
Sligo County Council

Enniscrone Public Realm Paving Project Co. Sligo

Appropriate Assessment Screening

July 2020



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1 INTRODUCTION

1.1 BACKGROUND

Jennings O'Donovan & Partners Limited have been commissioned by Sligo County Council to carry out an Appropriate Assessment (AA) Screening as required under Article 6(3) of Council Directive 92/43/EEC (Habitats Directive) for the rehabilitation and improvement of existing roads, footpaths and related pedestrian forecourts by repaving, hard landscaping, new signage and street furniture at the junction of Main Street and Cliff Road, Enniscrone, County Sligo, hereafter referred to as the Proposed Development. The nature and scope of the works for the Development are provided in this assessment.

Sections 1 and 2 of this report outline the background details of the Development, including legislative context, while Section 3 details the conservation objectives of any relevant Natura 2000 site(s) and the AA Screening. Section 4 delivers an AA screening statement.

Therefore, in compliance with legislative requirements, this Screening assesses whether the project, alone or in combination with other plans and projects, is likely to have significant effects on any European Site(s) in view of best scientific knowledge and the conservation objectives of the site(s).

1.2 NEED FOR THE DEVELOPMENT

The main driver for this project is the renewal of a portion of Enniscrone Main St. and Cliff Road from approximately the Southwestern end of Gilroys Bar to the Northeastern end of The Pilot Bar, and to the end of Gilroys Bar (Northwards) on the Cliff Road with view to providing a predominantly pedestrian plaza area. The relevant area is quite central to Enniscrone and consists of approx. 1580m² of public area, divide into two main paved areas: 800sqm of non-vehicular areas and 780m² of vehicular (the road) areas.

Sligo County Council wish to progress the works in 2020.

1.3 LEGISLATIVE CONTEXT

Under Section 177U (1) of the Planning Acts, a Screening for AA of a proposed Development shall be carried out by the competent authority (in this case, Sligo County Council) to assess in view of best scientific knowledge, if the proposed Development, individually or in combination with other plans or projects, is likely to have a significant effect(s) on any European site.

The legal basis on which SAC are selected and designated is the EU Habitats Directive, 92/43/EEC transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended. The designation features of SAC are referred to as Qualifying Interests (QI) and include both species (excluding birds) and habitats. Similarly, Special SPA are legislated in the Birds Directive 2009/147/EC. The designation features of SPA are referred to as Special Conservation Interests (SCIs) which comprise bird species as well as wetland bird habitats.

In general terms, SAC and SPA are considered to be of exceptional importance in terms of rare, endangered or vulnerable habitats and species within the European Community.

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6(3) establishes the requirement for an AA:

“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) states:

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

1.4 AUTHOR'S QUALIFICATION AND EXPERTISE

The AA Screening and NIS for this project have been prepared by ecologist Monica Sullivan (MCIEEM), who has a PhD in Environmental Sciences, from Trinity College, Dublin. She is a full member of the Chartered Institute of Ecology and the Environmental Management. Dr. Sullivan is Principal Environmental Scientist and ecologist in Jennings O'Donovan and has over 35 years' experience in the natural sciences, specialising in fisheries management, aquatic ecology and freshwater invertebrate taxonomy. She has lectured since the mid 1990's – 2017 in invertebrate zoology, ecology and environmental pollution control to both masters and degree students. She was the examiner for the freshwater biology module for the Institute of Fisheries Management, England. Monica's experience includes invasive species surveys, management plans, ecological studies, EIA screenings, AA screenings, NIS, otter surveys, badger surveys, freshwater macroinvertebrate and instream flora surveys.

Qualified to doctorate level, Monica previously worked as a partner in an environmental consultancy, undertaking fieldwork and specialising in Environmental Assessments of medium to large scale infrastructural projects and the coordination and management of AA and Environmental Impact Assessment processes. She has a clear understanding of the legislative framework governing the extent of environmental investigations, assessments and reports required to secure the necessary approvals on all types of projects. She has extensive experience in management of specialist sub-consultants and working in a team environment and a history of collaborating with participants on research projects. Dr. Sullivan was author and researcher on an Environmental Government Program on invasive species. She is chief author of a chapter in the book Zebra Mussels in Europe and has published many papers on the topic. She spent several years working as both English and Scientific editor for international scientific journals. In 2017, she was expert advisor for 'horizon scan' invasive species workshop.

2 METHODOLOGY

2.1 GUIDANCE FOLLOWED

Both EU and national guidance exists in relation to Member States fulfilling their requirements under the EU Habitats Directive, with particular reference to Article 6(3) and 6(4) of that Directive. The methodology followed in relation to this AA Screening has regard to the following:

- Assessment of plans and projects significantly affecting Natura 2000 sites: *Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC*. Office for Official Publications of the European Communities, Brussels (EC, 2001).
- Appropriate Assessment of Plans and Projects in Ireland: *Guidance for Planning Authorities*. Department of Environment, Heritage and Local Government, (DoEHLG, 2010).

