



An
Bord
Pleanála

Inspector's Report 02.JP0047

Development	N55 Corduff to South of Killydoon Realignment, Section B
Location	Townlands of Ballytrust, Ballytrust Lower, Legwee, Drumcor, Killydoon, Drumbannow, Grousehall and Mullaghoran, Co. Cavan
Local Authority	Cavan County Council
Type of application	Application for approval made under Section 177(AE) of the Planning and Development Act, 2010 (local authority development requiring appropriate assessment)
Prescribed Bodies	Transport Infrastructure Ireland Inland Fisheries Ireland
Observers	Oliver O'Reilly Patrick and Noel Brady Killydoon Area Development Association Malachy and Adele O'Reilly
Date of site inspection	3 rd October 2017
Inspector	Niall Haverty

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1.0 Introduction

- 1.1. Cavan County Council is seeking approval from An Bord Pleanála to undertake the realignment of a portion of the N55 National Secondary Road and associated development, including three new bridges over the River Erne. There are several designated European sites (SPAs and SACs) within 15km of the proposed works (see further analysis below). A Natura Impact Statement (NIS) and application under Section 177AE was lodged by the Local Authority on the basis of the proposed development's likely significant effect on a European site.
- 1.2. Section 177AE of the Planning and Development act 2000 (as amended) requires that where an appropriate assessment is required in respect of development by a local authority the authority shall prepare an NIS and the development shall not be carried out unless the Board has approved the development with or without modifications. Furthermore, Section 177V of the Planning and Development act 2000 (as amended) requires that the appropriate assessment shall include a determination by the Board as to whether or not the proposed development would affect the integrity of a European site and the appropriate assessment shall be carried out by the Board before consent is given for the proposed development.

2.0 Proposed Development

- 2.1. The proposed development comprises Section B of the N55 Corduff to South of Killydoon Realignment Scheme. It would entail the construction of 3.75km of new single carriageway road from a location at Ballytrust, 600m north of the junction of the N55 and local road L-6591 (at the tie-in with Section A of the Scheme) to a location at Mullaghoran, 820m north of the junction of the N55 and local road L-6560.
- 2.2. In addition to the new road, a number of relatively short linking side roads are proposed as follows:
 - SR 1S: A new section of link road connecting the existing N55 to the new N55 in the townland of Ballytrust, with a section of the existing N55 retained to service properties and local road L-6591.
 - SR 2N: A new section of link road connecting the existing N55 to the new N55 in the townlands of Killydoon and Dumcor, with a section of the existing N55

again retained to service properties and local roads L-25151 and L-25152. A ghost island staggered junction is proposed at the junction of the N55 and local road L-2515.

- SR 3S and SR 4S: Two new sections of link road to the north and south, respectively, of the village of Killydoon to connect it to the new N55.

2.3. The proposed development, as described above, would comprise the following elements:

- The provision of c. 3,750 metres of new single carriageway road. The road would consist of a two lane 7m wide single carriageway road with 0.5m wide hardstrip and 3m wide minimum grass verges on both sides.
- Three new single span bridge structures over the River Erne, with a length of up to 23.5m.
- Cut and fill earthworks operations.
- The provision of turning heads where the existing N55 is severed to form a cul-de-sac.
- The provision of local accesses to existing properties.
- Installation of road drainage, including storm attenuation ponds, culverts, petrol interceptors and outfalls as required.
- Provision of street lighting, road signage and markings and the provision for service providers.
- Other accommodation works and ancillary works, such as retaining walls, fencing and gates.

2.4. The intended posted speed limit and design speed of the realigned road is 100km/h.

2.5. **Accompanying Documents**

2.5.1. The application was accompanied by the following:

- Report entitled 'Description of the proposed development under section 177AE(4)(a) of the Planning and Development Acts 2000 to 2015', dated May 2017.

- Natura Impact Statement, dated April 2017.
- Environmental Impact Assessment Screening Report, dated March 2014.
- Environmental Impact Report, dated February 2015.
- Details relating to the statutory procedures undertaken by Cavan County Council.
- Drawings.

2.5.2. I note that the Environmental Impact Report submitted with the application relates to all four phases of Cavan County Council's N55 Corduff to South Killydoon route improvement project (i.e. Sections A and B). This application relates to phases 3 and 4 of the project (i.e. Section B). The NIS submitted with the application relates to phases 3 and 4 of the project (i.e. Section B), and notes that phases 1 and 2 (i.e. Section A) were previously screened out from the requirement for Appropriate Assessment. However, it states that Section A is considered when assessing the cumulative and in-combination impacts. I note from my site inspection that construction of Section A of the project is currently underway.

3.0 Site and Location

- 3.1. The N55 is a National Secondary Road linking the towns of Cavan and Athlone, via Granard, Edgeworthstown and Ballymahon.
- 3.2. The proposed development is located in the townlands of Ballytrust, Ballytrust Lower, Legwee, Drumcor, Killydoon, Drumbannow, Grousehall and Mullaghoran in south west County Cavan.
- 3.3. The area within which the proposed development is located generally comprises agricultural lands, with scattered one-off residential development along the current alignment of the N55 National Secondary Road. The River Erne follows a meandering route through the area, and the small village of Killydoon is located at the southern end of the proposed development.
- 3.4. As noted above, construction works associated with Section A of the N55 Corduff to South of Killydoon Realignment Scheme are currently underway to the north of the application site.

4.0 Planning History

4.1. I am not aware of any recent relevant planning history in the area.

5.0 Legislative and Policy Context

5.1. The EU Habitats Directive (92/43/EEC)

5.1.1. This Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) and 6(4) require an appropriate assessment of the likely significant effects of a proposed development on its own and in combination with other plans and projects which may have an effect on a European Site (SAC or SPA).

5.2. European Communities (Birds and Natural Habitats) Regulations, 2011

5.2.1. These Regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats) (Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in CJEU judgements. The Regulations in particular require in Reg 42(21) that where an appropriate assessment has already been carried out by a 'first' public authority for the same project (under a separate code of legislation) then a 'second' public authority considering that project for appropriate assessment under its own code of legislation is required to take account of the appropriate assessment of the first authority.

5.3. National Nature Conservation Designations

5.3.1. The Department of Culture, Heritage and the Gaeltacht and the National Parks and Wildlife Service are responsible for the designation of conservation sites throughout the country. The three main types of designation are Natural Heritage Areas (NHA), Special Areas of Conservation (SACs) and Special Protection Area (SPAs) and the latter two form part of the European Natura 2000 Network.

5.3.2. There are five European sites located within a 15km radius of the subject site, including:

- Lough Oughter and Associated Lakes SAC (Site Code 000007).
- Lough Oughter Complex SPA (Site Code 004049).
- Moneybeg and Clareisland Bogs SAC (Site Code 002340).
- Lough Sheelin SPA (Site Code 004065).
- Lough Kinale and Derragh Lough SPA (Site Code 004061).

5.4. **Planning and Development Acts 2000 (as amended)**

5.4.1. Part XAB of the Planning and Development Acts 2000-2010 sets out the requirements for the appropriate assessment of developments which could have an effect on a European site or its conservation objectives.

- 177(AE) sets out the requirements for the appropriate assessment of developments carried out by or on behalf of local authorities.
- Section 177(AE) (1) requires a local authority to prepare, or cause to be prepared, a Natura impact statement in respect of the proposed development.
- Section 177(AE) (2) states that a proposed development in respect of which an appropriate assessment is required shall not be carried out unless the Board has approved it with or without modifications.
- Section 177(AE) (3) states that where a Natura impact assessment has been prepared pursuant to subsection (1), the local authority shall apply to the Board for approval and the provisions of Part XAB shall apply in the carrying out of the appropriate assessment.
- Section 177(V) (3) states that a competent authority shall give consent for a proposed development only after having determined that the proposed development shall not adversely affect the integrity of a European site.
- Section 177AE (6) (a) states that before making a decision in respect of a proposed development the Board shall consider the NIS, any submissions or observations received and any other information relating to:
 - The likely effects on the environment.

