distribution, whilst the targets aim to ensure that the long term population trends of the bird species are stable or increasing and that there is no significant decrease in the numbers or range of areas used by the waterbirds, other than that occurring from natural patterns of variation.

The qualifying interests of Cummeen Strand / Drumcliff Bay SAC are listed below in Tables 2 – 12.

Estuaries (1130)

The SSCO for this habitat is to *maintain* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat Area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes.
Community Extent	Hectares	Maintain the extent of the *Zostera*-dominated community and the Mytilidae-dominated community complex, subject to natural processes.
Community structure: Zostera density	Shoots/m2	Conserve the high quality of the *Zostera*-dominated community, subject to natural processes
Community structure: Mytilus edulis density	Individuals/m2	Conserve the high quality of the *Mytilidae*-dominated community complex, subject to natural processes
Community Distribution	Hectares	Conserve the following community types in a natural condition: Intertidal fine sand with *Peringia ulvae* and *Pygospio elegans* community complex; Estuarine mixed sediment to sandy mud with *Hediste diversicolor* and oligochaetes community complex; Fine sand with *Angulus* spp. and *Nephtys* spp. community complex; Sand to mixed sediment with amphipods community; Intertidal reef community.

Table 2 – SSCOs for Estuaries

Potential Impact upon Estuaries

Map 3 of the SSCO document shows that within this SAC, the estuarine habitats occur at Drumcliff Bay and Sligo Harbour. Both these areas are sufficiently removed from the application site to ensure that significant effects upon this QI will not arise. There will be no reduction in habitat area or impacts upon thcommunity extent, community structure or community distribution within this QI.

Mudflats and sandflats not covered by seawater at low tide (1140)

The SSCO for this habitat is to *maintain* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat Area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes.
Community Extent	Hectares	Maintain the extent of the *Zostera*-dominated community and the Mytilidae-dominated community complex, subject to natural processes.
Community structure: Zostera density	Shoots/m2	Conserve the high quality of the *Zostera*-dominated community, subject to natural processes
Community structure: Mytilus edulis density	Individuals/m2	Conserve the high quality of the *Mytilidae*-dominated community complex, subject to natural processes
Community Distribution	Hectares	Conserve the following community types in a natural condition: Intertidal fine sand with *Peringia ulvae* and *Pygospio elegans* community complex; Estuarine mixed sediment to sandy mud with *Hediste diversicolor* and oligochaetes community complex; Fine sand with crustaceans and *Scololepis* (*Scololepis*) *squamata* community complex; Fine sand with *Angulus* spp. And *Nephtys* spp. community complex.

Table 3 – SSCOs for Mudflats and sandflats not covered by seawater at low tide

Potential Impact upon Mudflats and sandflats

Map 4 of the SSCO document shows that within this SAC, this habitat is recorded approximately 2km south-west of the application site. Significant effects upon this QI will not arise. There will be no reduction in habitat area or impacts upon the community extent, community structure or community distribution within this QI.

Embryonic Shifting Dunes (2110)

The SSCO for this habitat is to *maintain* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat Area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession.
Habitat Distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes.
Physical Structure: Functionality and Sediment Supply	Presence / Absence of Physical Barriers	Maintain the Natural Circulation of Sediment and Organic Matter, without and physical obstructions
Vegetation Structure: Zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation Composition: Plant health of foredune grasses	% Cover	More than 95% of sand couch (*Elytrigia juncea*) and/or lyme-grass *Leymus arenarius* should be healthy (i.e., green plant parts above ground and flowering heads present)

Vegetation Composition: Typical Species and Sub-Species Communities	% Cover	Maintain the presence of species-poor communities with typical species: sand couch (*Elytrigia juncea*) and/or lyme-grass *Leymus arenarius*
Vegetation Composition: Negative Indicator Species	% Cover	Negative indicator species (including non-natives) to represent less than 5% cover

Table4 – SSCOs for Embryonic Shifting Dunes

Shifting Dunes along the Shoreline with Ammophila arenaria (white dunes) (2120)