- *Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*, Office for Official Publications of the European Communities, Luxembourg, (EC, 2018).
- *Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna*. Official Journal of the European Communities.
- Circular L8/08 – *Water Services Investment and Rural Water Programmes – Protection of Natural Heritage and National Monuments*. Department of Environment, Heritage and Local Government, (DoEHLG, 2008).
- *Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds* (codified version).
- *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*. Office for Official Publications of the European Communities, Luxembourg, (EC, 2007).
- *Nature and biodiversity cases: Ruling of the European Court of Justice*. Office for Official Publications of the European Communities, Luxembourg (EC, 2006).
- *European Communities (Birds and Natural Habitats) Regulations, 2011* (S.I. No.477 of 2011).
- *European Communities (2000a) Communication from the Commission on the Precautionary Principle*. Office for Official Publications of the European Communities, Luxembourg
- *Interpretation Manual of European Union Habitats*. Version EUR 28. European Commission (EC, 2013).
- *Communication from the Commission on the Precautionary Principle*. Office for Official Publications of the European Communities, Luxembourg, (EC, 2000a).
- Department of Environment, Heritage and Local Government Circular Letter PD 2/07 and NPWS 1/07, 2007
- Department of Environment, Heritage and Local Government Circular Letter 1/08 and NPWS 1/08, February 2008
- Department of Environment, Heritage and Local Government Circular Letter L8/08, September, 2008
- The EPA Handbook on the Implementation of the Regulations for Water Services Authorities for Public Water Supplies (ISBN: 978-1-84095-349-7)
- European Union Regulations 2014, SI No. 31 of 2014, Good Agricultural Practice for the Protection of Waters

2.2 THE STAGES INVOLVED IN AN APPROPRIATE ASSESSMENT

There are 4 stages in an AA as outlined in the European Commission Guidance document (2001). The following is a brief summary of these steps:

Stage 1: Screening / Test of Significance:

This stage examines the likely effects of a project either alone or in combination with other projects upon a European site and considers whether it can be objectively concluded that these effects will not be significant. The output from this stage is a determination for each European Site(s) of not significant, significant, potentially significant, or uncertain effects. The latter three determinations will cause that site to be brought forward to Stage 2.

Stage 2: Appropriate Assessment:

This stage considers the impact of the project on the integrity of a European Site(s), either alone or in combination with other projects or plans, with respect to (1) the site's conservation objectives; and (2) the site's structure and function and its overall integrity. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts. The output from this stage is a Natura Impact Statement (NIS). This document must include sufficient information for the competent authority to carry out the Appropriate Assessment. If the assessment is negative, i.e. adverse effects on the integrity of a site cannot be excluded, then the process must consider alternatives (Stage 3) or proceed to Stage 4.

Stage 3 - Assessment of Alternative Solutions:

This process examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the European Site(s). This assessment may be carried out concurrently with Stage 2 in order to find the most appropriate solution. If no alternatives exist or all alternatives would result in negative impacts to the integrity of the European Site(s) then the process either moves to Stage 4 or the project is abandoned.

Stage 4 - Assessment where no alternative solutions exist and where adverse impacts remain:

Assessment where no alternative solutions exist and where adverse impacts remain: Where imperative reasons of overriding public interest (IROPI) exist, an assessment to consider whether compensatory measures will or will not effectively offset the damage to the European site will be necessary.

2.3 STAGE 1- SCREENING / TEST OF SIGNIFICANCE

The function of the Screening Assessment is to identify whether or not the proposal will have a likely significant effect on any European Site. In this context, "likely" refers to the presence of doubt with regard to the absence of significant effects (ECJ case C-127/02) and "significant" means not trivial or inconsequential but an effect that has the potential to undermine the site's conservation objectives (ECJ case C-127/02). In other words, any effect that compromises the functioning and viability of a site and interferes with achieving the conservation objectives for the site would constitute a significant effect.

The nature of the likely interactions between the Development and the integrity of European Site/s will depend upon the sensitivity of the European Site/s qualifying features to potential impacts arising from the Development; the current conservation status of the European Sites and their qualifying features; and any likely changes to key environmental indicators (e.g. water quality) that underpin the conservation status of a European Site/s and its qualifying features, in-combination with other plans and projects.

The European Commission (2018) Guidelines outline the stages involved in undertaking a Screening Assessment of a Project that has the potential to have likely significant effects on European Sites. The methodology adopted for this Screening Assessment is informed by these guidelines and was undertaken in the following steps:

1. Define the project and determine whether it is directly connected with or necessary for the conservation management of European Sites
2. Identify other plans or projects that, in-combination with the project, have the potential to effect European Sites
3. Assess whether or not the project is likely to have significant effects on European Sites in the view of its conservation objectives.

2.4 DESK STUDY

A desk study was carried out to collate the available information on the ecological environment within a 15 km radius (or further where a hydrological link exists) of the Development site. The National Parks and Wildlife Service (NPWS) database was consulted concerning designated conservation areas, individual site synopsis for each designated area, conservation objectives, standard Natura 2000 data forms and GIS layering. A literature survey focused on the information available for the Killala Bay/Moy Estuary SAC and SPA which are located approximately 50m and 115m respectively northwest of the Development site.

The Sligo County Development Plan 2017-2023, and the Sligo County Council planning enquiry website were reviewed to identify any proposed plans or projects which may have a direct, indirect or cumulative impact with this Development.

Information from the following sources was used for the Desktop study:

- Sligo County Council
- OSI Aerial photography and mapping

- National Parks and Wildlife Service (NPWS) Maps and Databases
- Environmental Protection Agency (EPA) Water Quality Data
- Water Framework Directive (www.catchments.ie)

No difficulties, such as technical deficiencies, lack of information or knowledge were encountered in compiling any specific information for this AA screening report.

3 SCREENING FOR APPROPRIATE ASSESSMENT

3.1 MANAGEMENT OF A EUROPEAN SITE

The proposed upgrade works are not directly connected with or necessary to the management of any European Site for nature conservation, therefore Screening for AA is required.