- The likely consequences for the proper planning and sustainable development of the area.
- The likely significant effects on a European site.

5.5. Regional Planning Guidelines for the Border Region 2010-2022

5.5.1. Section 5.2.2 of the RPGs relates to roads, and states that

“Seven key towns within the Border Region have been defined as having a key role in the development of the Region, as outlined in the Settlement Strategy in Chapter 3. It is important that the existing routes between these key urban settlements are developed so that each can realize their potential.”

5.5.2. A series of strategic links are identified in Section 5.2.2.2 of the RPGs, including the ‘Midlands Corridor’, which is described as follows:

- **Midlands Corridor (A3/N54/N55):** Links the City of Armagh to the Hubs of Monaghan and Cavan, which continues onto the linked Gateway of Athlone/Tullamore/Mullingar. This link is also a critical north/south route for freight transport both intra and inter-regional.

5.5.3. The following Roads Policies are of relevance:

- **INFP2:** Facilitate the development, of those sections of the Strategic Radial Corridors and Strategic Links identified above, as being of priority importance for the Region, subject to relevant environmental assessments;
- **INFP4:** Protect the carrying capacity of all Strategic Radial Corridors and Strategic Links including all National Primary and relevant National Secondary routes, through the restriction of new accesses and intensification of existing accesses.

5.6. Cavan County Development Plan 2014-2020

5.6.1. Section 4.1.4 relates to road infrastructure and states that the Council will strive to provide, maintain and enhance the road infrastructure to ensure the sustainable and economic development of the County. A strong transportation network plays a key economic function in providing access to ports, airports and markets plays a vital role

in the social life of both urban and rural dwellers. County Cavan relies on its road network as essentially the sole method of transport serving the county.

5.6.2. A number of road infrastructure Objectives are set out, including the following:

- **PIO1:** To improve all Council roads to an appropriate standard subject to the availability of resources.
- **PIO2:** To improve road safety for all road users and reduce fatalities and accidents on Cavan Roads.
- **PIO3:** To enable people, goods and services to reach their destination safely, efficiently and quickly and to improve access to services in rural parts of Cavan.
- **PIO4:** To improve the capacity of the road infrastructure within County Cavan in accordance with national and regional policy.
- **PIO11:** To have regard to the 'Cavan County Local Biodiversity Action Plan,' 2009-2014 in the provision of any new Council roads.
- **PIO14:** To implement the Roads Programme for the County in association with the NRA. Various road schemes will be subject to EIA and AA, where necessary.

5.6.3. Section 4.1.5 relates to National Roads and states that the National Road Network has an important role to play in the economic development of the County. The investment in 'Transport 21' and the NDP, 2007-2013 for road infrastructure ensures that Ireland stays competitive by reducing journey times and transport costs. It provides better access to all regions of the Country, facilitating a more even spread of economic benefits.

5.6.4. The subject proposal is included as a national secondary roads development proposal in Table 4.6 of the Development Plan and this is supported by the following Objective:

- **PIO15:** To progress the N55 National Secondary Route, Corduff to South of Killydoon Realignment Scheme to completion, subject to NRA funding.

6.0 The Natura Impact Statement

- 6.1. Cavan County Council's application for the proposed development was accompanied by a Natural Impact Statement (NIS) which scientifically examined the proposed development and the European sites. The NIS identified and characterised the possible implications of the proposed development on the European sites, in view of the site's conservation objectives, and provided information to enable the Board to carry out an appropriate assessment of the proposed works.
- 6.2. As noted above, the NIS submitted with the application relates to phases 3 and 4 of the project (i.e. Section B), and notes that phases 1 and 2 (i.e. Section A) were previously screened out from the requirement for Appropriate Assessment. However, it states that Section A is considered when assessing the cumulative and in-combination impacts.

7.0 Consultations

- 7.1. The application was circulated to the following bodies:

- Transport Infrastructure Ireland.
- The Heritage Council.
- Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (Development Applications Unit).
- Inland Fisheries Ireland.
- An Taisce.
- Failte Ireland.
- The Arts Council.
- Longford County Council.

Responses were received from Transport Infrastructure Ireland and Inland Fisheries Ireland.

7.2. Transport Infrastructure Ireland

- 7.2.1. Transport Infrastructure Ireland (TII) had no specific comments to make.

7.3. Inland Fisheries Ireland

7.3.1. The response from Inland Fisheries Ireland (IFI) can be summarised as follows:

- Road improvement is within close proximity to the Erne River, and numerous watercourses and streams along its catchment.
- All in-stream works should be carried out during May to September and no in-stream works should be carried out without written approval from IFI, following agreement of a method statement.
- IFI must be given sufficient notice before pre-approved in-stream works commence. If a section of watercourse is to be destocked, work must be carried out by authorised personnel.
- There must be no discharge of suspended solids or any other deleterious matter to watercourses.
- Fish passage conditions must be maintained at all times.
- Erne River has a stock of Trout and it is imperative that this habitat is not disturbed and that tributaries and feeder streams are not affected.
- Watercourses in the River Erne and Lough Oughter catchments are important salmonid and coarse fisheries, heavily fished by local and tourist anglers.
- Clear span bridging is the preferable option for the proposed crossings of the River Erne, causing no change to bed and banks and impact on fish migration.
- No works can be conducted in the vicinity of the River Erne during the peak spawning period for salmonids between October and April inclusive.
- Bed and bank works should be executed in natural materials. Stockpile areas should be kept to a minimum size, well away from the watercourse and runoff should only be routed to the watercourse via suitably designed and sited settlement ponds/filter channels.
- Open channels should be considered as an alternative to a culvert, particularly where long culvert lengths are involved. Where possible box arch type bottomless units should be used to retain natural river bed.

- Box culverts can be used, subject to suitable design.
- Useful guidance is contained within the NRA 'Guidelines for the Crossing of Watercourses During the Construction of National Road Scheme' and the ERFB 'Requirements for the Protection of Fisheries Habitat During Construction and Development Works at River Sites'.
- Mitigation measures recommended to prevent discharge of materials to waters. Contingency/remedial plan should also be developed to deal with any accidents or other occurrences of polluting discharge to waters.
- Extreme care and diligence is required to prevent adverse impacts during construction and operation of the scheme.

7.4. Public Submissions

7.4.1. Four submissions were received from members of the public. The issues raised can be summarised as follows:

7.4.2. Oliver O'Reilly:

- Farm is currently dissected by a road with a 60km/hr speed limit. Concern that crossing the road with farm machinery will be difficult and dangerous when traffic is travelling at 100km/hr. Neighbouring landowner was granted an underpass, but there is no provision for a similar underpass on the observer's lands.
- According to the map which was stated to be the final road plan, there was to be one entrance into the village of Killydoon at the southern end. The intention is now to leave both ends open and observer is concerned that this will result in excessive speeds outside his property. If scheme is proceeded with, there should be speed bumps immediately upon turning off the main road to slow traffic down.
- Disappointment at lack of direct consultation with the landowners.
- Future implications for possible planning permission for homes for observer's children.

7.4.3. Patrick and Noel Brady:

- Before new alignment was planned there was a plan for a new road to go closer to the village of Killydoon. The new alignment splits the observer's grazing area and he may have to quit dairy farming due to reduced grazing area and farm severance.
- Grandparents house is along the new alignment and the observer is in the process of purchasing it. The new road could leave the house not liveable due to noise.
- If road went back to the original plan this would all be avoidable and cause less disturbance.