The SSCO for this habitat is to *restore* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat Area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession.
Habitat Distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes.
Physical Structure: Functionality and Sediment Supply	Presence / Absence of Physical Barriers	Maintain the Natural Circulation of Sediment and Organic Matter, without and physical obstructions
Vegetation Structure: Zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation Composition: Plant health of dune grasses	% Cover	95% of marram grass *Ammophilia arenaria* and or lyme'grass *Leymus arenarius* should be healthy (i.e., green plant parts above ground and flowering heads present)
Vegetation Composition: Typical Species and Sub-Species Communities	% Cover at a Representative Sample of Monitoring Stops	Maintain the presence of species-poor communities dominated by marram grass (*Ammophila arenaria*) and/or lyme-grass (*Leymus arenarius*)
Vegetation Composition: Negative Indicator Species	% Cover	Negative indicator species (including non-natives) to represent less than 5% cover

Table 5 – SSCOs for Shifting Dunes along the Shoreline with Ammophila arenaria (white dunes)

Fixed Coastal Dunes with Herbaceous Vegetation (Grey Dunes) (2130)

The SSCO for this habitat is to *restore* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Habitat Area	Hectares	Area stable or increasing, subject to natural processes, including erosion and succession.
Habitat Distribution	Occurrence	No decline, or change in habitat distribution, subject to natural processes.
Physical Structure: Functionality and Sediment Supply	Presence / Absence of Physical Barriers	Maintain the Natural Circulation of Sediment and Organic Matter, without and physical obstructions
Vegetation Structure: Zonation	Occurrence	Maintain the range of coastal habitats including transitional zones, subject to natural processes including erosion and succession
Vegetation Structure: Bare Ground	% cover	Bare ground should not exceed 10% of fixed dune habitat, subject to natural processes
Vegetation Structure: Sward Height	Centimetres	Maintain structural variation within sward
Vegetation Composition: Typical	Percentage Cover at a Representative	Maintain range of subcommunities with typical species listed in Ryle et al (2009)

Species and Sub-Species Communities	Sample of Monitoring Stops	
Vegetation Composition: Negative Indicator Species-(including Hippophae rhamnoides)	Percentage Cover	Negative indicator species (including non-natives) to represent less than 5% cover
Vegetation Composition: Scrub and trees	Percentage Cover	No more than 5% cover or under control

Table 6 – SSCOs for Fixed Coastal Dunes with Herbaceous Vegetation (Grey Dunes)

Potential Impact upon the Dune Habitats

Map 6 of the SSCO document illustrates the location of the three dune QIs within this SAC. There are no dune habitats within or close to the application site. The closest recorded dune system is at Yellow Strand, which is 3km south of the application site. There will be no significant effects upon any dune habitat arising from the proposed development.

***Juniperus communis* formations on heaths or calcareous grasslands (5130)**

The SSCO for this habitat is to *restore* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Formation area	Hectares	Area stable or increasing, subject to natural processes.
Habitat distribution	Occurrence	No decline.
Juniper population size	Number	At least 50 plants per population
Formation structure: cover and height	Percentage and metres	Well-developed structure with an open to closed cover of juniper up to or exceeding 0.45m in height with associated species
Formation structure: community diversity and extent	Hectares	Appropriate community diversity and extent
Formation structure: cone-bearing plants	Percentage	At least 10% of plants bearing cones
Formation structure: seedling recruitment	Percentage	At least 10% of juniper plants within the formation are seedlings
Formation structure: amount of each dead plants	Mean Percentage	Mean percentage of each juniper plant dead not more than 10%
Vegetation composition: typical species	Occurrence	A variety of typical native species with a minimum of 10 species present (excluding negative indicator species)
Vegetation composition: negative indicator species	Occurrence	Negative indicator species, particularly non-native invasive species, absent or under control

Table 7 – SSCOs for Juniperus communis formations

Potential Impact upon *Juniperus communis* formations

Map 7 of the SSCO document illustrates the location of this QI within this SAC. The closest location of this habitat is at Knocklane, which is 3km south of the site. There will be no significant effects upon this habitat arising from the proposed development.

Petrifying Springs with Tufa Formation (Cratoneurion) 7220

The SSCO for this habitat is to *maintain* or *restore* its favourable conservation condition which is defined in another SAC by the following list of attributes and targets:

Attribute	Measure	Target
Habitat Area	M^2	The area should be stable or increasing, subject to natural processes.
Habitat Distribution	Occurrence	No decline, subject to natural processes.
Hydrological regime: Height of Water Table; Water Flow	Metres; Metres per Second	Maintain appropriate hydrological regimes
Water quality	Water chemistry measures	Maintain oligotrophic and calcareous conditions
Vegetation composition: typical species	Occurrence	Maintain typical species

Table 8 – SSCOs for Petrifying Springs with Tufa Formation (Cratoneurion)

Potential Impact upon Petrifying Springs

Map 7 of the SSCO document illustrates the location of this QI within this SAC. The closest location of this habitat is close to Sligo Harbour, which is 11km south-east of the site. There will be no significant effects upon this habitat arising from the proposed development.