3.2 PROJECT DESCRIPTION

3.2.1 *Site Location*

Enniscrone is a seaside town located in West Sligo off the N59 Sligo to Ballina route. It is approximately 54.4km west of Sligo town and 14.4km north of Ballina.

The Proposed Development at Enniscrone (Grid Reference ING 128729E, 329878N) is accessed from the R297 road (Main street), approximately 8.4km north-east of the N59 National Primary road (Figure 3.1).

The site is predominantly bound by local roads, footpaths and private and commercial properties along both the Main Street and Cliff Road. There is a low-lying (approximately 1m tall), cement-faced coastal wall along the north-western perimeter of Cliff Road.

The site is entirely a brownfield site with all areas given to either pedestrian or vehicular traffic/parking facilities. There is sufficient land available at the site indicating that land owned by a third party is unlikely to be a requirement.



Figure 3.1 Location of the Proposed Development Site at Enniscrone

The site is located in the north of the Moy and Killala Bay Water Framework Directive (WFD) Catchment (34) covering 2352km², the Leaffony Subcatchment catchment (010) and the south-western end of the River Quigabar (010) Sub basin (20.9 km²).

The Quigabar River (order three) discharges into Killala Bay approximately 3km north of the Proposed Development, along the coast. This river has two main tributaries, namely the Quigabar (ca. 2.4km) and the South Carrohubbuck (ca. 3.1km) which flow in a north-easterly direction before merging into the main branch of the Quigabar river (Figure 3.2). South of the Proposed Development in the Bellawaddy River Sub Basin, the Bellawaddy River flows in a north-westerly direction before entering Killala Bay. The Bellawaddy river is located approximately 325m west of the Proposed works along the Main street. No works will occur in the Bellawaddy River Sub Basin.



Figure 3.2 Outline of Local River Sub Basins and Local River Network

3.2.2 Drainage System

There is rising main sewer running along Main St. The direction of flow is northerly and away from the nearby Europeans Sites. The sewer is a combined system and receives all of the surface water accruing from this hard-surfaced area at present. The sewer discharges directly to the Enniscrone Wastewater Treatment Plant (WwTP).

3.2.3 Flooding

Office of Public Works (OPW) website and the CFRAM study were accessed (June 25, 2020) to determine flood areas within and near the Proposed Development. There is no potential for river or coastal flooding to occur at the Proposed Development site (**Figure 3.3**).



Figure 3.3 Flood Map for the Development Site (FloodInfo.ie, June 2020)

There are no historical recorded single or multiple flood events recorded in the vicinity of the site.

3.2.4 Project Description

Enniscrone Main street is a two-way carriageway road with a 30mph speed limit. Cliff Road is a single carriageway (one-way) road with a 30mph speed limit. The majority of the relevant section of Main Street does not allow parking on either side of the road and it also has double yellow lines to prevent parking in some areas.



Figure 3.4 Main Street and Cliff Road, Enniscrone

The Proposed Development works consists of the renewal of a portion of Enniscrone Main St. and Cliff Road from approximately the Southwestern end of Gilroys Bar to the Northeastern end of The Pilot Bar, and to the end of Gilroys Bar (Northwards) on the Cliff Road with view to providing a

predominantly pedestrian plaza area. The relevant area is quite central to Enniscrone and consists of approx. 1580 sqm of public area, divided into two main paved areas: 800sqm of non-vehicular areas and 780 sqm of vehicular (the road).