7.4.4. Killydoon Area Development Association:

- Implications of the proposed development for the proper planning and sustainable development of the area.
- To have lighting erected from junction north of Killydoon, along route to entrance/exit south of Killydoon, along with a footpath heading north/south. This would enable people to use it as a secure and safe walkway through Killydoon village.

7.4.5. Malachy and Adele O'Reilly:

- Implications of the proposed development for the proper planning and sustainable development of the area.
- Concern over proposed pond area south of bridge at crossing of River Erne.

8.0 **Assessment**

8.1. **The likely effects on the environment**

8.1.1. I consider that the likely effects of the proposed development on the environment can be assessed under the following headings:

- Human beings.
- Drainage.
- Soils, Geology and Hydrogeology.

- Air Quality.
- Noise.
- Ecology.
- Landscape and visual.
- Cultural heritage.
- Material assets.

8.1.2. Human Beings

8.1.2.1. While the majority of the land use in the vicinity of the proposed road project is agricultural, there are areas of ribbon development along the current alignment of the N55 and along local roads in the vicinity. The proposed development has the potential to affect this residential population, as well as the working population in the area and the visiting population, utilising the road in question.

8.1.2.2. During the construction phase of the proposed development, the local resident, working and visiting populations will be affected by a range of temporary and short-term impacts such as noise, dust, increased HGV construction traffic, disruption to residential and commercial properties and increased journey times. The following mitigation measures are proposed to address these issues:

- Environmental Management Plan will be prepared, including measures to provide information to affected parties, including advising land and property owners in advance of any diversions.
- Local access shall be maintained at all times.
- Temporary signage shall be put in place to minimise disruption and ensure all road users understand that construction works are in progress.

8.1.2.3. During the operational phase of the proposed development, there will be direct permanent impacts on some landholdings, both residential and agricultural, including changes to access arrangements, although it is not proposed to demolish any occupied properties. I have addressed these issues in the section relating to 'material assets' below. In terms of the impact on the working and visiting populations, I consider that the road realignment and related development will result

in improved accessibility between a number of villages and towns and will improve safety for all road users. No mitigation measures are proposed for the operational phase, and I consider that the delivery of the road realignment and associated improvement works would have a significant positive impact for residential, working and visiting populations.

- 8.1.2.4. A number of the third party submissions relate to the interface of the road realignment with Killydoon village. While the N55 currently passes through the village, the proposed development would bypass the village, with the existing roadway linking to the new N55 to the north and south of the village. Having considered the issues raised in the submissions, I consider that the proposed road design is likely to result in vehicles passing through Killydoon at excessive speeds, since vehicles exiting the N55 will be able to do so at speed due to the large radius of the junction and the short distance from the junction to the village. I therefore recommend that if the Board is minded to approve the application, that a suitable condition be included to require the provision of traffic calming measures at the entrances to the village.
- 8.1.2.5. With regard to the provision of lighting and footpaths, I note that Killydoon is a very small village, and that the centre of the village currently has footpaths and lighting along its extent. No works are proposed to the existing road through the village, and noting both the significant reduction in through-traffic that will occur as a result of the proposed development and that the provision of additional or extended footpaths would potentially require additional landtake, I do not consider it appropriate to require the provision of such by way of Condition.
- 8.1.2.6. Subject to the implementation of the mitigation measures outlined above, I therefore conclude that the proposed development would not have a significant negative residual impact upon human beings.

8.1.3. **Drainage**

- 8.1.3.1. The proposed road drainage scheme includes a carriageway drainage system together with a number of bridges and culverts to accommodate watercourses that intersect the scheme. These watercourses are primarily drainage ditches, although as noted above the proposed development includes three crossings of the River

Erne. Based on EPA monitoring data, the current water quality in the river upstream of the development is classified as Moderately Polluted (Q3), while downstream the river water quality is classified as Good Status (Q4).

- 8.1.3.2. During the construction phase, the proposed development could result in an impact on hydrology through runoff of silt, soil, chemicals or fuels into watercourses or the River Erne. During the operational phase, the proposed development could potentially result in a change in the hydrological characteristics of the area by modifying the quantity or quality of runoff as a result of the increase in impervious area and also through the runoff of fuels and silts into watercourses.
- 8.1.3.3. During the construction phase a sediment control plan is proposed to prevent soil erosion and excess sediment from reaching the receiving watercourses. The plan will include designated areas and methods for stockpiling soil and aggregates, re-vegetating exposed areas as soon as possible, use of silt fences, hay bales etc. to trap temporary sediments, and routing flows through settlement ponds or filter channels. I consider that such sediment control measures are standard good practice construction methodology for works in the vicinity of watercourses and that they are consistent with the NRA (now TII) Guidelines for the Crossing of Watercourses During the Construction of National Road Schemes. I also consider that the measures outlined will assist in the protection of aquatic ecology as well as water quality and I have addressed this issue in more detail in the Ecology section of my report. If the Board is minded to approve the proposed development, I recommend that the sediment control plan be included within a Construction Environmental Management Plan to be submitted for the agreement of the Planning Authority. With regard to the three proposed bridge crossings of the River Erne, I consider that the proposed design approach is consistent with good practice, with particular regard to the use of single span bridges with no in-stream elements and the retention of a leave strip of undisturbed riverbanks on either side. Subject to adequate construction management and monitoring I therefore consider that the construction of the bridges will not significantly impact upon the river banks or river bed.
- 8.1.3.4. With regard to operational phase mitigation, the design of the proposed development includes a series of sustainable drainage measures including attenuation storage areas and petrol interceptors at locations where carriageway runoff discharges to

open drains or watercourses. The EIR has calculated the required attenuation storage volumes for the overall scheme (i.e. Sections A and B) in accordance with the allowable discharge rate required under the Greater Dublin Strategic Drainage Study. It notes that due to site topography, there are limited opportunities to provide attenuation within Phases 3 and 4 (i.e. the current application), and therefore additional storage is provided in other areas to compensate and ensure that the overall discharge from the scheme does not exceed pre-development conditions. I note that Section A (i.e. Phases 1 and 2) of the scheme is already under construction, and this section will therefore provide some of the attenuation capacity to serve the proposed development.

8.1.3.5. Subject to the implementation of the abovementioned mitigation measures, I am satisfied that the proposed development would not a significant residual negative impact on drainage.

8.1.4. **Soils, Geology and Hydrogeology**

8.1.4.1. Ground investigation works along the route corridor identified the presence of greywacke and other sedimentary rocks, including mudstone, siltstone, shale and limestone. Bedrock was encountered at varying depths from 0.3m to 7.2m below ground level and no karst formations were encountered. Subsoils along the route generally comprise alluviums and glacial till however there are areas of peat cover which combine with soft silts and sandy clays to give rise to limited areas of soft land. The aquifer in the area is classified as PI, a poor aquifer which is generally unproductive except in local zones.

8.1.4.2. Potential impacts during the construction phase include contamination of groundwater due to accidental spills and leaks, storage of waste materials and the stockpiling of excavated material. Other potential impacts include the effect on groundwater of dewatering in areas of peat subsoil, and the potential for unstable slopes to cause landslides or release sediment to groundwater or surface water courses. During the operational phase, the potential impacts are primarily related to accidental spills and leaks from road users, slope stability and impacts on groundwater recharging due to the use of hardstanding materials.

- 8.1.4.3. A series of mitigation measures are proposed to address these potential impacts, including temporary bunded storage areas, refuelling and maintenance work away from exposed/shallow bedrock and surface water drains, availability of spill kits, stockpiling of soil away from exposed bedrock or groundwater table, covered storage of waste material, use of geotextiles and immediate vegetation of slopes following construction, and a study of local groundwater system and wells in areas of dewatering. During the operational phase, oil/petrol interceptors are proposed, together with the monitoring of vegetation on cut slopes.
- 8.1.4.4. No significant impacts are expected and subject to compliance with the mitigation measures and best practice construction methods outlined in the EIR, I would concur with this conclusion.

