R267/ Donegal Town Public Service Centre Junction at Drumlonagher, Donegal Town, Co. Donegal

HABITATS DIRECTIVE ARTICLE 6 SCREENING ASSESSMENT

May 2020

Chomhairle Chondae Dhun na nGall

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY

This report contains a Screening for Appropriate Assessment for the proposed signalisation of the R267/ Donegal Town Public Service Centre Junction at Drumlonagher, Donegal Town in accordance with the requirements of Article 6(3) and Article 6(4) of the EU Habitats Directive (92/43/EEC).

The project is unlikely to have a significant effect on any Natura 2000 site or qualifying interest due to the nature of the works and the separation distance between the works and the sites.

This report clearly determines that an Appropriate Assessment is not required.

2.0 INTRODUCTION

Article 6(3) and 6(4) of the Habitats Directive states the following:

6(3) – *'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'*.

6(4) – *'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 State 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'.

Appropriate Assessment process follows a four stage approach. The outcome of each successive stage determines whether a further stage in the process is required. Stages 1-2 deal with the main

requirements for assessment under Article 6(3). Stage 3 may be part of Article 6(3) or may be a necessary precursor to Stage 4. Stage 4 is the main derogation step in Article 6(4).

Appropriate Assessment process comprises of the following stages;

Stage 1 – Screening for Appropriate Assessment (AA)

Stage 2 – Appropriate Assessment (AA)

Stage 3 – Alternative Solutions

Stage 4 – Imperative Reasons of Overriding Public Interest (IROPI)/ Derogation.

Screening determines whether Appropriate Assessment (AA) is necessary by examining:

1. *'whether a plan or project can be excluded from AA requirements because it is directly connected with or necessary to the management of the site, and'*
2. *'the potential effects of a project or plan, either alone or in combination with other projects and plans, on a Natura 2000 site in view of its conservation objectives, and considering whether these effects will be significant'*.

Screening is an iterative process that involves consideration of the plan or project and its likely effects, and of the Natura 2000 sites and their ecological sensitivities, and the likely interaction of these. If the effects are deemed to be significant, potentially significant, or uncertain, or it the screening process becomes overly complicated, then the process must proceed to Stage 2 (AA).

3.0 DESCRIPTION OF PROJECT

Donegal County Council proposes to introduce a traffic signal control system on the R267 at the junction of the access road to the Donegal Town Public Service Centre (PSC) to the northwest and the access road to a number of commercial properties (known as the So-Lo Road for the purpose of this report only) to the southeast. The proposal includes the installation of traffic signals on all four approach roads to the junction and will also include pedestrian crossings. The proposal also includes realignment of the junction radii as appropriate.

The proposal has been developed to address the impact of increased traffic levels and safety concerns attracted by developments including the a new service station and food court and to ensure future additional traffic volumes from the Primary Care Centre (under construction), Nursing Home and Cinema

can be facilitated.

The introduction of a traffic management solution at this junction (R267 / Donegal Town PSC / So-Lo Road) would provide appropriate crossing points, predictable traffic movements and regulated flow patterns, which would improve safety for all road users and manage the traffic to aid with improved flow at am/pm peaks in particular.

The proposed works are summarised as follows:

- Installation of traffic signals on the R267 at the junction of the Donegal Town PSC and the "So-Lo" road.
- Upgrade and realignment of footpaths as appropriate to facilitate pedestrian crossings,
- Realignment of junction radii in accordance with DMURS,
- New road markings, signage, drainage works, landscaping as appropriate.
- The project will be carried out in accordance with Section 38 of the Road Traffic Act 1994.

4.0 NATURA 2000 SITES

The approach to screening follows guidance provided in the document 'Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities'.

1. Any Natura 2000 sites **within or adjacent** to the plan or project area.

County Donegal has 72 Natura sites and together they cover a large area of the county. In particular, watercourses are frequently included within the Natura sites and contribute significantly to the environmental diversity throughout the county. Where a particular watercourse is not directly included within a Natura site then it may often discharge into a Natura site and thus has a direct connector to that site. The following Natura sites are located near the proposed works:

- Lough Eske and Ardnamona Wood SAC (Site code 000163)
- Donegal Bay SPA (Site Code 004151)
- Donegal Bay (Murvagh) SAC (Site code 000133)

Lough Eske and Ardnamona Wood Special Area of Conversation (Site code 000163)

Lough Eske is a large lowland oligotrophic lake. It lies approximately 5 km north-east of Donegal town at the junction of Carboniferous rocks with more resistant Dalradian gneiss and granite. The site also includes the River Eske and short stretches of the Lowerymore, Clogher and Drummenny Rivers, as well as a number of smaller tributaries.