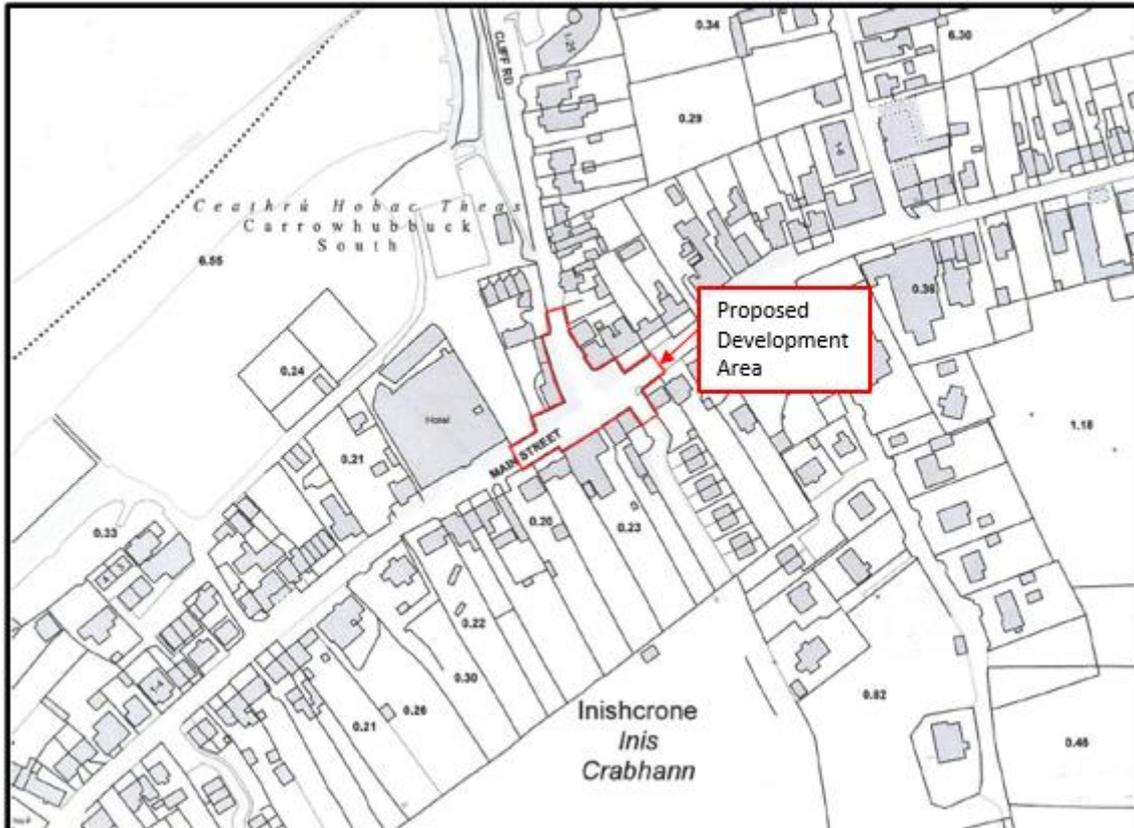


Figure 3.5 Enniscrone Town Centre, showing the location of the Proposed Development (Source Adapted from Sligo Co. Co.)

The entire works site will initially be tested for compaction levels in order to ascertain the exact works proposals. The results of these tests will determine the exact base materials and works required. It is envisaged that the existing thoroughfares, both vehicular and pedestrian are sufficiently compacted that removal of large amounts of existing materials and the construction of deep base layers will not be necessary.

3.2.5 **Summary of the Proposed Works:**

A Summary of the proposed works will comprise the following:

Removal and disposal of existing vehicular and pedestrian top layers, drainage channels and fixtures, kerbs, signage, fixtures.

Construct new base layers, new paving to vehicular and pedestrian areas, new raised and dropped kerbs, new traffic speed inhibitors (ramped paving), new tactile paving, new crossing points, new signage, new hard landscaping including planters, bollards, seats.



Figure 3.6 Proposed Works layout along Main Street and Cliff Road, Enniscrone, (Source Adapted from Sligo Co.Co.)

Sequence of Operations:

1. Carry out site compaction testing and complete design
2. Set up site compound and materials storage area if required – locations to be agreed
3. Implement all temporary works: road traffic management plan including safe pedestrian walkways
4. Remove and dispose of existing site materials: The existing carriageway will be planed off to a nominal depth of 100mm or 40mm using a mechanical 2.0 metre wide tracked planer. All arisings (no waste arisings) will be conveyed directly onto 8 wheeled tipper lorries and carted immediately off site to the contractors approved tip
5. Establish all new proposed levels
6. Ensure maintenance of existing drainage patterns
7. Construct kerbs and drainage: Extend the existing drainage runs as required. For the new kerb lines and new drainage channels, gulleys etc. to be installed the existing carriageway and existing kerb line will be excavated using a JCB and breaker and materials carted to tip. New kerbs will be delivered on site on a grab lorry and laid adjacent to there finishing position. A 6m3 concrete mixer lorry will deliver concrete and spread in new kerb line. The concrete will be levelled by hand kerb will be laid by 2 persons. Type 1 and sand will be delivered to site on a grab lorry and laid by hand on top of the existing carriageway and compacted. The existing paving will be relayed to new level and new paving will be laid.
8. Binder course/ regulating of carriageway: The sub base will be regulated to thickness/ tonnage as agreed by the Engineer. The surface will be compacted using a twin drum 120 roller or larger

9. Construct all new paved areas: granite, limestone and concrete pavers laid on sand blinding to manufacturers' specifications
10. Construct signage, hard landscaping; all required line marking works
11. Construction will be in accordance with appropriate Health and Safety standards and Sligo County Council's safety management system
12. Construction will be in accordance with low impact principles
13. Construction will be in off season period, eliminating local habitat impact
14. Completion of works: Test all drainage; test compaction; all plant, materials and traffic management removed from site.

3.3 RECEIVING ENVIRONMENT

3.3.1 Overview

The works will be undertaken in the town of Enniscrone, a small coastal town with a population of 1,156 (2016 statistics). The town looks out over Killala Bay and Enniscrone beach. Part of Killala Bay, west of Bartra Island and over 6km from the Proposed Development is designated as a shellfish area.

The eastern aspect of Enniscrone Beach is adjacent to the western wall along Cliff Road. This beach (with associated regulated bathing waters) is an exposed sandy beach, backed by sand dunes, a caravan park and a golf course. The bathing area (i.e. that which is patrolled by lifeguards) is approximately 500m in length. However, the beach is approximately 4.5km in length. The water quality for the beach is denoted as 'Excellent' for the three samples taken for 2020 and was classified as achieving 'Good' Water Quality in 2019 based on the assessment of bacteriological results for the period 2016 to 2019. Enniscrone Beach achieved a 'Good' Water Quality rating for the four consecutive years 2016 to 2019. Annual water quality ratings are generally calculated using monitoring results over a four-year period and are assessed against stringent bacterial limits to protect bather health. The beach did not secure the Blue Flag award in 2018.

3.3.2 Ecology of the Receiving Environment

The entire Proposed Development Site area is a brownfield site and can be classified as having *Building and Artificial Surface* (BL3) habitat (Fossitt, 2000). This category incorporates all areas of built land and includes the roadways, pavements, driveways, buildings, walls and artificial surfaces within the Proposed Development site. The ecological value of this habitat type is negligible.

3.3.3 Hydrology

In terms of hydrology, the local bedrock is classified as being a 'Locally Important Aquifer - Bedrock which is Moderately Productive only in Local Zones'. The aquifer is not within a locally important gravel aquifer.