Marsh Snail *Vertigo angustior* 1014

The SSCO for this species is to *maintain* or *restore* its favourable conservation condition which is defined in another SAC by the following list of attributes and targets:

Attribute	Measure	Target
Distribution: occupied sites	Number	No decline.
Presence on transect	Occurrence	Adult or sub-adult snails are present in four of the grassland zones on the transect where optimal or sub-optimal habitat occurs (minimum 5 samples).
Presence	Occurrence	Adult or sub-adult snails are present in at least 6 other places at the site with a wide geographical spread (minimum of 8 sites or 75% of sites sampled).
Transect habitat quality	Metres	At least 75m of habitat along the transect is classed as optimal and 150m habitats along the transect if classed as sub-optimal or optimal.
Transect optimal wetness	Metres	Soils, at time of sampling, are damp (optimal wetness) and covered with a layer of humid thatch for more than 130m along the transect.
Habitat extent	Hectares	12-15ha of the site optimal and a further 11-14ha sub-optimal. Optimal habitat is defined as fixed dune, species-rich grassland dominated by red fescue (*Festuca rubra*), with sparse marram grass (*Ammophila arenaria*), lady's bedstraw (*Galium verum*), eyebright (Euphrasia sp.), mouse- ear-hawkweed (*Pilosella officinarum*) and other low growing herbs. Vegetation height 10-30cm. Habitat growing on damp, friable soil covered with a layer of humid, open structured thatch. Sub-optimal habitat is defined as for optimal but either vegetation height is less than 10cm or between 30 and 50cm; or the vegetation contains mounds of moss or willow (*Salix* spp.) scrub; or the soil is dry and sandy; or the thatch is wetter with a denser structure

Table 9 – SSCOs for Narrow-mouthed Whorl Snail Vertigo angustior

Potential Impact upon Marsh Snail

Map 7 of the SSCO document illustrates the location of this species within this SAC. The species is known to occur in the marshland habitats to the west of Strandhill. There will be no significant effects upon this species arising from the proposed development.

Sea Lamprey (1095)

The SSCO for this habitat is to *restore* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Distribution: Extent of Anadromy	% of estuary accessible	No barriers for migratory life stages of lamprey moving from freshwater to marine habitats and vice versa.

Table 10 – SSCOs for Sea Lamprey

River Lamprey (1099)

The SSCO for this species is to *maintain* or *restore* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Distribution: Extent of Anadromy	% of estuary accessible	No barriers for migratory life stages of lamprey moving from freshwater to marine habitats and vice versa.

Table 11 – SSCOs for River Lamprey

Potential Impact upon Lamprey species

Migrating adult lamprey (sea and river) pass through this SAC to/from the Garavogue River, which flows out of Lough Gill. This route is 14km south of the application site. Significant effects upon these species will not arise on foot of the proposed works. There will be no movement of silt or any other substance which could give rise to physical or chemical barriers to the movement of lamprey species within this SAC. Significant effects upon these species will not arise.

Harbour Seal *Phoca vitulina* (1365)

The SSCO for this habitat is to *maintain* its favourable conservation condition which is defined by the following list of attributes and targets:

Attribute	Measure	Target
Access to Suitable Habitat	Number of Artificial Barriers	Species range within the site should not be restricted by artificial barriers to site use.
Breeding Behaviour	Breeding Sites	Conserve breeding sites in a natural condition
Moulting Behaviour	Mould Haul-Out Sites	Conserve moult haul-out sites in a natural condition
Resting Behaviour	Resting Haul-Out Sites	Conserve resting haul-out sites in a natural condition
Disturbance	Level of Impact	Human activities should occur at levels at do not adversely affect the harbour seal populations at this site.

Table 12– SSCOs for the Harbour Seal

Potential Impact upon the Harbour Seal

Map 8 of the SSCO document illustrates the location of the breeding and resting sites of this species within the SAC. All sites occur within Drumcliff Bay SAC, which is 6km south of the application site. There will be no significant effects upon this species arising from the proposed development.

