



An
Bord
Pleanála

Inspector's Report ABP-300441-17

Development	Proposed N16 National Road Project (Drumkilsellagh to Lugnagall)
Location	Drumkilsellagh, Doonally, Castlegal, Lugatober, Collinsford and Lugnagall townlands, 2.5km northeast of Sligo, County Sligo
Planning/Roads Authority	Sligo County Council
Developer	Sligo County Council
Type of Application	EIAR Direction
Date of Site Inspection	26 th February 2018
Inspector	Colm McLoughlin

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1.0 Introduction

- 1.1. Under the provisions of Section 50(1)(c) of the Roads Act, 1993, as amended (hereinafter 'the Roads Act'), Sligo County Council is seeking a direction from An Bord Pleanála, as to whether or not its proposal to carry out a road development project, would be likely to give rise to significant effects on the environment, and thereby require an Environmental Impact Assessment (EIA) to be undertaken and an Environmental Impact Assessment Report (EIAR) to be prepared in relation to the project. Sligo County Council is of the opinion that an EIAR is not required for the project. The request is accompanied by a document titled 'N16 Lugatober (Drumkilsellagh to Lugnagall) EIA Screening Report (& Provision of Information)' dated December 2017.

2.0 Site Location & Description

- 2.1. The area subject of the proposed road development is approximately 2.5km to the northeast of Sligo city and approximately 15.5km west of Manorhamilton. Sligo and Manorhamilton are connected by the N16 national road, which extends eastward to meet the A4 major road at the border with Northern Ireland at Blacklion / Belcoo. The A4 connects onwards to Enniskillen and feeds into the M1 motorway leading towards Belfast. It is understood that the subject project would form part of the wider improvement works to the N16.
- 2.2. The section of the N16 subject of this direction request, commences in the townland of Drumkilsellagh at the junction with Local Road L3406 (Drum Road), initially following a north-south alignment for a distance of approximately 1.1km rising by approximately 30m towards the western slopes of Cope's Mountain. A Local Road L7415 leading towards the southern slopes of Cope's Mountain intersects the national road in this lower section. The second section of the road project, hugs the northwestern slopes of Cope's Mountain and is deficient in horizontal alignment with overtaking prohibited. This second section of this road cuts into the mountain slope and intermittently features steep drops to the northwest into Glencar valley. L7413 and L3404 local roads intersect the second section of the road, dropping

northwestwards into the valley. The project terminates in Lugnagall townland, approximately 2.5km from the county boundary with Leitrim, a boundary which is identified on the ground by a stream running north towards Glencar Lough.

- 2.3. The area which the road cuts through is characterised by agricultural lands dominated by sheep farming, interspersed by farmsteads and dwellings set back from the roadside. While agriculture is the dominant land use, the area also performs an important tourism function, with Glencar waterfall accessed via this route. Businesses in the area include a guesthouse, a 'shot blasting' premises and a quarry. There are four minor road intersections along the subject section of the N16 and accesses to houses, and agricultural lands. The road is flanked on both sides for large sections by mature hedgerows and trees, including broadleaf wooded areas. Views overlooking Glencar valley are intermittently available along the second higher section of the road. Tully River is the largest watercourse that intersects with the subject section of the N16, and this passes under the road at Drumkilsellagh, before flowing west towards Rathcormac village and Drumcliff Bay. Two other watercourses feeding off the northwestern slopes of Cope's Mountain, flow northwestwards towards the Drumcliff River in the valley below, which feeds Drumcliff Bay from Glencar Lough.