3.3.4 EPA Water Quality Ratings

The Ground Waterbody WFD Status for the Proposed Development comes under the Foxford waterbody (EPA Code IE WE G 0034) and was classified as having 'good' quality for the 2013-2018 period, maintaining this status since 2007-2012 period.

The transitional waterbody of the Moy estuary located 2km west of the site was classified as having 'Moderate' water quality for the 2013-2018 survey period.

There are three water quality monitoring stations in the coastal waters off Enniscrone and its environs, Station 1 is located 1.25km NW of the Proposed Development (WFD Code IEMCCW22005295MY2004) in 1km offshore marine waters; Station 2 (WFD Code IEMCCW22005295MY2007) is located 1.3 km N-NW of the Proposed Development and 130m offshore, and Station 3 (WFD Code IEMCCW22005295MY2010) in relation to the Proposed Development is also N-

NW at 1.4km from the site and approx. 85m offshore. Monitoring at these stations denotes Coastal Waterbody (Killala Bay: IE WE 420 0000) quality for the 2013-2018 period as 'Good'.

The Bellawaddy river and its tributaries received 'Good' water quality status for the 2013-2018 period; the Quigabar watercourse was unassigned.

Enniscrone beach has a monitoring station located approx. 675m west of the Proposed Development site; the 2019 results from this sampling station denote 'Good' Water Quality.

3.3.5 **Land Cover, Geology and Soils**

Corine 2018 land cover data classifies the site as being within Code 112: *Discontinuous Urban Fabric* which covers an area of 132.33 hectares and encompasses the town of Enniscrone. Lands adjacent (south and east) and in the surrounding environs are classified as *Pastures* (Code 231) spreading out over 64, 500 hectares. Directly north of Main street and beyond the residential and commercial buildings Corine 2018 denotes a 128 hectare area of Code 331, *Beach, Dunes and Sands* which is located south of a narrow belt of *Intertidal Flat* (Code 423) which opens out into Code 523 *Sea and Ocean*.

The entire site's underlying geology is from the Ballina Limestone Formation (Lower) and is comprised of dark fine-grained limestone and shale. The groundwater subsoil permeability is classified as 'Moderate'.

The Moy Water Management Unit Action Plan, covering an area of 1,356km², outlines diffuse agriculture sources as representing 70% of total phosphorous in the area.

3.3.6 **Pressures**

Enniscrone WwTP, designed for a PE of 5,000 and provides secondary treatment is located 1km north of the site on the Killala Bay coastline. It has failed its licence D0102-01 compliance on several grounds, including BOD, Suspended Solids, pH, and Total Ammonia (as N). The Moy WMU outlines this WwTP as a point pressure on the catchment.

3.3.7 **European Sites within the Zone of Influence (Zoi) of the Development**

This AA Screening examines the likely significant effects of the Development, either alone or in-combination with other projects or plans on European sites, that are situated within a Zoi, or a distance that has a potential source-pathway-receptor (SPR), both direct and indirect with the Development.

The potential Zoi currently recommended for plans, is a distance of 15 km from the plan boundary and derives from UK guidance (Scott Wilson *et al.*, 2006). For projects however, the distance could be more, or much less than 15 km, and in some cases less than 100m, but guidance advises that this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in-combination effects.

Figure 3.7 shows a 15 km radius Zoi around the Development and the Natura 2000 sites that are within the Zoi. The operational impact of the Development was assessed using the SPR model to examine the likelihood of significant effects of the Development either alone or in-combination with other plans or projects, on any European Sites within the Zoi. Table 3.1 lists the Natura 2000 sites within a 15 km radius of the Development.