4.3 SUMMARY OF POTENTIAL IMPACTS

INTRODUCTION

The identification of potential impacts and the assessment of their significance typically requires the identification of the type and magnitude of the impacts. For example, will the impacts be short term or long term, direct, indirect or cumulative and will they occur during construction or operation. This section will establish whether the impacts of the proposed development at Ballyconnell that were identified in the previous section, are likely to occur and whether or not they are significant. These potential impacts will be examined with respect to the conservation objectives of the Natura 2000 site identified.

The previous section ruled out any potential for significant effects to arise on the individual QIs for which this site has been designated. However, the site boundary overlaps with the SAC boundary and therefore, general ecological impacts upon this site should also be considered.

In the screening section of this report, the following possible future impacts on the Cummeen Strand/Drumcliff Bay SAC were listed. These concerns are again listed below and

they will be dealt with in more detail in this section. These impacts will also consider those that may lead to significant negative effects upon the pNHA.

1. Significant effects upon the QIs of this SAC.
2. Habitat loss or fragmentation of the habitats within the SAC.
3. Deteriorations in water quality in the SAC arising from construction and operational activities.
4. Cumulative impacts with other proposed/existing developments.

Significant Effects upon the QIs of this Site

Section 4.2 established that the proposed development will not give rise to significant effects upon the QIs of this SAC.

Habitat Loss and Fragmentation

The construction works will occur within the boundary of an existing domestic site, and they will involve the demolition of existing structures and the construction of an extension. There will be no increase in the overall footprint area of the existing cottage. All works will take place on a previously developed part of the site consisting of buildings and artificial surfaces and surrounding garden habitats. There will no disturbances to any of the non-QI grassland habitats within the SAC/pNHA, the boundary of which extends towards the back of the existing house.

However, habitat loss or fragmentation within the SAC may arise due to the storage and disposal of construction and demolition waste within the SAC boundary. Mitigation measures will be included to ensure that this does not arise.

Deterioration in Water Quality in the SAC During Construction

The proposed development will not give rise to any significant effects upon the QIs for which this site has been designated. However, the site is partially within and it is adjacent to the coastal aquatic habitats of this SAC. Therefore, impacts upon water quality in the SAC that surrounds the site due to run-off from construction works cannot be excluded. Run-off could contain silt, cement and hydrocarbons and this could have a polluting effect upon the water surrounding the site.

The site is also within an area of extreme groundwater vulnerability. Therefore, impacts upon groundwater due to pollution during deeper excavations could also arise. Any runoff of hydrocarbons into these excavated areas could give rise to a temporary reduction in groundwater quality in the area.

The upgrading of the existing septic tank to a treatment plant and percolation area is considered a positive impact and this will eliminate any ongoing pollution issues arising from the existing unsuitable septic tank.

Potential In-Combination Effects

This section of the NIS examines whether any other plans or projects have the potential to act cumulatively or in-combination with the proposed development to adversely affect the integrity of the Cummeen Strand/Drumcliff Bay SAC.

The proposed development site is situated within the Sligo Bay and Drowse catchment. Therefore, any national, regional or local land use plans, along with any existing or proposed projects, further upstream in the catchment, or in the same groundwater body, have the potential to affect water quality in the this catchment and therefore also have the potential to act in-combination with the proposed development to affect the above European sites.

Any plan or existing/proposed project that could potentially affect the Natura 2000 sites above in-combination with the proposed development must adhere to the overarching environmental protective policies and objectives of the relevant land use plan. These policies and objectives will ensure the protection of Natura 2000 sites and will include the requirement for any future project to undergo Screening for Appropriate Assessment and/or Appropriate Assessment.

Sligo County Development Plan

Planning policy at the local level is provided by the Sligo County Development Plan 2017–2023. This plan contains a number of objectives and policies relevant to ecology, biodiversity and nature conservation. It also sets out the requirement for proposed developments to be subjected to Appropriate Assessment.

Future Plans / Other Projects

The Sligo County Council planning map tool was used to identify any current or future or projects which may potentially impact on Natura 2000 sites when considered in combination with the proposed development. In the preceding five years, many planning applications have been granted planning permission in the Ballinfull area. Where necessary, these applications were screened for AA, or else full AA was deemed necessary and an NIS was submitted. The proposed development will have no significant effects upon any designated site when considered in combination with other developments that have been properly screened or where mitigation is required following AA.