3.0 Proposed Development

- 3.1. The proposed development relates to approximately 2.5km of the N16 national road from a point approximately 2.5km to the northeast of Sligo, commencing in the townland of Drumkilsellagh and terminating in the townland of Lugnagall. The project entails approximately 67% offline realignment works and approximately 33% online at both road tie-ins, to provide a 'Type-2 Single-Carriageway Road' with a total width of approximately 18m, to include a cycle track where alternative off-road routes are not available. The developer, Sligo County Council, estimate that between 10 and 15 hectares of land would be required to be purchased for the 2.5km road realignment project, and that the paved road surface would equate to approximately 2 to 3 hectares. The construction phase of the project would take 10 to 12 months according to the Screening Report submitted by the developer, which also outlines the various associated proposed works, including the following:

- Approximately 1.9km length of side road realignments and rearrangements;
- One at-grade roundabout junction at the southwest end in Drumkilsellagh;
- All the necessary drainage works associated with the proposed project, including culverts and associated diversions of existing minor watercourses and drainage ditches;
- The diversion of services and utilities;
- Earthworks operations relating to the cut/fill elements of the project;
- Environmental mitigation works;
- Service and accommodation tracks; and
- The other consequential construction works necessary to complete the project, including a construction site compound.

3.1.1. The Screening report outlines that the 'emerging preferred route' for the N16 from Sligo city to Sligo county boundary has been identified in three sections. Full scheme improvement works would not be viable for the N16, based on funding and given the low level of traffic when compared with other national roads in the County. A multi-criteria analysis identified that of the three sections analysed, the subject middle section would provide greatest benefits in the short to medium term.

3.1.2. One substantial cut section to the road project is envisaged and this would have a maximum depth of approximately 13m and would be approximately 200m in length. Two substantial fill sections are proposed and these would have a maximum length of approximately 150m and would be between approximately 10m to 15m in height. Where possible, the project looks to reuse 'cut' material, to satisfy 'fill' requirements.

4.0 **Legislation & Guidelines**

4.1. **Roads Act, 1993**

4.1.1. This determination is being sought under the Roads Act. Section 50(1)(a) of the Roads Act, lists road developments in respect of which there is a mandatory requirement to carry out EIA, as follows:

- (i) the construction of a motorway;

- (ii) the construction of a busway;
- (iii) the construction of a service area, or;
- (iv) any prescribed type of proposed road development consisting of the construction of a proposed public road or the improvement of any existing public road.

4.1.2. The proposed road project does not fall into the mandatory EIA categories (i), (ii) or (iii), as listed above, and with regards to category (iv), Article 8 of the Roads Regulations, 1994 (S.I. 119 of 1994) outlines the following:

The prescribed types of proposed road development for the purpose of subsection (1)(a)(iv) of Section 50 of the Act shall be -

(a) the construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500m or more in length in an urban area;

(b) the construction of a new bridge or tunnel which would be 100m or more in length.

4.1.3. The proposed single-carriageway road, being less than ‘four or more lanes’ and not entailing the construction of new bridge or tunnel, 100 metres or more in length’, does not, therefore, require mandatory EIA.

4.1.4. Section 50(1)(c) of the Roads Act requires that where a Roads Authority considers that any proposed road development below the relevant threshold for which an EIA would be mandatory, would be likely to have significant effects on the environment, it shall inform the Minister¹ and, where the Minister concurs with the Roads Authority, it shall give a direction to the Roads Authority [under Section 50(1)(b)] to shall prepare a statement of the likely effects on the environment in respect of such a ‘sub-threshold’ development.

4.1.5. Under Section 50(1)(d) of the Roads Act, the requirements set out under Section 50(1)(c) will also apply in the following circumstances:

¹ Where the word ‘Minister’ appears in Section 50 of the Roads Act, it is understood to refer to ‘An Bord Pleanála’, to reflect the transfer of certain functions from the Minister to An Bord Pleanála, subsequent to enactment of the Roads Act, 1993.

Where a proposed road development (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be located on:

(i) a European Site, meaning:

(I) a candidate site of Community importance;

(II) a site of Community importance;

(III) a candidate special area of conservation (cSAC);

(IV) a special area of conservation (SAC);

(V) a candidate special protection area (cSPA), or;

(VI) a special protection area (SPA).

(v) land established or recognised as a nature reserve within the meaning of section 15 or 16 of the Wildlife Act, 1976 (No. 39 of 1976);

(vi) land designated as a refuge for fauna under section 17 of the Wildlife Act, 1976 (No. 39 of 1976).