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

- [3110] Oligotrophic Waters containing very few minerals
- [7220] Petrifying Springs*
- [91A0] Old Oak Woodlands
- [1029] Freshwater Pearl Mussel (Margaritifera margaritifera)
- [1106] Atlantic Salmon (Salmo salar)
- [1421] Killarney Fern (Trichomanes speciosum)

Donegal Bay Special Protection Areas (Site code 004151)

Donegal Bay SPA is a very large, marine-dominated, site. It extends from Doorin Point, to the west of Donegal Town, to Tullaghan Point in County Leitrim, a distance of approximately 15 km along its north-east/south-west axis. It varies in width from about 3 km to over 8 km. The site includes the estuary of the River Eske, which flows through Donegal Town, and the estuary of the River Erne, which flows through Ballyshannon. Much of the shoreline is rocky or stony, with well-developed littoral reefs in places. There are also extensive stretches of sandy beaches, especially from the Murvagh peninsula southwards to Rossnowlagh and at the outer part of the estuary of the River Erne. Shingle or cobble beaches are also represented. There are extensive areas of intertidal flats associated with the estuary of the River Eske, reflecting the very sheltered conditions in this part of the bay. These have been shown to be biotope rich, and supporting a range of macro-invertebrates, including polychaete worms (Hediste diversicolor, Arenicola marina and Nephtys hombergii) and bivalves (Scrobicularia plana, Cerastoderma edule and Macoma balthica). Elsewhere, a narrow fringe of intertidal flats is exposed at low tides. Salt marshes are found in the sheltered conditions of the innermost part of the bay. A number of small, grassy, islands occur in the innermost part of the bay. The waters of the shallow bay overlie mostly sandy substrates, though reefs occur in places.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Great Northern Diver, Light-bellied Brent Goose, Common Scoter and Sanderling. 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.

Donegal Bay (Murvagh) Special Area of Conservation (Site Code 000133)

This site occupies the inner part of Donegal Bay, immediately to the south-west of Donegal Town. It contains the estuary of the River Eske and a number of other significant rivers. The area is underlain by Carboniferous limestone and shale, although blown sand and other recent deposits obscure much of the solid geology.

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

- [1140] Tidal Mudflats and Sandflats
- [2130] Fixed Dunes (Grey Dunes)*
- [2170] Dunes with Creeping Willow
- [2190] Humid Dune Slacks
- [1365] Common (Harbour) Seal (Phoca vitulina)

A Site Synopsis of the Natura 2000 sites identified in (2) above are attached in Appendix 1 of this report.

There are no works proposed within any of these sites.

Favourable conservation status of a habitat is achieved when its natural range, and area it covers within that range, is stable or increasing, and the ecological factors that are necessary for its long- term maintenance exist and are likely to continue to exist for the foreseeable future, and the conservation status of its typical species is favourable. The favourable conservation status of a species is achieved when population data on the species concerned indicate that it is maintaining itself, and the natural range of the species is neither being reduced or likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The project overview and location in relation to Natura 2000 sites are shown in Figure 4.0

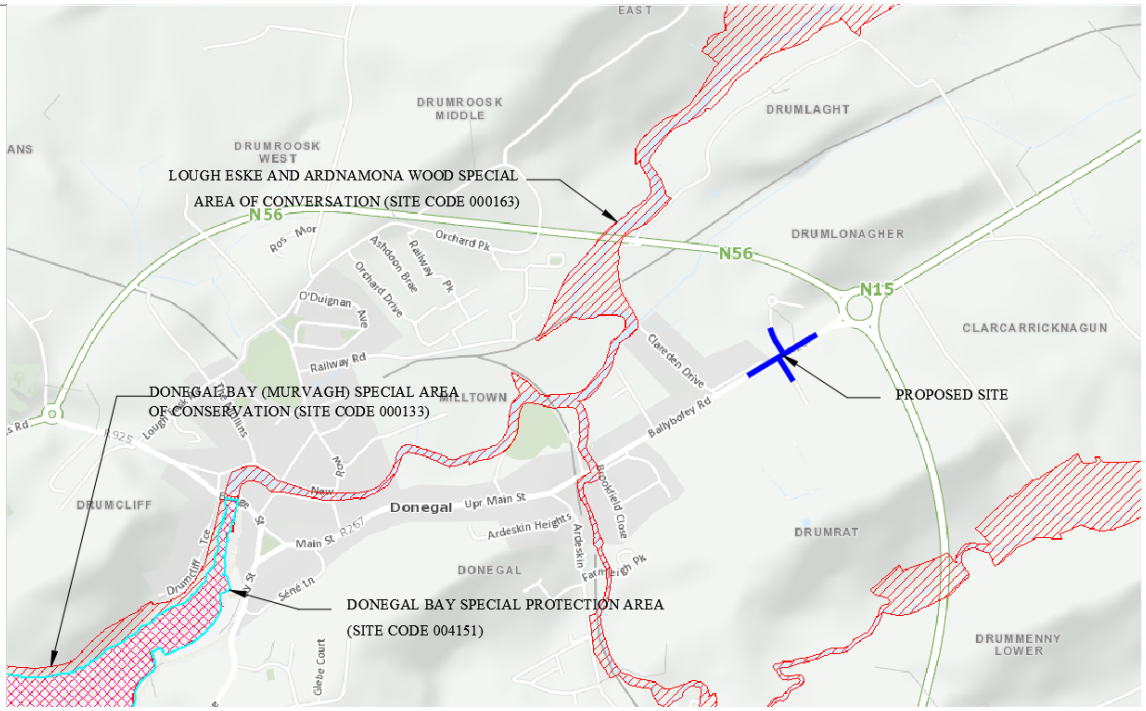


Figure 4.0 – Project overview of Natura 2000 sites identified.