Any future application in the area that has the potential to impact upon Cummeen Strand/Drumcliff Bay SAC will be subjected to Appropriate Assessment as required under Articles 6(3) of the Habitats Directive. This current development will have no cumulative impacts upon the SACs / SPAs identified when considered in combination with any other development that has been screened for no impacts themselves (Stage 1) or where potential impacts have been mitigated against (Stage 2 AA / NIS).

5 MITIGATION MEASURES

In order to protect the overall integrity of the Cummeen Strand/Drumcliff Bay SAC and pNHA, a number of mitigation measures must be implemented and followed. Measures have also been suggested that will help to protect the local biodiversity of the surrounding area and to ensure the protection of local ecology and wildlife.

The implementation of these site-specific mitigation measures will ensure the overall protection of biodiversity and ecology the Cummeen Strand/Drumcliff Bay SAC / pNHA. The primary parties responsible for the implementation of these measures include the applicants, the project manager and the construction contractors.

Pre-Construction and Construction

- Prior to the commencement of any site works, the applicant and the contactors must be made aware of the overall sensitivity of this site. They must be made familiar with the overall content of this NIS and they must be made aware of the mitigation measures contained in this NIS. A statement signed by personnel on site to say that they will adhere to the mitigation measures as outlined in this NIS must be presented to the Local Authority prior to the commencement of any works.

- Site preparation and construction should be confined to the development site only and should adhere to all the mitigation measures outlined in this NIS.

- Work areas must be kept to the minimum area required to carry out the proposed works and the area must be clearly marked out in advance of the proposed works.

- Efficient construction practices and sequences should be employed on site, and this will minimise soil erosion and potential pollution of the aquatic habitats surrounding the site. Unnecessary clearance of vegetation should be avoided and only areas necessary for building works should be cleared.

Pollution Control

- There should be no discharges of contaminated waters to ground or surface waters from these developments, either during the construction or operation of the development. The control and management of hydrocarbons on site will be vital to prevent deteriorations in surface and groundwater quality locally. The following measures must be employed on site:

- All fuels, lubricants and hydraulic fluids should be kept in secure bunded areas remotely from any deep excavations or watercourses. The bunded area should accommodate 110% of the total capacity of the containers within it. Containers should be properly secured to prevent unauthorised access and misuse.
- On-site refuelling must be carried out at designated refuelling stations within the site. Only designated trained and competent operatives should be authorised to refuel plant on site. Drip trays must be used when refuelling all machinery. Absorbent material and pads should be available in the event of any accidental spillages.
- Alternatively, mobile double skinned fuel bowsers may be used. Fuel bowsers should be parked on a level area in the site when not in use. They should be bunded at 110%.
- There must be minimal maintenance of construction vehicles or plant on site.
- On-site diesel tanks should be double skinned to 110% of their capacity.
- Containment stores should be used for refuelling of small plant such as consaws etc.
- Fuel volumes stored on site should be minimised. Any fuel storage areas should be bunded appropriately for the fuel storage volume for the time period of the construction.
- Machines used should be regularly inspected for leaks and fitness for purpose.
- Any hazardous materials should be stored in secure bunded areas.
- An effective spillage procedure should be put in place with all staff properly briefed.
- Spill kits should be present in all plant machinery.
- Oil booms and oil soakage pads should be kept on site to deal with any accidental spillage.
- An emergency plan for the construction phase to deal with accidental spillages should be contained within an Environmental Management Plan.
- Waste oils and hydraulic fluids should be collected in leak-proof containers and removed from site for disposal and recycling

- Best practice concrete / aggregate management measures should be employed on site. These should include:

  - Best practice in bulk-liquid concrete management must be employed on site addressing pouring and handling, secure shuttering, adequate curing times etc.
  - Stockpile areas for sands and gravel should be kept to a minimum size, well away from aquatic habitats (minimum 50m).

- Where concrete shuttering is used, measures should be put in place to prevent against shutter failure and control storage, handling and disposal of shutter oils.
- Wash down water from concrete trucks will be appropriately controlled on-site. Such controls may include collection to allow sediment to settle out and reach neutral pH before clarified water is released to the local watercourse or allowed to percolate into the ground.
- Activities which result in the creation of cement dust should be controlled by dampening down the areas.
- Raw and uncured waste concrete should be disposed of by removal from the site or by burial on the site in a location and manner which will not impact upon local watercourses.
- Stockpile areas for sands and gravel should be kept to a minimum size, well away from any drain or watercourse.