The Road Authority concerned shall decide whether the proposed road development would or would not be likely to have significant effects on the environment, and if the Authority decides that the proposed road development would be likely to have such effects, paragraph (c) shall apply accordingly.

- 4.1.6. As set out under Section 50(1)(e) of the Roads Act, in deciding whether a proposed development would or would not be likely to have significant effects on the environment, An Bord Pleanála shall have regard to the criteria specified for the purposes of Article 27 of the European Communities (Environmental Impact Assessment) Regulations, 1989². These assessment criteria, including the characteristics of the proposed development, the location of the proposed development and the characteristics of potential impacts have been amended in the EU Directive 2014/52/EU, as set out below.

² As inserted by European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1999.

4.2. Directive 2014/52/EU

- 4.2.1. The EU Directive 2014/52/EU of 16th April 2014, amending Directive 2011/92/EU (the EIA Directive) on the Assessment of the Effects of Certain Public and Private Projects on the Environment, entered into force on 15th May 2014. The EIA Directive 2014/52/EU reaffirms that ‘Annex I projects’ shall be subject to EIA and that for ‘Annex II projects’, Member States shall determine whether the project should be subject to EIA on a case-by-case basis or subject to thresholds or other criteria set by the Member State. The screening determination must be based on the information provided by the developer and if mitigation measures are influential to a screening determination, these must be stated by An Bord Pleanála, as the competent authority, in a screening determination.
- 4.2.2. One of the more significant changes introduced by the new Directive is the addition of Annex IIA, the information which a developer must provide to the competent authority to inform a screening determination, including a description of the project, a description of the aspects of the environment likely to be affected by the project and a description of any likely significant effects. In order to ensure a high level of protection of the environment and human health, screening procedures and environmental impact assessments should take account of the impact of the whole project in question, including, where relevant, its subsurface and underground, during the construction, operational and, where relevant, demolition phases.
- 4.2.3. Annex III of the Directive lists revised key criteria to determine whether or not a sub-threshold should be subject to EIA. The revised key criteria are grouped under three headings as follows:
- Characteristics of Projects;
 - Location of Projects;
 - Type and Characteristics of Potential Impact.
- 4.2.4. The revised criteria for determination, provide more specific and broader considerations in relation to certain assessment categories, including the need to consider the risks to human health and risk of disasters, including those caused by climate change. With regard to the location of the project the new Directive now requires consideration of approved land use and natural resources including soil,

land, water and biodiversity in the area and underground. The cumulation of the impact with the impact of other existing and/or approved projects and the possibility of effectively reducing the impact are additional criteria to be considered in screening for EIA. The Directive outlines that a developer shall take into account the available results of other relevant assessments of the effects on the environment, which I note could also include appropriate assessments prepared in response to obligations within the Habitats Directive.

4.3. **Guidance**

- 4.3.1. Following from transposition by the EU of Directive 2014/52/EU, guidance document 'EIA of Projects - Guidance on Screening' (2017) and other documents were prepared on behalf of the European Commission to assist competent authorities, developers and EIA practitioners in the EU Member States. The 'Guidance on Screening' document outlines a stepped approach to the screening process for competent authorities, as well as two checklists to assist in case-by-case screening.
- 4.3.2. 'Environmental Impact Assessment Guidance for Consent Authorities regarding Sub-threshold Development' published in 2003 by the Department of the Environment, Heritage and Local Government, provides guidance on the criteria to be assessed when deciding whether or not a proposed development is likely to have significant effects on the environment³.
- 4.3.3. Additional guidance with regard to the screening of road projects for EIA is provided in the National Roads Authority's publication, 'EIA of National Road Schemes – A Practical Guide' (2008). There are other guidance documents, as referenced by the developer, outlining best practise in regard to projects such as that subject of this assessment.