4.1 CONSERVATION OBJECTIVES FOR NATURA 2000 SITES

Conservation objectives for the various SPA's and SAC's have been set by the National Parks and Wildlife Service. These objectives are generally to maintain or restore the favorable conservation status for habitats and species of community interest within the Natura sites. The specific conservation objectives for each site is listed below

Lough Eske and Ardnamona Wood SAC (Site code 000163)

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

- [3110] Oligotrophic Waters containing very few minerals
- [7220] Petrifying Springs*
- [91A0] Old Oak Woodlands
- [1029] Freshwater Pearl Mussel (Margaritifera margaritifera)
- [1106] Atlantic Salmon (Salmo salar)
- [1421] Killarney Fern (Trichomanes speciosum)

Donegal Bay SPA (Site Code 004151)

- A003 Great Northern Diver Gavia immer
- A046 Light-bellied Brent Goose Branta bernicla hrota
- A065 Common Scoter Melanitta nigra
- A144 Sanderling Calidris alba
- A999 Wetlands

Donegal Bay (Murvagh) SAC (Site code 000133)

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

- [1140] Tidal Mudflats and Sandflats
- [2130] Fixed Dunes (Grey Dunes)*
- [2170] Dunes with Creeping Willow
- [2190] Humid Dune Slacks
- [1365] Common (Harbour) Seal (Phoca vitulina)

5.0 ASSESSMENT OF LIKELY EFFECTS

The aim of this project is to introduce traffic signals on a road junction in Donegal Town. The project will also include new pedestrian crossings, realignment of corner radii and all other associated works.

There are no other works, policies, plans or projects known that would impact on any of the Natura 2000 sites identified above. As the works are non intrusive in nature on the Natura 2000 sites, it is unlikely that the project will have any effect on these species.

Assessment of likely effects is the process of establishing whether the plan or project is likely to affect a Natura 2000 site or sites. It is based on a preliminary impact assessment using available information and data. This is followed by a determination of whether there is a risk that the effects identified could be significant.

A summary of the assessment can be referenced in Appendix 2.

5.1 CUMULATIVE, DIRECT, INDIRECT, SHORT & LONG TERM EFFECTS

The development will not have a direct effect on any of the Natura 2000 sites identified near the proposed project. The development will not lead to loss of habitat, fragmentation or any impact on water resources.

The site is located in a built up area in the town. The proposal is to introduce traffic signals and pedestrian crossings at a road junction. It is also proposed to realign the corner radii at the junction. There will be no work carried out on greenfield sites.

There are 3 No. Natura 2000 sites identified near the site, none of these run through the site.

5.2 OTHER SPECIES - OTTER [1355] *LUTRA LUTRA*

The ecology of otters has been the subject of a project under the LIFE Nature programme of the European Commission, published by Life in UK Rivers. The study shows that otters require huge territories. Quantities of prey dictate numbers of otters and any factor that impacts on fish stock numbers can have significant impact. The food taken by otters has been the subject of a number of studies, and the main prey of the otter includes fish, frogs, crayfish and eels. Chemical vulnerability relates to prey (principally fish) and the possibility of contamination.

Otters are very mobile creatures and so have the potential to be present in the area. However they are also shy creatures and the works are within an urban area which will have a greater affect on their movements and makes their presence less likely. The site will be checked for the presence of otter holts in advance of the works but it is extremely unlikely that any holts will be within the site as no watercourse present would be suitable. Given that the works will not affect the river and there shall be no restriction to otter's movements or their prey in the area, it is therefore considered extremely unlikely that the proposed works will have a significant effect on this species.

5.3 WETLAND BIRDS

The Donegal Bay SPA is designated for a number of wintering wetland birds as listed in section 4.1. Given the separation between the works area and the areas of ornithological interest and that the works will be undertaken in a way that prevents accidental pollution of any watercourse, then it is considered extremely unlikely that there will be a direct or indirect impact on the ornithological interest within the SPA as a result of the proposed works.

5.4 PARTICULAR HABITATS

The SAC's identified have been dedicated for a number of particular habitats including estuaries, and sandy beaches. These habitats are found mainly in the exposed coastal regions and the proposed works will not intrude in this area.

5.5 OTHER POLICIES, PLANS OR PROJECTS

There are no other works, policies, plans or projects known that would impact on any of the Natrua 2000 sites identified. As the works are non intrusive in nature on the Natura 2000 sites, it is unlikely that the project will have any effect on these species.

Assessment of likely effects is the process of establishing whether the plan or project is likely to

affect a Natura 2000 site or sites. It is based on a preliminary impact assessment using available information and data. This is followed by a determination of whether there is a risk that the effects identified could be significant.

If the effects are deemed to be significant, potentially, significant, or uncertain, or it the screening process becomes overly complicated, then the process must proceed to Stage 2 (AA).

A preliminary impact assessment using available information and data was undertaken to establish whether the plan or project is likely to have an effect on a Natura 2000 site.

Examples of effects that are likely to be significant are:

- Any impact on an Annex I habitat.
- Causing reduction in the area of the habitat or Natura 2000 site.
- Causing direct or indirect damage to the physical quality of the environment (e.g. water quality and supply, soil compaction) in the Natura 2000 site.
- Causing serious or ongoing disturbance to species or habitats for which the Natura 2000 site is selected (e.g. increased noise, illumination and human activity).
- Causing direct or indirect damage to the size, characteristics or reproductive ability of populations on the Natura 2000 site.
- Interfering with mitigation measures put in place for other plans or projects.