8.1.5. **Air Quality**

- 8.1.5.1. The potential impacts on air quality during the construction phase are primarily related to dust generation associated with construction activities. During the operational phase, the potential impacts are related to increases in air pollution as a result of changes in the alignment of the road and changes to traffic speeds. An assessment of the air quality impact for the worst case receptor (i.e. the house closest to the realigned road) indicates that the levels of all key pollutants for all future scenarios will remain well below the statutory limits for the protection of human health and the impact on sensitive receptors can therefore be classified as 'negligible'.
- 8.1.5.2. The principal construction phase mitigation measure is the preparation of a dust minimisation plan as part of the Environmental Management Plan. This includes relatively standard good working practices such as wheelwashes, cleaning and wetting of roads and stockpiles and misting of particularly dusty activities. Dust deposition monitoring is also proposed during construction. No project specific mitigation measures are proposed during the operational phase, although it is noted that the collection of EU Directives known as the Auto Oil Programme outline criteria for ongoing emissions reductions into the future, and that the free flow of traffic on the improved road network will result in a reduction in vehicle-related emissions.

8.1.5.3. Subject to compliance with the above mitigation measures, and noting that the proposal relates to the realignment of a portion of existing road, rather than an entirely new road, I consider that the proposed development will not result in any significant residual impact on air quality.

8.1.6. **Noise**

8.1.6.1. The existing noise climate in the vicinity of the proposed development is dominated by road traffic noise, with other sources of noise including wind and agricultural activities and noises. Base year traffic flows are between 3,560 – 5,400 vehicles per day AADT, which is projected to rise to 4,640 – 7,040 under a medium growth scenario.

8.1.6.2. Since the proposed development comprises the realignment of an existing national road, with portions of the works occurring on-line, the number of additional receptors that have the potential to experience noise impacts is limited. Short-term increases in noise impacts are predicted during the construction phase, due to the use of heavy plant and machinery. In order to mitigate this impact, a series of measures are proposed, including the use of approved haul routes, 30kph speed limit for construction related HCV traffic, no HCV traffic on the surrounding road network on weekends or after 18:00 on weekdays, selection of plant with low inherent potential for noise and vibration and the establishment of channels of communication between the contractor, Local Authority and residents.

8.1.6.3. During the operational phase, the assessment undertaken in the EIR indicates that numerous properties will experience either a reduction in noise levels due to the realignment or no change. Three properties in the vicinity of Phases 3 and 4 of the project are predicted to experience a rise in noise levels above the design goal of 60dB L_{DEN} and satisfy the criteria for mitigation set out in the NRA (now TII) Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes. However, the impact arising from the marginal increase in noise predicted for these three properties can be classified as 'negligible', since they already experience a relatively high noise environment due to their proximity to the existing road. Noise barriers are proposed for these three properties, which I consider to be an appropriate form of mitigation.

8.1.6.4. Subject to the implementation of the various mitigation measures identified above, I am satisfied that the proposed development would not result in significant residual negative impacts with respect to noise.

8.1.7. **Landscape and Visual**

8.1.7.1. The landscape within which the proposed development is located comprises an undulating drumlin agricultural landscape which is broadly typical of much of County Cavan and results in a patchwork of well-defined fields with mature hedgerows and trees. The drumlin topography serves to restrict views, and there are only a limited number of locations where wider views of the proposed road realignment scheme can be obtained. This restricted visibility of the development is reflected in the zone of visual influence drawing included in the EIR.

8.1.7.2. With regard to the Cavan County Development Plan 2014-2020, I note that there are no designated Scenic Views or Scenic Routes in the vicinity of the application site. The nearest Scenic View is SV6, located at Belville Tower to the north of Ballinagh. There are four High Landscape Areas identified in the Plan, none of which are in proximity of the proposed development. Cavan County Council has not yet prepared a Landscape Character Assessment for the County, however they have categorised landscapes in the interim, and the proposed development is along the boundary between the Lakelands and Drumlin Belt and Uplands of East Cavan. Having regard to the character of the landscape, I consider that it has medium sensitivity.

8.1.7.3. With regard to the potential impact on landscape character, I concur with the applicant's assessment, that the impact will be slight/moderate negative, due to the proximity of works to the existing road, the undulating drumlin landscape which limits visibility of the proposed development and the relatively limited cutting and embankment requirement associated with the development.

8.1.7.4. With regard to the visual impact of the proposed development, I note that no photomontages were submitted with the application to assist in the assessment of its visual impact. However, having inspected the drawings and documentation, having visited the site and surrounding area and having had regard to aerial photography and mapping, I consider that, having regard to the linear nature and the scale of the proposed development and the drumlin topography of the area as discussed above,

the key receptors are the residential properties along the route, particularly those accessed off the existing N55 and those which will lose part of their curtilage to accommodate the development.

8.1.7.5. Prior to the implementation of mitigation measures, the EIR identifies a number of properties that will experience negative impacts as a result of Phases 3 and 4 of the scheme. The EIR proposes a series of mitigation measures to reduce the impacts identified above. These include road verge and bank planting with a mix of locally occurring and native species, and the reinstatement of hedgerows at field boundaries to maintain the existing local character of fields. Six Specific Landscape Measures (SLMs) are proposed within Phases 3 and 4 of the scheme to mitigate the visual impact at specific properties. These consist of high woodland screening planting with individual trees as necessary at the relevant properties.

8.1.7.6. With regard to residual impacts post-mitigation, the EIR considers the residual impacts after 5 – 10 years of growth of the mitigation planting. The number of properties that will experience predicted residual impacts before and after mitigation for Phases 3 and 4 of the scheme are as follows:

Degree of visual impact	Number of Properties (Phases 3 and 4)	
	Before mitigation	After mitigation
Substantial negative	2	0
Moderate negative	8	6
Slight negative	9	9
No change	36	39
Slight beneficial	4	4

8.1.7.7. The properties that will continue to experience a moderate or slight negative visual impact post-mitigation are those that are in close proximity to the proposed road development, and will experience a loss or change to existing views.

8.1.7.8. Finally, with regard to the proposed bridges over the River Erne, I consider that the use of single span bridges which do not have any in-stream elements, and which preserve the existing river banks will not have a significant visual impact in this area

which is typical of Cavan's drumlin topography and which is not designated as being of scenic or other landscape or visual interest.

8.1.7.9. In conclusion, subject to the implementation of the various mitigation measures identified above, I am satisfied that the proposed development would not result in significant residual negative impacts upon the landscape and visual amenity of the area.

8.1.8. **Ecology**

8.1.8.1. This section of my report should be read in conjunction with the Appropriate Assessment section below.

8.1.8.2. The proposed development is within 15km of two Special Areas of Conservation, three Special Protection Areas, one Natural Heritage Area and seven proposed Natural Heritage Areas. Existing habitats in Phases 3 and 4 of the project generally comprise improved grassland, with small patches of scrub, a small area of mixed woodland and a eutrophic pond within a heavily grazed field. The River Erne also passes through Phases 3 and 4, with three bridges proposed over the river. The river is currently monitored by the EPA, and the current water quality in the river upstream of the development is classified as Moderately Polluted (Q3), while downstream the river water quality is classified as Good Status (Q4). The river is classified as containing good salmonid adult and nursery habitats, with fair – good salmonid spawning habitat.

8.1.8.3. The field surveys undertaken identified a number of protected species, including badgers, otters and frogs. A number of sites with potential for bat roosts were also identified, while no signs of red squirrels or pine martens were found. As noted above, the River Erne contains good quality salmonid habitats in the vicinity of the proposed development. I note that no bird or bat surveys were undertaken, with the baseline description of the environment instead being based on records of protected species from the National Biodiversity Data Centre.