5.0 **Sligo County Council EIA Screening Report**

- 5.1. The EIA Screening Report prepared by the Transport Infrastructure Ireland (TII) Roads Project Office of Sligo County Council, initially sets out the relevant legislation in relation to mandatory and sub-threshold EIA road projects. Mandatory EIA for this

³ This was prepared with regard to the requirements set out in the EC (Environmental Impact Assessment) (Amendment) Regulations, 1999 (S.I. No. 93 of 1999) and in Schedule 7 of the Planning and Development Regulations 2001-2017.

project was discounted by the developer and the issue of sub-threshold EIA is addressed in the report. The EIA Screening Report includes a screening checklist following from the document 'EIA of Projects - Guidance on Screening (2017)' to assist in assessing the likely impact of the project on the environment. Appended to the EIA Screening Report are the following:

- Summary of N16 Route Improvement Strategy (Appendix 1);
- Landscape Assessment Report prepared by RPS Group (Appendix 2);
- Outline Erosion & Sediment Control Plan (Appendix 3).

5.2. The developer also states that a Screening Report for Appropriate Assessment has also been undertaken for the project, with extracts included in the EIA Screening Report. Within the EIA Screening Report, the developer provides information to align with criteria for determining whether the development would or would not be likely to have significant effects on the environment, as per Annex III of Directive 2014/52/EU.

5.3. The Report notes that the road forms part of a scenic route and is within an area of high sensitivity to development. It is stated by the developer that the project will only intercept one watercourse, the Tully River, and that impacts would not be significant. Land take is not considered significant in a regional context according to the developer. Significant quantities of peat are not expected to be encountered and a c.70m stretch of gravelly alluvium may possibly remain in situ. Annual average daily traffic (AADT) on the road would increase by 200 from 3,300 AADT in 2017 to a 2047 design year AADT of 3,500, and according to the developer pollution arising from noise and vibration and air quality does not require further consideration. The construction phase would generate trips and activity along the project boundaries and haulage routes. Major accidents and/or disasters would not arise due to the nature of the project, and landslides or rockfalls are not expected to be a problem for the road project, due to the receiving environment. Risks to human health are not anticipated and impacts to businesses along the route are expected to be localised. No significant effects on landscape are predicted and trees and hedgerows required to be removed would recover adequately in the short to medium term.

5.4. Assessment of the impacts of the development are considered with regard to Benbulbin, Gleniff and Glenade candidate Special Areas of Conservation (cSAC)

(Site Code: 000623), Cummeen Strand/Drumcliff Bay cSAC (Site Code: 004013) and Sligo/Leitrim Uplands Special Protection Area (SPA) (Site Code: 004187). The Report concludes that 'the Appropriate Assessment Screening Report has established, in view of best scientific knowledge and on the basis of objective information, that the proposed development either individually or in combination with other plans or projects, is not likely to have significant effects on these cSACs or SPA'.

5.5. Potential positive impacts have been identified as:

- Drainage design would offer significant improvements on the existing situation, which is devoid of surface-water collection systems, water-quality treatment and water-quantity control;
- At operational phase, surface-water containment and treatment measures would improve the quantity and quality of surface water being discharged to the environment;
- Project would have a positive impact on journey times and amenity along the N16, with segregation of transport modes. Some residents would benefit from the transfer of traffic from the existing N16 to new sections. Improved access for tourists to Glencar waterfall via the L3404 would result;
- Operational noise levels would reduce for some residences.

5.6. Potential negative impacts have been identified as:

- The need to address the shortfall in fill materials;
- The project would result in severance of some agricultural land with limited localised impacts on farming practices;
- Four residences would be impacted by the road project; one property at Lugnagall would overlook the road and three other properties would be closer to the new road than the existing road;
- Operational noise levels would increase for some residences.