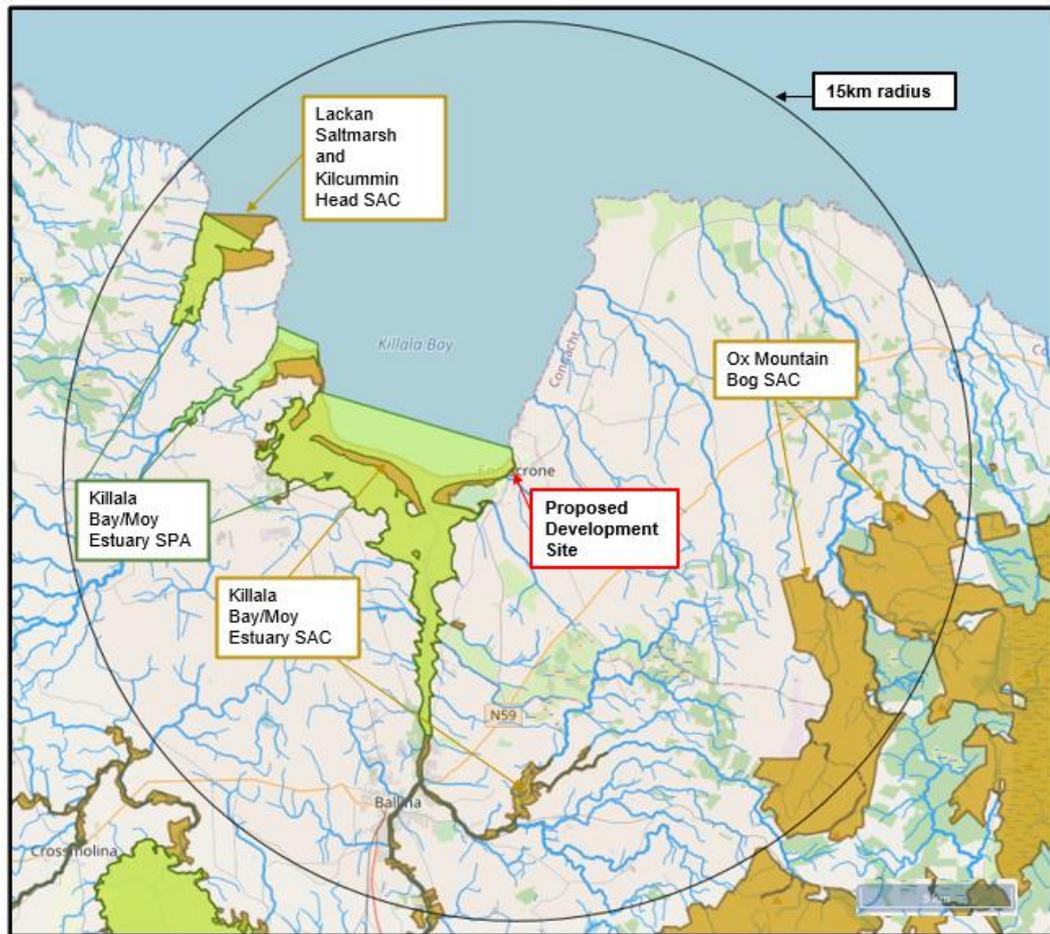


Figure 3.7 European Sites Located within the Zol of the Development

Table 3.1 Natura 2000 sites within a 15 km radius of the Development Site

Site Code	Natura 2000 Site	Distance (km) from Development Site to nearest point	Pathway for Effects
000516	Lackan Saltmarsh and Kilcummin Head SAC	11.0km northwest	No: separated by distance and no hydrological connection
002006	Ox Mountain Bog SAC	9.7 km southeast	No: separated by distance and no hydrological connection
004036	Killala Bay/Moy Estuary SPA	105m northwest	Yes: local noise disturbance
000458	Killala Bay/Moy Estuary SAC	50m northwest	Yes: surface water run-off into SAC

3.3.8 Conservation Objectives

Due to the scale and scope of the Development, lack of a hydrological link and sufficient distance from the Development site, it is considered that negative impacts will not occur on European Sites that have no direct or indirect connectivity to the Development site, either alone or in combination with other projects and plans. Other than the Killala Bay/Moy Estuary SAC and SPA, no other European Site within a 15 km radius of the Proposed Development area has any direct or indirect connectivity to the Development. Therefore, with due consideration, impacts on the conservation objectives of the former two European Sites outlined above in Table 3.1 are not considered likely and are 'screened out'. The Killala Bay/Moy Estuary SAC and SPA however, are located within very close proximity to the proposed works and are considered further in this assessment (Table 3.2 and Table 3.3).

Table 3.2 Features of interest for the Killala Bay/Moy Estuary SAC under consideration

Killala Bay/Moy Estuary SAC	
1.	Estuaries [1130]
2.	Mudflats and sandflats not covered by seawater at low tide [1140]
3.	Annual vegetation of drift lines [1210]
4.	Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]
5.	Salicornia and other annuals colonising mud and sand [1310]
6.	Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>) [1330]
7.	Embryonic shifting dunes [2110]
8.	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]
9.	Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]
10.	Humid dune slacks [2190]
11.	<i>Vertigo angustior</i> (Narrow-mouthed Whorl Snail) [1014]
12.	<i>Petromyzon marinus</i> (Sea Lamprey) [1095]

13. *Phoca vitulina* (Harbour Seal) [1365]

North of Ballina town, the River Moy flows to the sea via a long, narrow estuarine channel. After approximately 8km, the estuary widens to form a north-facing triangular bay, with the towns of Enniscrone (Co. Sligo) and Killala (Co. Mayo) situated on the eastern and western shores, respectively. The estuary itself forms the County boundary along its northern part. A long sandy island (Bartragh Island) separates the south-western side of the bay from the open water. Much of the inner part of the bay is intertidal. The northern part shelves to approximately -10m.

Extensive sandflats and mudflats are exposed in the estuary and bay at low tide. For the most part, these flats are unvegetated, but mats of Eelgrass (*Zostera* spp.), Beaked Tasselweed (*Ruppia maritima*) and green algae (*Enteromorpha* spp.) occur which provide important feeding material for birds. The estuary is generally in a natural state and is considered to be one of the best examples of a largely unpolluted system in Ireland. The dune systems at Bartragh Island, Enniscrone and Ross, to the north-west, are well-developed and constitute good examples of dunes with a rich and diverse flora. Dunes dominated by Marram (*Ammophila arenaria*) are located at all three sub-sites. At Enniscrone, they stretch the length of the strand and are particularly well-developed towards the western end.

Saltmarshes are present in sheltered parts of the site, some of which occur in association with the dune systems. Elsewhere along the coastline are sandy beaches, shingle beaches and some bedrock shores which are occasionally backed by clay sea-cliffs, such as at Moyne. Species such as Sea Rocket, Colt's-foot (*Tussilago farfara*) and Sea Mayweed (*Matricaria maritima*) are indicative of the habitat 'annual vegetation of drift lines'.

The site holds populations of three species listed on Annex II of the E.U. Habitats Directive: Common Seal (maximum count of 108 in the all-Ireland survey of 2003); Sea Lamprey and Narrow-mouthed Whorl Snail (*Vertigo angustior*). The rare snail has been known at this site for over 100 years. It occurs in an area of wet marsh and this site represents one of the few remaining examples of *Vertigo angustior* in its marsh "phase". This species has been declining throughout much of its range due to loss of habitat, and in particular, drainage of wetlands.