8.1.8.4. During the construction phase the potential impacts of the proposed development are primarily related to loss of habitat and loss or disturbance to species, spread of invasive species and water quality impacts. During the operational phase the potential impacts are primarily related to the removal and alteration of habitats and

species due to impacts such as the barrier effect of the road, loss of foraging areas and run-off from road surface.

- 8.1.8.5. Inland Fisheries Ireland made a submission which did not object to the proposed development, but noted the importance of the River Erne as a fisheries habitat and set out a series of recommended mitigation measures to protect these fisheries habitats. I also note that the NPWS has not made a submission in respect of the proposed development.
- 8.1.8.6. The EIR outlines a series of mitigation measures to address the potential impacts, including pre-construction badger and otter surveys, fencing on off-line section of Phase 3 to prevent badgers crossing the road other than at bridge B2, retention of hedgerows and trees where possible and no removal during bird nesting season (1st March to 31st August), felling of trees and demolition of structures utilising a methodology that reduces risk to bats. A new pond is also proposed within Phase 4 of the development with relocation of any frogs or frogspawn from the existing pond which will be removed to facilitate the development. A series of measures to reduce and prevent suspended solids and construction-related materials from causing pollution of the River Erne and other watercourses are also proposed. These are consistent with those outlined in the Drainage section of the EIR, as detailed elsewhere in my report and generally relate to good practice construction methodology. I consider that the proposed mitigation measures to protect in-stream habitats and to mitigate obstruction to fish movements are consistent with the recommendations set out in the IFI submission, and the design of the bridges as single span structures with no in-stream elements, and the retention of undisturbed river banks and river bed will assist in this regard. During the operational phase, the use of petrol interceptors is proposed to prevent pollution of watercourses.
- 8.1.8.7. The NRA (now TII) has published a series of Guidelines for the treatment of otters, badgers and bats prior to the construction of national road schemes. Having reviewed these guidelines and the documentation submitted with the application, I consider that the design of the scheme and the mitigation measures outlined in the EIR are generally consistent with these guidelines.
- 8.1.8.8. Following the implementation of the mitigation measures, the EIR considers the overall residual impact on ecology to be minor. Subject to implementation of all

mitigation measures and ongoing monitoring of their efficacy, I consider that the residual impact of the proposed development on flora and fauna is acceptable.

8.1.9. **Material Assets**

8.1.9.1. I have considered the potential impacts of the proposed development on material assets in terms of agricultural and non-agricultural properties.

8.1.9.2. Agricultural Properties

8.1.9.3. The vast majority of farms in Cavan are involved in livestock farming, with very little tillage farming in the County. The land quality in the study area is variable, with 55% being classified as good or medium/good, and 44% being classified as medium, medium/poor or poor. The two Sections of the scheme will result in a total landtake of c. 28.5 ha, and will have a number of potential impacts in addition to landtake, including:

- Severance due to landtake and loss of existing access points.
- Noise and dust.
- Increased traffic.
- Changes to field drainage patterns.

8.1.9.4. A number of third parties have also raised the issue of access arrangements and severance of farmland.

8.1.9.5. A number of mitigation measures are proposed during both construction phase and operational phase. These include compensation for landtake, reinstatement of access points or provision of alternative access arrangements in consultation with landowners, provision of accommodation tracks under each bridge crossing of the River Erne, reinstatement of lands affected by temporary works, including stockproof fencing and restoration of fences, walls, drains etc. In order to mitigate the risk to animal health, it is proposed to spray all machines with disinfectant prior to arrival on site and to liaise with the local District Veterinary Office regarding the location of any restricted herds in the area.

- 8.1.9.6. The EIR considers that the proposed development will not have a significant impact on agriculture from a national or regional perspective, but that it will have a minor residual impact due to loss of agricultural land.
- 8.1.9.7. Having regard to the extent, current use and quality of the land that will be affected by the proposed development, and subject to the implementation of the mitigation measures outlined in the EIR, I concur with the conclusion that the proposed development would not have any unacceptable direct or indirect impacts in terms of agricultural properties.
- 8.1.9.8. Non Agricultural Properties
- 8.1.9.9. While the majority of the land use along the route of the proposed development is agricultural, there is ribbon development along the existing N55, and a number of properties would be affected by the proposed development.
- 8.1.9.10. In Phases 3 and 4 (i.e Section B), five residential properties would permanently lose part of their curtilage. The EIR identifies the level of this impact as minor for four of the properties, and minor/moderate for one property. In order to mitigate this impact, a series of construction stage measures to minimise disruption are proposed, and in the operational phase, alternative access arrangements will be provided, with the provision of new or restored boundary fences and walls as required. On foot of these mitigation measures, the EIR considers that the proposed development will not have a significant residual impact.
- 8.1.9.11. The residential properties in question are all located within relatively sizable sites, and are already facing onto a busy national road. I consider that these properties will benefit from the safer road environment created by the proposed development and subject to the mitigation measures outlined above, and the noise mitigation measures addressed elsewhere, I concur with the applicant that no significant residual impacts would result from the proposed development.

8.1.10. **Cultural Heritage**

- 8.1.10.1. There are two archaeological sites listed in the Record of Monuments and Places within 250m of the centreline of the route corridor. These two sites are ringforts, and will not be directly impacted upon by the proposed development. In terms of areas of archaeological potential, there is the potential for unknown sub-surface

archaeological sites or features to be present in greenfield areas, and the road will cross a number of townland boundaries in addition to the three crossings of the River Erne. There will be a direct impact on the townland boundaries, while the use of single span clear crossings of the river mean there will be no direct impact on the river, although the potential remains for unknown sub-surface features in the vicinity of rivers. I therefore recommend that if the Board is minded to approve the application that a suitable archaeological monitoring condition be included.

- 8.1.10.2. With regard to architectural heritage, a roadbridge over the River Erne at Drumbannow lies within the landtake for the route corridor. This bridge, which is located on the existing N55, is listed in the NIAH, but not in the RPS. There will be no direct impact on the bridge, as it is located c. 50m east of the proposed route, and this portion of the existing N55 will be retained to serve the village of Killydoon.
- 8.1.10.3. With regard to cultural heritage, there are a number of vernacular structures of local cultural heritage interest within 100m of the centreline of the road development. None of these are protected structures or listed in the NIAH and the majority will not be impacted upon by the proposed development. The only structures that will be directly affected are a single storey dwelling with corrugated roofing and an associated outbuilding, again with corrugated roofing. These structures, which appear to be disused, are within the land-take for the development in the vicinity of link road SR 2N.
- 8.1.10.4. A number of mitigation measures are proposed, including centreline archaeological testing in greenfield areas and in the vicinity of rivers. Townland boundaries that will be directly impacted by the proposed development will be preserved by written and photographic record, and be subject to archaeological monitoring. The cultural heritage features identified above will be recorded by way of a written and photographic record.
- 8.1.10.5. Having inspected the site, reviewed all documentation and drawings associated with the application, and having had regard to aerial photography and mapping, I am satisfied that the EIR has adequately described the existing environment and identified the likely impacts of the proposed development on archaeological and cultural heritage. I consider that these impacts would be avoided, managed and

mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions.

8.1.10.6. I am, therefore, satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of cultural heritage.

8.2. The likely consequences for the proper planning and sustainable development of the area

8.2.1. The proposed development is specifically supported by Objective PIO15 of the Cavan County Development Plan 2014-2020, which states that it is an Objective of the Planning Authority to progress the N55 National Secondary Route, Corduff to South of Killydoon Realignment Scheme to completion, subject to NRA funding. It is also supported by a series of non-specific Objectives, which seek to improve road infrastructure in the County in terms of capacity, safety and speed of movement.