5.7. Potential negative impacts which may need to be mitigated include:

- Pollution to surface waters - An Outline Erosion and Sediment Control Plan has been prepared to detail control measures to offset sediment pollution

risks to adjacent watercourses and sensitive habitats. It is stated that the project will also be carried out in accordance with TII Environmental Guidelines and other best practice environmental guidance;

- Visual impact - A dedicated EIA (Screening) Landscape Impact Assessment Report has been undertaken, and this concludes that the works would not take place in a 'sensitive-rural landscape', as defined by the Sligo County Development Plan 2017-2023 and that no significant effects are predicted during the construction or operational phase;
- Ecological impact - Two wetland areas that contain 'Annex I priority habitat' are in close proximity to the project, including three petrifying springs west of Castlegal 40m from a proposed embankment and alkaline fens and petrifying springs at Lugnagall Flush, 5m and 15m respectively from the proposed road works. The developer states that direct impacts to these habitats has been avoided, as the vertical alignment of the road would avoid interception of the groundwater table at Lugnagall. The EIA Screening Report also states that the project would not result in direct landtake within designated areas, including candidate Special Areas of Conservation (cSACs), Special Protected Areas (SPAs) or proposed Natural Heritage Areas (pNHAs). The report concludes that impacts on Crockauns / Keelogyboy Bogs pNHA (Site Code: 002435) and Sligo/Leitrim Uplands SPA (Site Code: 004187) which are adjacent to the second section of the existing road are not predicted. The developer also states that there are unlikely to be hydrological connections to Benbulbin, Gleniff and Glenade cSAC (Site Code: 000623) but that a hydrological connection with Cummeen Strand/Drumcliff Bay (Sligo Bay cSAC (Site Code: 000627) does exist, but that significant effects are unlikely once best practise and other measures are adhered to;
- Cultural Heritage - The proposed road and associated works would be 60m to the east of a megalithic tomb at Drum east townland (Recorded Monument and Places [RMP] Ref. SL009-028), 10m to the east and within the zone of constraints for a ringfort at Lugatober (RMP Ref. SL009-026) and traversing an abandoned road, which is not a RMP, at Lugatober and Castlegal. Castlegal Bridge is the closest architectural heritage site to the road project.

Direct impacts on RMP as stated would be either avoided, avoided through sensitive design measures or localised.

- 5.8. It was concluded by the developer that the development would not be likely to have significant effects on the environment and would therefore not require EIA.

6.0 **Assessment**

6.1. **Introduction**

- 6.1.1. Having regard to the requirement for the developer to provide information on the characteristics of the project and its likely significant effects on the environment, I am satisfied that the information contained in the EIA Screening Report provided by Sligo County Council meets the provisions of Article 4(4) and Annex II A of EU Directive 2014/52/EU.
- 6.1.2. The 'Directive 2014/52/EU' groups criteria for deciding whether or not a proposed development would be likely to have significant effects on the environment, under three headings. To understand the type and characteristics of the potential impact of the project, the characteristics of the project and the environmental sensitivity of geographical areas likely to be affected by the project must first be considered.

6.2. **Characteristics of the Project**

6.2.1. **Size and Design of the Whole Project**

- 6.2.2. A description of the project works is outlined in Section 3 to this report based on information provided by the developer. Whilst, plans and numerous extracts of drawings are included within the information submitted by the developer, the scale of maps accompanying the request to the Board are not sufficiently detailed to allow a thorough understanding of the amount of land required and the vertical aspect of the road, particularly for the offline sections.
- 6.2.3. The total land-take of the proposed road has not been indicated, but it is stated that between 10 and 15 hectares of land would be required to be purchased for the project. The paved surface to the road would equate to approximately 2 to 3 hectares and approximately 2.5km in length, with approximately 67% offline. This

would require the acquisition of agricultural lands in this rural area. Acquisition of residential/commercial lands would not be necessary, although farm buildings and partially-constructed building at Castlegal would need to be demolished and removed to accommodate the road realignment and slip road.

6.2.4. For the most part, the new road would either run along the existing road or parallel with it. The project is small scale both in terms of its length and the proposed online realignment and widening works. Of note are the fill elements of the new section of national road and the slip roads, including the two 150m long off-line sections, featuring engineered embankments, one of which would vary between 10 and 15m in height. These represent considerable design elements to the project, which are necessary due to the topography of the area, including steep drops to the valley. The Tully River would be crossed to the northeast of the existing Castlegal bridge. Additional substantial elements of the project include cut sections leading to the embankment sections and realignments and rearrangements of side roads, some of which would be banked, amounting to an additional 1.9km of additional roads.