This composite site has an excellent range of good quality coastal habitats, including a number listed on Annex I of the E.U. Habitats Directive. In particular, the dune complex at Bartragh Island is relatively undisturbed and is considered to be one of the best in the country in terms of its naturalness and intact state. The presence of the Annex II snail, *Vertigo angustior*, and the importance of the area for wintering waterfowl, including two Annex I Birds Directive species, adds further significance to this area. The site is extremely scenic and is a significant regional amenity area for its beaches and for fishing.

Table 3.3 Features of interest for the Killala Bay/Moy Estuary SPA under consideration

Killala Bay/Moy Estuary SPA	
1.	Ringed Plover (<i>Charadrius hiaticula</i>) [A137]
2.	Golden Plover (<i>Pluvialis apricaria</i>) [A140]
3.	Grey Plover (<i>Pluvialis squatarola</i>) [A141]
4.	Sanderling (<i>Calidris alba</i>) [A144]
5.	Dunlin (<i>Calidris alpina</i>) [A149]
6.	Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157]
7.	Curlew (<i>Numenius arquata</i>) [A160]
8.	Redshank (<i>Tringa totanus</i>) [A162]

9. Wetland and Waterbirds [A999]

The Killala Bay/Moy Estuary site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the eight species outlined in Table 3.3 above. 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.

This SPA site is a large site that comprises the estuary of the River Moy and the inner part of Killala Bay, including Lackan Bay and Rathfran Bay, in Counties Mayo and Sligo. It is a funnel-shaped estuary, c. 7 km wide at its outer limit. It is very well sheltered by a sandy island, Bartragh, and by a sandy peninsula that extends from Enniscrone on the eastern side. Extensive intertidal sand and mud flats are exposed at low tide. For the most part, these flats are unvegetated, but mats of eelgrass (*Zostera* spp.), beaked tasselweed (*Ruppia maritima*) and green algae (*Ulva* spp.) occur, which provide important feeding material for waterfowl species.

The site is of high ornithological importance as it supports wintering waterfowl and provides excellent feeding grounds for birds, as well as high-tide roosts. All eight species have populations of national importance in this SPA, including a very substantial population of grey plover (3.4% of the all-Ireland total). The presence of red-throated diver, golden plover and bar-tailed Godwit is of particular note as these species are listed on Annex I of the E.U. Birds Directive. Killala Bay/Moy Estuary is a Ramsar Convention site.

3.4 APPROPRIATE ASSESSMENT SCREENING

This section identifies and considers potential impacts; direct and secondary, on the conservation status of the qualifying interests of Killala Bay/Moy Estuary SAC and SPA as a result of the Proposed Development. Direct and indirect impacts related to the construction and operation phase are discussed in section 4.1. Cumulative impacts are considered under section 4.2.

3.4.1 *Direct and Indirect impacts*

There is no direct spatial overlap between any element of the Proposed Development and the features of interest for which Killala Bay/Moy Estuary SAC and Killala Bay/Moy Estuary SPA are selected. All components of the Proposed Development are restricted to public roads.

Indirect impacts may occur as a result of direct or indirect linkages to those habitats within the Zol of the Proposed Development. The Zol of this project is considered to be the QI which occur in close proximity to the site of works and include:

- i) Mudflats and sandflats not covered by seawater at low tide [1140]
- ii) Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] and
- iii) Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]

and the species of SCI of the Killala Bay/Moy Estuary SPA to include all 8 species outlined in Table 3.3 above and the wetland and waterbirds associated with this European Site.

Harbour seals, sea lamprey and narrow-mouthed sails are not considered to be within the Zol in this instance.

This zone of influence has been decided based on expert judgement relative to the scale and scope of the project, corridors of connectivity and potential cumulative impacts pre, post and during the construction phase of the project.

The purpose of this section of the Screening is to examine the possibility that the project, either individually or in combination with other plans and projects, has the potential to significantly affect any European Site.

This section will identify and consider potential impacts, both direct and indirect on the conservation status of the noted qualifying interests of the two European Sites as a result of the Proposed Development. Considering the source-pathway-receptor model, the pathways for potential effects arising during the completion of the proposed upgrade works are limited to any such activities which

could give rise to land take / habitat loss, water quality, noise, or disturbance effects. With cognisance of the minor scale of works which are limited in excavation and construction, it is considered that the Zol of the proposal is limited geographically and temporally, with pathways exclusively limited to two designated European Sites, outside of which the proposed works will be completed and taking account of the hydrological pathway for effects within the Zol of the proposed works.

No works will be undertaken in any European Site. The proposed works comprise a one-off operation at the location areas identified in Figure 3.5 and 3.6. During the completion of the works, localised impacts may arise from the required activities:

1. Noise and vibration disturbance generated from excavation activities
2. The potential for sediment and pollutants to enter surface waters

The potential for impact, relative to construction works and post-construction operation on the qualifying features considered to be within the Zol of the Development is outlined below in Table 3.4.