8.2.2. I consider that the proposed development would improve road safety on the N55 National Secondary Road, would be consistent with the Objectives and Policies set out in the Development Plan and would be in accordance with the proper planning and sustainable development of the areas.

8.3. The Likely Significant Effects on a European Site

8.3.1. The areas addressed in this section are as follows:

- Compliance with Articles 6(3) of the EU Habitats Directive
- The Natura Impact Statement
- Appropriate Assessment

8.3.2. Compliance with Articles 6(3) of the EU Habitats Directive

8.3.2.1. The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that 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. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site.

8.3.3. The Natura Impact Statement

- 8.3.3.1. The application was accompanied by an NIS which described the proposed development, the project site and the surrounding area. The NIS contained a Stage 1 Screening Assessment which concluded that a Stage 2 Appropriate Assessment was required. The NIS outlined the methodology used for assessing potential impacts on the habitats and species within several European Sites that have the potential to be affected by the proposed development. It predicted the potential impacts for these sites and their conservation objectives, it suggested mitigation measures, assessed in-combination effects with other plans and projects and it identified any residual effects on the European sites and their conservation objectives.
- 8.3.3.2. The NIS was informed by the following studies and surveys:
- European-level and National-level guidance on Appropriate Assessment.
 - Field surveys of the proposal site and surrounding area, as well as surveys at the locations of the proposed bridges and along both upstream and downstream stretches.
- 8.3.3.3. The report concluded that, subject to the implementation of best practice and the recommended mitigation measures, the proposed development would not have a significant effect either individually or in combination with other plans or projects on the conservation objectives of the Lough Oughter and Associated Lakes SAC and the Lough Oughter Complex SPA.
- 8.3.3.4. Having reviewed the NIS and the supporting documentation, I am satisfied that it provides adequate information in respect of the baseline conditions, clearly identifies the potential impacts, and uses best scientific information and knowledge. Details of mitigation measures are provided and they are summarised in Section 4.6 of the NIS. I am satisfied that the information is sufficient to allow for appropriate assessment of the proposed development (see further analysis below).

8.3.4. Appropriate Assessment

8.3.4.1. I consider that the proposed development is not directly connected with or necessary to the management of any European site.

8.3.4.2. Having regard to the information and submissions available, nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, the source-pathway-receptor principle and sensitivities of the ecological receptors the following European Sites are considered relevant to include for the purposes of initial screening for the requirement for Stage 2 appropriate assessment on the basis of likely significant effects.

8.3.4.3. European sites considered for Stage 1 screening:

European site (SAC/SPA)	Qualifying Interests	Distance
1. Lough Oughter and Associated Lakes SAC (000007)	<ul style="list-style-type: none"> Natural eutrophic lakes Bog woodland Otter (<i>Lutra lutra</i>) 	c. 8.7km
2. Lough Oughter Complex SPA (004049)	<ul style="list-style-type: none"> Great Crested Grebe (<i>Podiceps cristatus</i>) Whooper Swan (<i>Cygnus cygnus</i>) Wigeon (<i>Anas penelope</i>) Wetland and Waterbirds 	c. 8.5km
3. Moneybeg and Clareisland Bogs SAC (002340)	<ul style="list-style-type: none"> Active raised bogs Degraded raised bogs still capable of natural regeneration Depressions on peat substrates of the Rhynchosporion 	c. 10km
4. Lough Sheelin SPA (004065)	<ul style="list-style-type: none"> Great Crested Grebe (<i>Podiceps cristatus</i>) Pochard (<i>Aythya ferina</i>) Tufted Duck (<i>Aythya fuligula</i>) 	c. 8.4km

European site (SAC/SPA)	Qualifying Interests	Distance
	<ul style="list-style-type: none"> • Goldeneye (<i>Bucephala clangula</i>) • Wetland and Waterbirds 	
5. Lough Kinale and Derragh Lough SPA (004061)	<ul style="list-style-type: none"> • Pochard (<i>Aythya ferina</i>) • Tufted Duck (<i>Aythya fuligula</i>) • Wetland and Waterbirds 	c. 9.5km

8.3.4.4. Based on my examination of the NIS report and supporting information, the NPWS website, aerial and satellite imagery, the scale of the proposed development and likely effects, separation distance and functional relationship between the proposed works and the European sites, their conservation objectives and taken in conjunction with my assessment of the subject site and the surrounding area, I would conclude that a Stage 2 Appropriate Assessment is required for two of the five European sites referred to above, namely the Lough Oughter and Associated Lakes SAC (Site Code 000007) and the Lough Oughter Complex SPA (Site Code 004049).

8.3.4.5. With regard to the other three European sites (i.e. Moneybeg and Clareisland Bogs SAC (002340), Lough Sheelin SPA (004065) and Lough Kinale and Derragh Lough SPA (004061)), I consider it reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on these three European Sites, in view of the nature and scale of the proposed works which entail road realignment works with significant portions of the work occurring on-line or immediately adjacent to the existing road; the nature of the receiving environment, which generally comprises heavily grazed and species poor improved grassland; the nature of the Conservation Objectives, Qualifying and Special Conservation Interests of the three sites; the separation distances; and the lack of a substantive linkage between the proposed works and the European sites.

8.3.4.6. **Relevant European sites – Stage 2 Appropriate Assessment:**

The Conservation Objectives and Qualifying Interests, including any relevant attributes and targets for these sites, are set out below.

Site Name	Qualifying Interests	Distance
1. Lough Oughter and Associated Lakes SAC (000007)	<ul style="list-style-type: none"> • Natural eutrophic lakes • Bog woodland • Otter (<i>Lutra lutra</i>) 	c. 8.7km
2. Lough Oughter Complex SPA (004049)	<ul style="list-style-type: none"> • Great Crested Grebe (<i>Podiceps cristatus</i>) • Whooper Swan (<i>Cygnus cygnus</i>) • Wigeon (<i>Anas penelope</i>) • Wetland and Waterbirds 	c. 8.5km

The distance of the proposed development from the relevant European sites listed above are straight-line distances. However, I consider that the primary potential pathway between the development site (source) and the European sites (receptors) is the River Erne. As a result of the meandering route that the River Erne takes through the drumlin landscape, the Board should note that the two European sites listed above are located c. 20km downstream of the application site, although the shorter straight-line distance is of course relevant in the context of bird movements.

1. Lough Oughter and Associated Lakes SAC (Site Code: 000007)

Description of Site:

Lough Oughter and its associated loughs occupy much of the lowland drumlin belt in north and central Cavan between Upper Lough Erne, Killeshandra and Cavan town. The site is a maze of waterways, islands, small lakes and peninsulas including some 90 inter-drumlin lakes and 14 basins in the course of the Erne River. The site is a Special Area of Conservation (SAC) for natural eutrophic lakes and bog woodland, which are listed on Annex I of the Habitats Directive, and for the Otter, which is a species listed on Annex II of the Directive. The site also contains areas of dry woodland, marsh, reedbed and wet pasture.

The lakes and basins are shallow, and the water well-mixed and nutrient rich (eutrophic). Drainage within the area is inefficient and the water levels are prone to natural fluctuation as a result. The regularly flooded areas still accommodate a variety of specialist plant species. The aquatic flora is varied with several pondweed species, while the aquatic community includes species of limited distribution in Ireland. Otters and Irish Hares have been recorded, both of which are species listed in the Irish Red Data Book and are legally protected under the Wildlife Act, 1976.

The main threats to the quality of the site are water polluting activities (such as run-off from fertiliser and slurry application, and sewage discharge) which have raised the nutrient status of some lakes to hypertrophic. Housing and boating developments are on the increase, both adjacent to and within the site. There is also significant fishing and shooting pressure on and around the lakes. Increased afforestation has resulted in some loss of wetland habitat and also loss of feeding ground for wintering birds such as Greenland White-fronted Goose.