It is concluded the subject project does not have any significant impact on identified Natura 2000 Sites, Appendix 2 contains an Assessment of Natura 2000 Sites identified at Section 4.0 above. No other plans or projects have been identified in respect of which combined effects with the subject project require consideration.

6.0 CONCLUSION

Further to the above assessment of Natura 2000 sites (as detailed in Appendix 2) within the area of the proposed works it is considered that the project will have no adverse effect on the integrity or conservation objectives of any of the Natura 2000 sites. The screening process has been undertaken to identify the proximity of Natura sites to the proposed works. The process has considered the qualifying interests of these Natura 2000 sites and potential impacts arising from the proposed project. Because of the type of qualifying interest, the separation between construction sites and Natura sites, the timing of the works, the controls in place, the environmental checks and the use of good site management practices it is considered extremely

unlikely that the proposed works will have any significant impact on the integrity on any of the Natura sites.

The process has shown that it is extremely unlikely that there will be any significant negative effects on any Natura 2000 sites arising from the implementation of the project. It is also unlikely that there will be 'in combination' negative effects from any other plans or known developments.

In conclusion the Stage 1 screening for Appropriate Assessment has determined that the introduction of traffic signals on the R267 at the junction with the Donegal PSC and the "So-Lo" road in Donegal Town will not adversely impact in any significant manner on any Natura 2000 site and the qualifying interests or conservation objectives associated with them.

As such, it is concluded that Stage 2 Appropriate Assessment is not required.

7.0 REPORT ACCEPTANCE SHEET

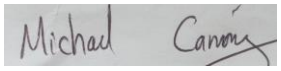
The Habitats Directive Article 6 screening report has determined that the proposed R267/ Donegal Town Public Service Centre Junction project is unlikely to have a significant effect on any Natura site.

Screening Report Prepared and Recommended By:

John Mc Cafferty Date: 20th May 2020

Assistant Engineer

Screening Report Approved By:



Michael Canning Date 20th May 2020

Executive Engineer

Appendix 1 – Natura 2000 Site Synopsis

SITE SYNOPSIS

Site Name: Lough Eske and Ardnamona Wood SAC

Site Code: 000163

Lough Eske is a large lowland oligotrophic lake. It lies approximately 5 km north-east of Donegal town at the junction of Carboniferous rocks with more resistant Dalradian gneiss and granite. The site also includes the River Eske and short stretches of the Lowerymore, Clogher and Drummenny Rivers, as well as a number of smaller tributaries.
The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[3110] Oligotrophic Waters containing very few minerals
[7220] Petrifying Springs*
[91A0] Old Oak Woodlands
[1029] Freshwater Pearl Mussel (*Margaritifera margaritifera*)
[1106] Atlantic Salmon (*Salmo salar*)
[1421] Killarney Fern (*Trichomanes speciosum*)

The shore of Lough Eske has a diverse and interesting flora which reflects the contrasting geology within the site. It includes heath-covered peninsulas, rocky shores, small flushes, wet and dry woodland fringes, occasional reedbeds of *Phragmites australis*, small freshwater marshes and some interesting species-poor fen communities (particularly on the northern shore of the lake) which are typified by Star Sedge (*Carex echinata*). In addition there are also small, but relatively intact, very wet areas of blanket bog.
Ardnamona Wood, on the western side of the lake, is an old oak woodland. It is of great scientific interest for its size, naturalness and flora. It displays a habitat range from dry areas dominated by Pedunculate Oak (*Quercus robur*) to wet woodland with Alder (*Alnus glutinosa*). Ash (*Fraxinus excelsior*), Rowan (*Sorbus aucuparia*) and Downy Birch (*Betula pubescens*) also occur in the high canopy with Holly (*Ilex aquifolium*), Hazel (*Corylus avellana*) and Willow (*Salix* spp.) in the understorey. Oak and Birch woodland is also found along the valley of the Lowerymore River. The north side of this valley also has some petrifying springs, a priority Annex I habitat under the E.U. Habitats Directive. These all possess moss species which are diagnostic of the habitat, such as *Cratoneuron commutatum, C. filicinum* and *Eucladium verticillatum*).

The Killarney Fern (*Trichomanes speciosum*), a Red Data Book species listed in Annex II of the E.U. Habitats Directive and included under the Flora (Protection) Order, 1999, occurs in the site. Two other rare plants, Whorled Caraway (*Carum verticillatum*) and Six-stamened Waterwort (*Elatine hexandra*), are also present.
Important animals recorded from the site include good populations of Atlantic Salmon and Freshwater Pearl Mussel (*Margaritifera margaritifera*), both listed on Annex II of the E.U. Habitats Directive, and the Arctic Char (*Salvelinus alpinus*), a rare fish listed in the Red Data Book of Irish vertebrates. The Eske system is an important multi-sea-winter (spring salmon) stock, one of the few rivers nationally to hold 3-sea-winter fish over 20 lb.
A number of exotic species, notably the invasive *Rhododendron ponticum*, have become established in Ardnamona Wood and represent a threat to the ecological value of the habitat. The lake and its flora and fauna are vulnerable to pollution from the surrounding agricultural land and also from an increase in domestic waster effluent.
This site contains three habitats listed in the E.U. Habitats Directive - lowland oligotrophic lake,

petrifying springs and old oak woodland. Three species which are also included in the Habitats Directive - the Killarney Fern, the Atlantic Salmon and the Freshwater Pearl Mussel - are also present in the site.