Table 3.4 Potential Construction and Operation Phase Effects on Killala Bay/Moy Estuary SAC and Killala Bay/Moy Estuary SPA

Qualifying Feature SAC/SPA	Source of Potential Effect	Assessment of Impact	Appropriate Assessment Requirement
SAC: Mudflats and sandflats not covered by seawater at low tide [1140]	No S-P-R link exists. All run-off from the roadworks will enter the drainage system that feeds into the Enniscrone WwTP.	Construction and Operation Phases There is no potential for any impact on the local SAC or any of the conservation objectives of this site.	No
SAC: Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) [2120]	No S-P-R link exists. All run-off from the roadworks will enter the drainage system that feeds into the Enniscrone WwTP.	There is no potential for any impact on the local SAC or any of the conservation objectives of this site.	No
SAC: Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]	No S-P-R link exists. All run-off from the roadworks will enter the drainage system that feeds into the Enniscrone WwTP.	There is no potential for any impact on the local SAC or any of the conservation objectives of this site.	No
SPA: Ringed Plover (<i>Charadrius hiaticula</i>) [A137] Golden Plover (<i>Pluvialis apricaria</i>) [A140] Grey Plover (<i>Pluvialis squatarola</i>) [A141] Sanderling (<i>Calidris alba</i>) [A144] Dunlin (<i>Calidris alpina</i>) [A149]	Noise and excavation works may disturb birds utilising the area.	Birds utilising this area are already accustomed to a high level of noise from traffic movement along both Main Street and also along the adjacent Cliff Road. Human traffic is also pronounced in this area as both locals and tourists utilise the beach and also the walk along Cliff Road. Housing, commercial developments, a 1m high wall and an extensive beach area exist in the intervening distance between the SPA and the Proposed Development site. These established features visually separate the species of SCI from the Development Site and also provide noise barriers for any works undertaken. It is unlikely that any works undertaken for this project will disturb birds of the nearby Killala Bay/Moy Estuary SPA.	No

<p>Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] Curlew (<i>Numenius arquata</i>) [A160] Redshank (<i>Tringa totanus</i>) [A162] Wetland and Waterbirds [A999]</p>			
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3.5 CUMULATIVE IMPACTS

Given the scale and nature of the works and the discrete temporal nature of any associated localised impact limited to the duration of the individual component works themselves, there is no potential for the Development to give rise to significant effects 'alone', and therefore no potential to interact with any other impact to contribute to cumulative impacts on any European Site.

3.6 CONCLUDING STATEMENT

The likely changes that will arise from the proposed works at Enniscrone have been examined in the context of a number of factors that could potentially affect the qualifying interests of the Killala Bay/Moy Estuary SAC and the species of Special Conservation Interest of the SPA. Overall, it has been found that the proposed works are not likely to significantly affect any European Site, in view of the qualifying interests and conservation objectives of these sites.

4 SCREENING STATEMENT

The likely impacts that will arise from the proposed upgrade works associated with the Enniscrone Public Realm - Paving Project, Co. Sligo have been evaluated with regard to the qualifying interests and the associated conservation objectives of the designated European Sites within the zone of influence. The proposed works are small in scale and localised to within the immediate component work areas and are limited to temporary, short-term disturbance.

Given the scale of the proposed works, the short timescale, in addition to the brownfield character of the baseline environment, it has been evaluated that the potential for significant effects on any designated European Site can be excluded, having regard to the sensitive receptors and their conservation objectives occurring within the zone of influence of the works. This evaluation has been completed with specific regard to the Killala Bay/Moy Estuary SAC and with reference to the QIs of this designation and also the Killala Bay/Moy Estuary SPA with particular reference to the species of SCI of this designation; none of which will be significantly affected on the basis of the works proposed.

Taking account of the findings of this Screening for Appropriate Assessment, it is concluded that the proposed upgrade works at Enniscrone will not have a significant effect on any European Site within the Natura 2000 network. A Stage 2 Appropriate Assessment is therefore not required.

5 REFERENCES

Assessment of plans and projects significantly affecting Natura 2000 sites; Methodological Guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC. European Commission, 2002.

Sligo County Development Plan 2017-2023 Volume 1 (adapted 28/08/2017)

Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna. Official Journal of the European Communities.

Department of Environment, Heritage and Local Government Circular Letter PD 2/07 and NPWS 1/07, 2007.

Department of Environment, Heritage and Local Government Circular Letter 1/08 and NPWS 1/08, February 2008.

Department of Environment, Heritage and Local Government Circular Letter L8/08, September 2008.

Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version).

DoEHLG (2009). Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities.

EPA (2017) Water Quality in 2017: An Indicators Report. Environmental Protection Agency. Johnstown Castle, Wexford, Ireland.

European Commission (2001) Assessment of Plans and Projects significantly affecting European Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.

European Commission (2007) Interpretation manual of European Union habitats – EUR27.

European Commission (2013) Interpretation manual of European Union habitats EUR 28. European Commission, DG Environment.

European Commission (2018) Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats Directive' 92/43/EEC.

European Union Birds Directive (1979) Council Directive 79/209/EEC of 2 April 1979 on the conservation of wild birds. Brussels: The Council of the European Communities.

European Union Habitats Directive (1992) Council Directives 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

Fossitt, J.A. (2000) A Guide to Habitats in Ireland', The Heritage Council, Co. Kilkenny.

Inland Fisheries Ireland (2016) Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters. Inland Fisheries Ireland.

Managing Natura 2000 Sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC. European Commission 2018. 7621 final. Office for Official Publications of the European Communities, Luxembourg.

National Biodiversity Data Centre (2019). Biodiversity maps; Species data sets.

NPWS (2009) Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government Dublin.

NPWS (2019) The Status of EU Protected Habitats and Species in Ireland. Volume 2: National Parks and Wildlife Service, Habitat Assessments, Department of Arts, Heritage and the Gaeltacht.

Scott Wilson, Levett-Therivel Sustainability Consultants, Treweek Environmental Consultants and Land Use Consultants (2006) Appropriate Assessment of Plans.