Overall, the Lough Oughter area contains important examples of two habitats listed on Annex I of the E.U. Habitats Directive and supports a population of the Annex II species, Otter. The site as a whole is the best inland example of a flooded drumlin landscape in Ireland and has many rich and varied biological communities. Nowhere else in the country does such an intimate mixture of land and water occur over a comparable area, and many of the species of wetland plants, some considered quite commonplace in Lough Oughter and its associated loughs, are infrequent elsewhere.

Conservation Objectives:

- To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

2. Lough Oughter Complex SPA (Site Code: 004049)

Description of Site:

Lough Oughter, the largest lake in the site, is relatively shallow (maximum depth of 10 m) and considered to be a naturally eutrophic system. Its main inflowing rivers are the River Erne and the Annalee River, whilst the main outflow is the River Erne, which connects the lake to Upper Lough Erne and Lower Lough Erne to the north.

The site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: Great Crested Grebe, Whooper Swan, and Wigeon. The E.U. Birds Directive pays particular attention to wetlands and, as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds.

The Lough Oughter Complex is of importance for a range of wintering waterfowl. Of particular note is an internationally important population of Whooper Swan that is based in the area and which uses the lakes as a roost. A population of Greenland White-fronted Goose of regional importance also roosts on the lakes and feeds mainly on agriculturally improved grassland nearby. The site supports nationally important wintering populations of two species, Great Crested Grebe and Wigeon. Other species which occur regularly include Mute Swan, Teal, Mallard, Pochard, Tufted Duck, Goldeneye, Lapwing, Curlew, Little Grebe, Cormorant, Black-headed Gull and Common Tern.

Lough Oughter is at the centre of the Irish breeding range of Great Crested Grebe and the site supports in excess of 10% of the estimated national breeding total of this species.

The Lough Oughter Complex SPA is of ornithological importance for its wintering waterbird populations. Of particular note is the internationally important population of Whooper Swan that is based in the area. The site also supports nationally important populations of a further two wintering species. Two of the species which occur regularly are listed on Annex I of the E.U. Birds Directive, i.e. Whooper Swan and Greenland White-fronted Goose. Lough Oughter is also a Ramsar Convention site and a Wildfowl Sanctuary.

Conservation Objectives

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA.
- To maintain or restore the favourable conservation condition of the wetland habitat at Lough Oughter Complex SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.

8.3.4.7. **Potential direct effects on SAC and SPA**

- Disturbance to otters during construction due to increased noise and human activity, heavy machinery use and bridge works.

No other direct impacts to habitats or species are identified, due to the location of the proposed development 20km upstream of the SAC and SPA and since the relevant species and habitats, with the exception of otters, were not recorded in the vicinity of the proposed development. Notwithstanding this, I note that no site-specific bird survey was undertaken, with the NIS instead relying on historical bird records. However, having regard to the location of the works either on-line or in close proximity to the existing road, and the nature of the receiving environment which generally comprises heavily grazed improved grassland, I do not consider that there is likely to be any direct impact on the bird species for which the SPA has been designated, or any significant loss of habitats relevant to these bird species.

8.3.4.8. **Potential indirect effects on SAC and SPA**

- Pollution of River Erne with suspended solids and other substances associated with the construction process, resulting in a change in the water quality entering the Natura 2000 sites. This could result in:
 - Settlement in spawning areas and infill in intragravel voids and pools and riffles.
 - Smothering and displacement of aquatic organisms, reducing food availability for fish, birds and otters.
 - Reduction in water clarity and visibility, impairing ability of fish, birds and otter to find food.
 - Potential for fuels, oils, cement etc. to have deleterious effects on fish, plants, invertebrates, birds and otters.
- Introduction and spread of invasive species.
- Impact on upstream movement of aquatic organisms due to use of unsuitable culverts on watercourses and drains, reducing food availability for birds and otters.
- Disruption to movements if bridge crossings are inappropriately designed.

- Increase in surface water run-off from the road improvement scheme.

8.3.4.9. **Potential in-combination effects on SAC and SPA**

The NIS considers a number of water-related plans and programmes, and considers that none of these could result in a significant in-combination effect on the Lough Oughter and Associated Lakes SAC and Lough Oughter Complex SPA. It contends that the plans and programmes would have positive effects on water quality, resulting in positive indirect impacts on any receiving Natura 2000 sites.

As noted above, the NIS only relates to Section B of the N55 Corduff to South of Killydoon project, which is Phases 3 and 4 of the overall project. Section A of the project (i.e. Phases 1 and 2) has separately been screened out for AA and construction of those phases is now underway. Section 1.2 of the NIS states that Section A will be considered when assessing the cumulative and in-combination impacts. Notwithstanding this statement, I note that section 4.5.3 of the NIS, which relates to cumulative and in-combination impacts, does not mention Section A of the project. However, having regard to: the nature of the overall N55 Corduff to South of Killydoon project which comprises the realignment of an existing road with significant portions of on-line works or works in close proximity to the existing road; the receiving environment, which generally comprises improved grassland or other habitats of low conservation value; the distance to the Natura 2000 sites; and the lack of pathways other than the River Erne, I do not consider that any significant potential in-combination or cumulative impacts arise over and above those potential direct and indirect effects listed above.

8.3.4.10. **Mitigation measures**

The NIS sets out a series of mitigation measures under a number of headings, which can be summarised as follows:

- Reduction and prevention of suspended solids pollution:
 - Schedule timing of works to minimise erosion and run-off.
 - Retain existing vegetation where possible
 - Revegetate denuded areas, particularly cut and fill slopes and disturbed slopes as soon as possible. Use organic stabilisers to minimise erosion until vegetation is established.

- Cover temporary fill and stockpiles with sheeting.
- Divert runoff from denuded areas.
- Minimise length and steepness of slopes.
- Minimise runoff velocity and erosive energy by maximising flow path length, constructing interceptor ditches and channels, and lining steep ditches with filter fabric or rock.
- Retain sediments on site with sediment traps, silt fences and ponds with a 15 hour retention time.
- Access roads to be topped with granular material or nonwoven geotextile.
- In-stream works to be avoided where possible, and kept to a minimum if unavoidable.
- Temporary stream diversions, such as for culvert installation, shall only be carried out in consultation with IFI.
- Machinery should never cross a watercourse by entering it.
- Reduction or elimination of pollution with other substances associated with the construction process:
 - Raw or uncured waste concrete should be disposed of by removal from the site or burial in a location that shall not impact on the watercourse.
 - Wash-down water shall be trapped on-site to allow sediment to settle out and reach neutral pH before being released to the drainage system.
 - Fuels, lubricant and other fluids shall be carefully handled and secured against unauthorised access.
 - Any spillages shall be immediately contained and the contaminated soil disposed of. Oil booms and oil soakage pads shall be kept on site.
 - Fuelling and lubrication of equipment shall be carried out in bunded areas as far as possible away from the River Erne.

- Foul drainage from site offices etc. shall be removed to a suitable treatment facility or discharged to a septic tank system.
- Location of sites for use as storage areas, machinery depots, site office, temporary access roads or the disposal of spoil:
 - All sediments from the spoil fill and construction and demolition waste will be retained on site through the use of erosion and sediment control structures such as sediment traps, silt fences and sediment control ponds.
 - Such measures shall remain in place until all disturbed ground or exposed sediments have been re-colonised with established vegetation.
- Mitigating permanent loss of habitat:
 - A 5m wide leave strip should be established upstream and downstream of the proposed river crossing points.
 - Where new road construction is to take place close to rivers/streams, a riparian leave strip should be clearly marked.
 - Other than the single span bridges with no instream structures, no temporary stream crossings or temporary culverting shall take place without prior agreement of IFI.
- Mitigation of obstruction to upstream movement of fish and other aquatic fauna:
 - In-stream works shall not be carried out between the end of September and the beginning of July without IFI approval to avoid any significant disruption to upstream fish movement.
 - Single span bridges will be used that are at least 1.2 times the width of the river to ensure no negative impact on fish movement.
 - If culverting of watercourses such as field drains is required, the culvert diameter should be at least 1.2 times the bankfull width of the drain. Such culverting shall be agreed with IFI prior to works commencing.