- During construction, surface water on the site must be controlled and managed to avoid any impacts upon local ground or surface water receptors. Construction water should not be discharged directly into any watercourse. Good construction practices such as wheel washers and dust suppression measures must be undertaken. There must be no discharges of silt laden surface water into the public sewer.

- It is recommended that a geotextile membrane is installed as a fence around the demolition and construction work areas prior to the commencement of works. This fence will prevent the mobilisation of silt and aggregate into the aquatic habitats that surround the site.

- Guidelines within The Construction Industry Research and Information Association (CIRIA) provides guidance on the control and management of water pollution from construction sites ('Control of Water Pollution from Construction Sites, guidance for consultants and contractors', CIRIA, 2001). Guidelines within this document must be followed.

- All waste associated with the development should be disposed of in an environmentally friendly manner. Registered contractors should only be used. This includes any excavated soil. There must be no placement of soil or waste within any area designated as an SAC or pNHA.

Site Operation and Landscaping

- The treatment plant and percolation area must be installed under the supervision of a qualified engineer, and in accordance with the EPA Code of Practice (2021). The plant must be emptied regularly.

- Demolition and roof works should be mindful with regards to the potential presence of roosting bats. If bats are present in any structure that is to be demolished, works must be delayed until the bats have vacated naturally. If not, then a derogation license must be sought to move these bats safely.

- During operation only low intensity lighting should be used on the development. This will reduce the impact of any new lighting scheme on local bat populations. Lights should not be directed seawards.

- The removal of vegetation with herbicides should be avoided.

- Any landscaping should involve the planting of native Irish species that are indigenous to the site.

- Site verges and garden should be managed at a low intensity level to provide maximum habitat availability for pollinators.

6 APPROPRIATE ASSESSMENT CONCLUSIONS

This NIS has been undertaken to evaluate the potential impacts of the proposed development with regard to the effects upon the conservation objectives and qualifying interests (including the habitats and species) of the Cummeen Strand/Drumcliff Bay SAC. It is considered that following mitigation, that the proposed project does not have the potential to significantly affect the conservation objectives of this site and the integrity of these site as a whole will not be adversely impacted.

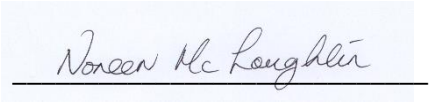
The qualifying interests of the site and their potential to be impacted upon from the potential development were listed in Section 4.2. It is considered that these potential impacts can be successfully mitigated against. With implementation of the mitigation measures there will be no impacts upon any designated habitat or any species dependent on these designated habitats.

In light of the above, it is considered that the proposed works do not have the potential to significantly affect the conservation objectives or qualifying interests of the Cummeen Strand/Drumcliff Bay SAC. The integrity of the site will not be adversely affected. Table 13 follows the integrity of the SAC / SPA checklist, which shows that the integrity of the site would not be affected by the proposed development.

Conservation Objective: Does the project have the potential to:	Yes / No
Cause delays in progress towards achieving the conservation objectives of the site?	N
Interrupt progress towards achieving the conservation objectives of the site?	N
Disrupt those factors that help to maintain the favourable conditions of the site?	N
Interfere with the balance, distribution and density of key species that are the indicators of the favourable condition of the site?	N
Other Objectives: does the project have the potential to:	
Cause changes to the vital defining aspects (e.g. nutrient balance) that determine how the site functions as a habitat or ecosystem?	N
Change the dynamics of the relationships (between, for example, soil and water or plants and animals) that define the structure and/or function of the site?	N

Interfere with predicted or expected natural changes to the site (such as water dynamics or chemical composition)?	N
Reduce the area of key habitats?	N
Reduce the population of key species?	N
Change the balance between key species?	N
Reduce diversity of the site?	N
Result in disturbance that could affect population size or density or the balance between key species?	N
Result in fragmentation?	N
Result in loss or reduction of key features (e.g. tree cover, tidal exposure, annual flooding, etc.)	N

Table 13 – Integrity of Site Checklist (From NPWS, Information Checklist for AA, Box 6, EC (2002)



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