SITE NAME: DONEGAL BAY SPA

SITE CODE: 004151

Donegal Bay SPA is a very large, marine-dominated, site. It extends from Doorin Point, to the west of Donegal Town, to Tullaghan Point in County Leitrim, a distance of approximately 15 km along its north-east/south-west axis. It varies in width from about 3 km to over 8 km. The site includes the estuary of the River Eske, which flows through Donegal Town, and the estuary of the River Erne, which flows through Ballyshannon. Much of the shoreline is rocky or stony, with well-developed littoral reefs in places. There are also extensive stretches of sandy beaches, especially from the Murvagh peninsula southwards to Rossnowlagh and at the outer part of the estuary of the River Erne. Shingle or cobble beaches are also represented. There are extensive areas of intertidal flats associated with the estuary of the River Eske, reflecting the very sheltered conditions in this part of the bay. These have been shown to be biotope rich, and supporting a range of macro-invertebrates, including polychaete worms (*Hediste diversicolor*, *Arenicola marina* and *Nephtys hombergii*) and bivalves (*Scrobicularia plana*, *Cerastoderma edule* and *Macoma balthica*). Elsewhere, a narrow fringe of intertidal flats is exposed at low tides. Salt marshes are found in the sheltered conditions of the innermost part of the bay. A number of small, grassy, islands occur in the innermost part of the bay. The waters of the shallow bay overlie mostly sandy substrates, though reefs occur in places.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Great Northern Diver, Light-bellied Brent Goose, Common Scoter and Sanderling. 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.
Donegal Bay supports an excellent diversity of wintering waterbirds, especially species associated with shallow bays (all figures are mean peak counts for four of the five winters between 1995/96 and 1999/2000). It has an internationally important wintering population of Great Northern Diver (138) and is consistently one of the top sites in the country for this species. It also has one of the few regular populations of Black-throated Diver in the country (11), and Red-throated Diver (21). It supports an internationally important population of Light-bellied Brent Goose (207) and nationally important populations of Common Scoter (860) and Sanderling (68). A range of other species associated with estuarine and shoreline habitats occurs at the site, including Cormorant (29), Shelduck (24), Wigeon (224), Mallard (100), Long-tailed Duck (14), Red-breasted Merganser (38), Oystercatcher (581), Ringed Plover (99), Golden Plover (103), Lapwing (122), Dunlin (269), Bar-tailed Godwit (49), Curlew (359), Redshank (93), Greenshank (12) and Turnstone (53). Gulls are regular in autumn and winter, especially Black-headed Gull (239) and Common Gull (297).

This large coastal site is of high ornithological importance, with two species having populations of international importance (Great Northern Diver and Light-bellied Brent Goose) and a further two species having populations of national importance (Common Scoter and Sanderling). Also of note is that five of the regularly occurring species are listed on Annex I of the E.U. Birds Directive, i.e. Great Northern Diver, Black-throated Diver, Red-throated Diver, Golden Plover and Bar-tailed Godwit.

SITE SYNOPSIS

Site Name: Donegal Bay (Murvagh) SAC

Site Code: 000133

This site occupies the inner part of Donegal Bay, immediately to the south-west of Donegal Town. It contains the estuary of the River Eske and a number of other significant rivers. The area is underlain by Carboniferous limestone and shale, although blown sand and other recent deposits obscure much of the solid geology.
The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[1140] Tidal Mudflats and Sandflats
[2130] Fixed Dunes (Grey Dunes)*
[2170] Dunes with Creeping Willow
[2190] Humid Dune Slacks
[1365] Common (Harbour) Seal (*Phoca vitulina*)

Most of the site consists of intertidal habitats, notably mud- and sandflats, sea inlets and bays, tidal rivers, estuarine channels and sandy beaches. These areas are generally unvegetated but are obviously nutrient-rich, as extensive beds of shellfish occur in parts of the bay. The following macro-invertebrate species are common throughout much of the bay: *Arenicola marina, Hediste diversicolor, Scrobicularia plana* and *Macoma balthica.*
Along some parts of the shore, saltmarsh has developed. Dominant plants there include Thrift (*Armeria maritima*), Red Fescue (*Festuca rubra*) and Common Scurvygrass (*Cochlearia officinalis*). Sea Arrowgrass (*Triglochin maritima*), Sharp Rush (*Juncus acutus*) and Saltmarsh Rush (*J. gerardi*) are also common, while brown seaweeds (*Fucus* spp.) are abundant lower down the shore profile.
On the stable parts of some of the shingle and boulder beaches, Common Scurvygrass also occurs, along with Silverweed (*Potentilla anserina*) and Sea-milkwort (*Glaux maritima*).
Sand dunes, including fixed dunes, occur in parts of the site, especially at Murvagh. Intact sections contain Sea Sandwort (*Honkenya peploides*) and Marram (*Ammophila arenaria*) in the young dunes, with abundant Marram in the fixed dunes. These stable areas are frequently species-rich, with abundant Field Wood-rush (*Luzula campestris*), a well-developed moss community including *Thuidium tamariscinum* and *Rhytidiadelphus squarrosus*, and herbs such as Common Bird's-foot-trefoil (*Lotuscorniculatus*), Wild Thyme (*Thymus praecox*), Heath Dog-violet (*Viola canina*) and Lady's Bedstraw (*Galium verum*). Dune slacks also occur and in one slack the Red Data Book species Round-leaved Wintergreen (*Pyrola rotundifolia*) occurs. Typical species of dunes with Creeping Willow occur at Mullanasole and include: Creeping Willow (*Salix repens*), Sand sedge (*Carex arenaria*), Red Fescue, Lady's Bedstraw, Common Bird's-foot-trefoil and Mouse-ear Hawkweed (*Pilosella officinarum*) along