- Reduction and prevention of hydrocarbon pollution during the operational phase:
 - Sustainable drainage system, including petroleum interceptors will be installed to prevent significant pollution reaching the River Erne.
 - The Environmental Management System will include a program of maintenance, cleaning and inspection of the surface water run-off treatment system.
- Mitigation of obstruction to otter movements:
 - Design of bridges includes an access track along the river and the river bank will be retained to ensure that movement of otters is not obstructed.
- Mitigation of spread of invasive species:
 - All plant and equipment must be thoroughly cleaned down prior to arrival on site. Sign-off sheet to be maintained.

8.3.4.11. **Residual effects/Further analysis**

No significant residual effects are identified following implementation of the recommended mitigation measures.

8.3.4.12. **NIS Omissions**

None noted.

8.3.4.13. **Suggested related conditions**

Having regard to the nature of the proposed development, its distance from the Natura 2000 sites, the potential direct and indirect effects identified, I consider that the majority of the mitigation measures proposed in the NIS are primarily matters of good practice construction methodology, and I consider that the mitigation measures should be incorporated into a Construction Environmental Management Plan to be agreed with the relevant statutory agencies/authorities. If the Board is minded to approve the proposed development, I therefore recommend the following conditions:

- Compliance with the mitigation measures contained in the Natura Impact Statement and the Environmental Impact Report.

- Preparation of a Construction Environmental Management Plan, incorporating all mitigation measures indicated in the Natura Impact Statement to be agreed with relevant bodies.
- Appointment of a suitably qualified ecologist to oversee the site set-up and construction of the proposed development.

8.3.4.14. **Appropriate Assessment Conclusions**

Having regard to the location of the application site 20km upstream of the Lough Oughter and Associated Lakes SAC (site code: 000007) and the Lough Oughter Complex SPA (site code: 004049), the design of the scheme and in particular the use of clear span bridges with no in-stream structures or disruption to the existing river banks, and subject to the implementation of best practice construction methodologies and the proposed mitigation measures, I consider that it is reasonable to conclude on the basis of the information on the file, which I consider adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans and projects would not adversely affect the integrity of the Lough Oughter and Associated Lakes SAC, the Lough Oughter Complex SPA, or any other European site, in view of the sites' Conservation Objectives.

9.0 **Recommendation**

- 9.1. On the basis of the above assessment, I recommend that the Board approve the proposed development subject to the reasons and considerations below and subject to conditions including requiring compliance with the submitted details and with the mitigation measures as set out in the NIS.

10.0 **Reasons and Considerations**

- 10.1. In coming to its decision, the Board had regard to the following:

- (a) the EU Habitats Directive (92/43/EEC),
- (b) the European Union (Birds and Natural Habitats) Regulations 2011-2015,
- (c) the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the

proposed development and the likely significant effects of the proposed development on a European Site,

- (d) the conservation objectives, qualifying interests and special conservation interests for the Lough Oughter and Associated Lakes SAC (site code: 000007) and the Lough Oughter Complex SPA (site code: 004049),
- (e) the policies and objectives of the Cavan County Development Plan, 2014-2020,
- (f) the nature and extent of the proposed works as set out in the application for approval,
- (g) the information submitted in relation to the potential impacts on habitats, flora and fauna, including the Natura Impact Statement,
- (h) the submissions and observations received in relation to the proposed development, and
- (i) the report and recommendation of the person appointed by the Board to make a report and recommendation on the matter

10.2. **Appropriate Assessment**

10.2.1. The Board agreed with the screening assessment and conclusion carried out in the Inspector's report that the Lough Oughter and Associated Lakes SAC (site code: 000007) and the Lough Oughter Complex SPA (site code: 004049) are the only European Sites in respect of which the proposed development has the potential to have a significant effect.

10.2.2. The Board considered the Natura Impact Statement and associated documentation submitted with the application for approval, the mitigation measures contained therein, the submissions and observations on file, and the Inspector's assessment. The Board completed an appropriate assessment of the implications of the proposed development for the affected European Sites, namely the Lough Oughter and Associated Lakes SAC (site code: 000007) and the Lough Oughter Complex SPA (site code: 004049), in view of the sites' conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment. In completing the appropriate assessment, the Board considered, in particular, the following:

- i. the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects,
- ii. the mitigation measures which are included as part of the current proposal, and
- iii. the conservation objectives for the European Sites.

10.2.3. In completing the appropriate assessment, the Board accepted and adopted the screening and the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European Sites, having regard to the site's conservation objectives.

In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the site's conservation objectives.

10.3. **Proper Planning and Sustainable Development/Likely effects on the environment**

10.3.1. It is considered that, subject to compliance with the conditions set out below, the proposed development would not have significant negative effects on the environment or the community in the vicinity, would not give rise to a risk of pollution, would not be detrimental to the visual or landscape amenities of the area, would not seriously injure the amenities of property in the vicinity, would not adversely impact on the cultural, archaeological and built heritage of the area and would not interfere with the existing land uses in the area. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

11.0 **Conditions**

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions.

Reason: In the interest of clarity.

2. (a) The County Council and any agent acting on its behalf shall comply with the mitigation measures contained in the Natura Impact Statement and

the Environmental Impact Report which was submitted with the application.

- (b) Detailed measures in relation to the protection of bats, badgers and otters during the construction period shall be determined in consultation with the National Parks and Wildlife Service of the Department of Culture, Heritage and the Gaeltacht. These measures shall be implemented as part of the development by the local authority and/or any agent acting on its behalf.

Reason: In the interest of clarity and the proper planning and sustainable development of the area and to ensure the protection of the European sites

- 3. The scheme shall make provision for traffic calming measures at the entrances from the realigned N55 to the village of Killydoon and these shall be put in place as part of the overall contract for the works. These provisions shall be made available for public inspection at the offices of the local authority.

Reason: In the interest of traffic safety.

- 4. Prior to the commencement of development, the local authority shall agree with the relevant statutory agencies a Construction Environmental Management Plan, incorporating all mitigation measures indicated in the Natura Impact Statement.

Reason: To ensure the protection of European sites.

- 5. (a) The design and construction of culverts and watercourse/river crossings shall have regard to the provisions of NRA publication 'Guidelines for the Crossing of Watercourses during the Construction Of National Road Schemes' and the Eastern Regional Fisheries Board publication 'Requirements for the Protection of Fisheries Habitat during Construction and Development Work at River Sites'.
- (b) No excavation or construction works shall take place in the vicinity of the River Erne during the peak spawning period for salmonids between 1st October and 30th April inclusive.

Reason: In the interests of ecological protection.

6. A suitably qualified ecologist shall be appointed by the County Council to oversee the site set-up and construction of the proposed development and the ecologist shall be present on site during construction works. Upon completion of works, an audit report of the site works shall be prepared by the appointed ecologist and submitted to the County Council to be kept on record.

Reason: In the interest of nature conservation, to prevent adverse impacts on the European sites and to ensure the protection of the Annex I habitats and Annex II species and their Qualifying Interests for which the sites were designated.

7. The County Council and any agent acting on its behalf shall facilitate the preservation, recording, protection or removal of archaeological materials or features that may exist within the site. A suitably qualified archaeologist shall be appointed by the County Council to oversee the site set-up and construction of the proposed development and the archaeologist shall be present on site during construction works.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

Niall Haverty
Planning Inspector

26th October 2017