with other typical species of fixed dune including: False Oat-grass (*Arrhenatherum elatius*), Selfheal (*Prunella vulgaris*), Wild Thyme and the mosses *Hypnum cupressiforme*, *Rhytidiadelphus triquetrus* and *Rhytidiadelphus squarrosus*. The Common Twayblade orchid (*Listera ovata*) occurs throughout this habitat. Other species present include: Creeping Bent (*Agrostis stolonifera*), Marram Grass and the moss *Pleurozium schreberi*.

Both Common Scoter and Brent Goose are found in the greater Donegal Bay area, from Bundoran north to Murvagh. The Bay provides one of the most important sites in the country for the Common Scoter, with peak numbers of approximately 1,500 individuals in 1984/85 - 1986/87. This species uses large wintering grounds making counts difficult, but in recent years peaks of 662 birds (1995/96) and 1,073 birds (1997/98) have been recorded in the area. Other wintering species of note from the site include Ringed Plover 175, Oystercatcher 119 and Dunlin 221 (data based on 18 counts from 1984/85 - 1986/87). Small numbers (up to 50) of Greenland White-fronted Goose from the Pettigo flock fed at Inishpat Island in the 1980s, but have rarely done so in recent years.
The site supports a population of Common Seal (maximum count of 148 in the all-Ireland survey of 2003). This species is listed on Annex II of the E.U. Habitats Directive.
Land use in the area consists of boating and fishing in the bay, with a little shellfish aquaculture. Grazing occurs on terrestrial habitats, while recreational pressures are severe on parts of the dunes. A large part of the dune system is excluded from the site due to its development as a golf course and to the presence of conifer plantations. Despite these pressures, the site is of international importance due to the presence of a wide range of habitats, including four listed on Annex I of the E.U. Habitats Directive, an important seal colony and the occurrence of significant bird populations.

Appendix 2 –Assessment of Natura 2000 Sites

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
Site Name: Lough Eske and Ardnamona Wood SAC **Site Code: 000163** Lough Eske is a large lowland oligotrophic lake. It lies approximately 5 km north-east of Donegal town at the junction of Carboniferous rocks with more resistant Dalradian gneiss and granite. The site also includes the River Eske and short stretches of the Lowerymore, Clogher and Drummenny Rivers, as well as a number of smaller tributaries. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes): • [3110] Oligotrophic Waters containing very few minerals • [7220] Petrifying Springs* • [91A0] Old Oak Woodlands • [1029] Freshwater Pearl Mussel (Margaritifera margaritifera) • [1106] Atlantic Salmon (Salmo salar) • [1421] Killarney Fern (Trichomanes speciosum)	The shore of Lough Eske has a diverse and interesting flora which reflects the contrasting geology within the site. It includes heath-covered peninsulas, rocky shores, small flushes, wet and dry woodland fringes, occasional reedbeds of Phragmites australis, small freshwater marshes and some interesting species-poor fen communities (particularly on the northern shore of the lake) which are typified by Star Sedge (Carex echinata). In addition there are also small, but relatively intact, very wet areas of blanket bog. Ardnamona Wood, on the western side of the lake, is an old oak woodland. It is of great scientific interest for its size, naturalness and flora. It displays a habitat range from dry areas dominated by Pedunculate Oak (Quercus robur) to wet woodland with Alder (Alnus glutinosa). Ash (Fraxinus excelsior), Rowan (Sorbus aucuparia) and Downy Birch (Betula pubescens) also occur in the high canopy with Holly (Ilex aquifolium), Hazel (Corylus avellana) and Willow (Salix spp.) in the understorey. Oak and Birch	Site is extensive and primarily vulnerable to effects of surrounding agricultural activities and urban residential and industrial development. The only risk factor is the entry of pollutants into the drainage network and particularly nutrient pollution of waters. This will be negated though controls	• The predominant habitat of the SAC is of Oligotrophic Waters and Old Oak Woodlands. • Proposal is to introduce new traffic signals, pedestrian crossings and realignment of corner radii. • The scheme does not increase likely run off or risk of pollutants entering the drainage system.	• There are no other works planned for the area. • The works do not constitute a major change in the land use of the area. **Consideration:** Scheme does not have a cumulative impact on the SAC.	**Consideration:** The scheme does not have a significant impact on the Natura 2000 Site. This is due to the separation distance between the works and the qualifying interests contained in the SAC and controls that will be in place during construction.

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	woodland is also found along the valley of the Lowerymore River. The north side of this valley also has some petrifying springs, a priority Annex I habitat under the E.U. Habitats Directive. These all possess moss species which are diagnostic of the habitat, such as Cratoneuron commutatum, C. filicinum and Eucladium verticillatum). The Killarney Fern (Trichomanes speciosum), a Red Data Book species listed in Annex II of the E.U. Habitats Directive and included under the Flora (Protection) Order, 1999, occurs in the site. Two other rare plants, Whorled Caraway (Carum verticillatum) and Six-stamened Waterwort (Elatine hexandra), are also present. Important animals recorded from the site include good populations of Atlantic Salmon and Freshwater Pearl Mussel (Margaritifera margaritifera), both listed on Annex II of the E.U. Habitats Directive, and the Arctic Char (Salvelinus alpinus), a rare fish listed in the Red Data Book of Irish vertebrates. The Eske system is an important multi-sea-winter(spring salmon) stock, one of the few rivers	which will be put in place prior to construction .	**Consideration:** Scheme does not impact the SAC.		

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	nationally to hold 3-sea-winter fish over 20 lb. A number of exotic species, notably the invasive Rhododendron ponticum, have become established in Ardnamona Wood and represent a threat to the ecological value of the habitat. The lake and its flora and fauna are vulnerable to pollution from the surrounding agricultural land and also from an increase in domestic waster effluent. This site contains three habitats listed in the E.U. Habitats Directive - lowland oligotrophic lake, petrifying springs and old oak woodland. Three species which are also included in the Habitats Directive - the Killarney Fern, the Atlantic Salmon and the Freshwater Pearl Mussel - are also present in the site.				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
Site Name: Donegal Bay SPA **Site Code: 004151** Donegal Bay SPA is a very large, marine-dominated, site. It extends from Doorin Point, to the west of Donegal Town, to Tullaghan Point in County Leitrim, a distance of approximately 15 km along its north-east/south-west axis. It varies in width from about 3 km to over 8 km. The site includes the estuary of the River Eske, which flows through Donegal Town, and the estuary of the River Erne, which flows through Ballyshannon. Much of the shoreline is rocky or stony, with well-developed littoral reefs in places. There are also extensive stretches of sandy beaches, especially from the Murvagh peninsula southwards to Rossnowlagh and at the outer part of the estuary of the River Erne. Shingle or cobble beaches are also represented. There are extensive areas of intertidal flats associated with the estuary of the River Eske, reflecting the very sheltered conditions in this part of the bay. These have been shown to be biotope rich, and supporting a range of macro-invertebrates, including polychaete worms (Hediste diversicolor, Arenicola marina and Nephtys hombergii) and bivalves	The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Great Northern Diver, Light-bellied Brent Goose, Common Scoter and Sanderling. 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. Donegal Bay supports an excellent diversity of wintering waterbirds, especially species associated with shallow bays (all figures are mean peak counts for four of the five winters between 1995/96 and 1999/2000). It has an internationally important wintering population of Great Northern Diver (138) and is consistently one of the top sites in the country for this species. It also has one of the few regular populations of Black-throated Diver in the country (11), and Red-throated Diver (21). It supports an internationally important population of Light-bellied Brent Goose (207) and nationally important populations of Common Scoter (860) and Sanderling (68).	The only risk factor is the entry of pollutants into the River Eske upstream of the SPA. This is unlikely due to the separation distance between the site and the river.	• The area is of interest partly due to its wetlands and waterbirds. • Proposal is to introduce new traffic signals, pedestrian crossings and realignment of corner radii. • The scheme does not increase likely run off or risk of pollutants entering the drainage system.	• There are no other works planned for the area. • The works do not constitute a major change in the land use of the area. **Consideration:** Scheme does not have a cumulative impact on the SPA.	**Consideration:** The scheme does not have a significant impact on the Natura 2000 Site. This is due to the separation distance between the works and the qualifying interests contained in the SPA and controls that will be in place during construction.

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
(Scrobicularia plana, Cerastoderma edule and Macoma balthica). Elsewhere, a narrow fringe of intertidal flats is exposed at low tides. Salt marshes are found in the sheltered conditions of the innermost part of the bay. A number of small, grassy, islands occur in the innermost part of the bay. The waters of the shallow bay overlie mostly sandy substrates, though reefs occur in places.	A range of other species associated with estuarine and shoreline habitats occurs at the site, including Cormorant (29), Shelduck (24), Wigeon (224), Mallard (100), Long-tailed Duck (14), Red-breasted Merganser (38), Oystercatcher (581), Ringed Plover (99), Golden Plover (103), Lapwing (122), Dunlin (269), Bar-tailed Godwit (49), Curlew (359), Redshank (93), Greenshank (12) and Turnstone (53). Gulls are regular in autumn and winter, especially Black-headed Gull (239) and Common Gull (297). This large coastal site is of high ornithological importance, with two species having populations of international importance (Great Northern Diver and Light-bellied Brent Goose) and a further two species having populations of national importance (Common Scoter and Sanderling). Also of note is that five of the regularly occurring species are listed on Annex I of the E.U. Birds Directive, i.e. Great Northern Diver, Black-throated Diver, Red-throated Diver, Golden Plover and Bar-tailed Godwit.		**Consideration:** Scheme does not impact the SPA.		

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
Site Name: Donegal Bay (Murvagh) SAC **Site Code: 000133** This site occupies the inner part of Donegal Bay, immediately to the south-west of Donegal Town. It contains the estuary of the River Eske and a number of other significant rivers. The area is underlain by Carboniferous limestone and shale, although blown sand and other recent deposits obscure much of the solid geology. The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes): • [1140] Tidal Mudflats and Sandflats • [2130] Fixed Dunes (Grey Dunes)* • [2170] Dunes with Creeping Willow • [2190] Humid Dune Slacks • [1365] Common (Harbour) Seal (Phoca vitulina)	Most of the site consists of intertidal habitats, notably mud- and sandflats, sea inlets and bays, tidal rivers, estuarine channels and sandy beaches. These areas are generally unvegetated but are obviously nutrient-rich, as extensive beds of shellfish occur in parts of the bay. The following macro-invertebrate species are common throughout much of the bay: Arenicola marina, Hediste diversicolor, Scrobicularia plana and Macoma balthica. Along some parts of the shore, saltmarsh has developed. Dominant plants there include Thrift (Armeria maritima), Red Fescue (Festuca rubra) and Common Scurvygrass (Cochlearia officinalis). Sea Arrowgrass (Triglochin maritima), Sharp Rush (Juncus acutus) and Saltmarsh Rush (J. gerardi) are also common, while brown seaweeds (Fucus spp.) are abundant lower down the shore profile. On the stable parts of some of the shingle and boulder beaches, Common Scurvygrass also occurs, along with Silverweed (Potentilla anserina) and Sea-milkwort (Glaux maritima).	The only risk factor is the entry of pollutants into the River Eske upstream of the SPA. This is unlikely due to the separation distance between the site and the river.	• This site was selected for habitats including fixed dunes and Humid Dune Slacks. • Proposal is to introduce new traffic signals, pedestrian crossings and realignment of corner radii. • The scheme does not increase likely run off or risk of pollutants entering the drainage system.	• There are no other works planned for the area. • The works do not constitute a major change in the land use of the area. **Consideration:** Scheme does not have a cumulative impact on the SAC.	**Consideration:** The scheme does not have a significant impact on the Natura 2000 Site. This is due to the separation distance between the works and the qualifying interests contained in the SAC and controls that will be in place during construction.

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	Sand dunes, including fixed dunes, occur in parts of the site, especially at Murvagh. Intact sections contain Sea Sandwort (Honkenya peploides) and Marram (Ammophila arenaria) in the young dunes, with abundant Marram in the fixed dunes. These stable areas are frequently species-rich, with abundant Field Wood-rush (Luzula campestris), a well-developed moss community including Thuidium tamariscinum and Rhytidiadelphus squarrosus, and herbs such as Common Bird's-foot-trefoil (Lotus corniculatus), Wild Thyme (Thymus praecox), Heath Dog-violet (Viola canina) and Lady's Bedstraw (Galium verum). Dune slacks also occur and in one slack the Red Data Book species Round-leaved Wintergreen (Pyrola rotundifolia) occurs. Typical species of dunes with Creeping Willow occur at Mullanasole and include: Creeping Willow (Salix repens), Sand sedge (Carex arenaria), Red Fescue, Lady's Bedstraw, Common Bird's-foot-trefoil and Mouse-ear Hawkweed (Pilosella officinarum) along with other typical species of fixed dune including: False Oat-grass (Arrhenatherum elatius), Selfheal		**Consideration:** Scheme does not impact the SAC.		

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	(Prunella vulgaris), Wild Thyme and the mosses Hypnum cupressiforme, Rhytidiadelphus triquetrus and Rhytidiadelphus squarrosus. The Common Twayblade orchid (Listera ovata) occurs throughout this habitat. Other species present include: Creeping Bent (Agrostis stolonifera), Marram Grass and the moss Pleurozium schreberi. Both Common Scoter and Brent Goose are found in the greater Donegal Bay area, from Bundoran north to Murvagh. The Bay provides one of the most important sites in the country for the Common Scoter, with peak numbers of approximately 1,500 individuals in 1984/85 - 1986/87. This species uses large wintering grounds making counts difficult, but in recent years peaks of 662 birds (1995/96) and 1,073 birds (1997/98) have been recorded in the area. Other wintering species of note from the site include Ringed Plover 175, Oystercatcher 119 and Dunlin 221 (data based on 18 counts from 1984/85 - 1986/87). Small numbers (up to 50) of Greenland White-fronted Goose from the Pettigo flock fed at Inishpat Island in the 1980s, but have rarely done so in recent				

1. Natura 2000 Site ID & Characteristics	2. Site Importance	3. Site Vulnerability	4. Likely Impact of Proposed Development	5. Cumulative Effects	6. Development Likely to Cause Significant Impact
	years. The site supports a population of Common Seal (maximum count of 148 in the all-Ireland survey of 2003). This species is listed on Annex II of the E.U. Habitats Directive. Land use in the area consists of boating and fishing in the bay, with a little shellfish aquaculture. Grazing occurs on terrestrial habitats, while recreational pressures are severe on parts of the dunes. A large part of the dune system is excluded from the site due to its development as a golf course and to the presence of conifer plantations. Despite these pressures, the site is of international importance due to the presence of a wide range of habitats, including four listed on Annex I of the E.U. Habitats Directive, an important seal colony and the occurrence of significant bird populations.				