6.2.5. **Cumulation with Other Existing and/or Approved Projects**

6.2.6. Sligo County Council states that this road project forms the middle section of a larger road project to improve the N16 route from Sligo town to Diffreen townland in County Leitrim. It is stated that the other two sections of the road project have not been approved and are unlikely to be progressed in the next 5 to 15 years. I am not aware of any existing or approved projects planned in the vicinity, which might be carried out at the same time as the proposed road, the impact of which, when considered with this proposed road project, might result in a cumulative impact which would be significant on the environment.

6.2.7. **The use of Natural Resources, in particular Land, Soil, Water and Biodiversity**

6.2.8. Materials will be required for the construction of the road such as rockfill, crushed stone, bituminous products and concrete, particularly for the two 150m offline embankment sections in the second higher section of the road running along Cope's Mountain. Based on estimates provided by the developer 60,000m³ to 140,000m³ of materials would need to be sourced. It is stated that rock required for construction would be sourced from registered quarries within 20km of the project. I would

consider that the use of soil and rock resources would not cause unusual, significant or adverse effects of a type that would require the preparation of an EIAR.

6.2.9. Production of Waste

6.2.10. Significant volumes of waste are not anticipated and inert materials (rock, soil, subsoil) removed during excavation would be used in construction and landscaping. Where unsuitable 'cut' or soil materials arise, it is stated that these would be transferred to licensed facilities. The production of waste would not cause unusual, significant, or adverse effects of a type that would require EIA or the preparation of an EIAR.

6.2.11. Pollution and Nuisances

6.2.12. The developer states that only one small coastal stream, the Tully River, would be traversed by the subject road and that the proposed works would involve culverts and associated diversions of existing minor watercourses and drainage ditches. All watercourses and drainage ditches that would be traversed by the road, have a direct downstream hydrological link with designated sites 4km to the west at Drumcliff Bay. According to the developer, the Outline Erosion & Sediment Control Plan prepared for the project has been prepared as a method of water quality protection to offset potential Construction and Operation Stage pollution impacts arising from the project to adjacent watercourses and habitats.

6.2.13. Based on the estimates provided and standard construction vehicle load, a minimum of between 4,000 and 9,333 tipper trucks of 'fill' material would be required for the project. Given that the project would involve a 10-12 month construction phase, this would require a minimum of between 20 and 47 deliveries per weekday over the course of the project. Daily deliveries would not be consistent over the construction phase and would readily exceed 20 and 47 deliveries per weekday during the early phases of the project, particularly as part of the engineering works to create the 150m-long, 120m-wide and 10 to 15m-high embankment at Castlegal. Construction compound and haulage route details have not been provided. Given the number of tipper trucks visiting the site and area, the construction phase of the project would be likely to create a temporary nuisance for residents at a local level.

6.2.14. The proposed development involves the upgrade both online and offline of an existing stretch of road and, with the exception of the temporary construction phase,

would not generate significant additional vehicular movements, changes in composition of traffic or increased congestion. Lighting from vehicles on the proposed offline section may result in nuisance to residents immediate to these sections.

6.2.15. The Risk of Major Accidents and/or disasters which are relevant to the Project concerned, including those caused by climate change, in accordance with scientific knowledge

It is not anticipated that the project is a type which would cause an increased risk of landslides or rockfall on the neighbouring mountain slopes or other major accidents / disasters including those caused by climate change.

6.2.16. The Risks to Human Health (for example due to water contamination or air pollution)

Risks to human health may arise from accidental spillages, sediment releases or contaminated soils, which may be encountered during excavations and which could impact on water quality, affecting drinking water quality. Such impacts could potentially arise at a local level during construction and would be mitigated by the implementation of a Construction Environment Management Plan and adherence to best practice and protocols, such as those outlined in the Outline Erosion & Sediment Control Plan prepared by the developer.

6.2.17. Airborne dust nuisance during construction could be controlled by way of a dust minimisation plan. Given the estimated AADT increase in traffic from 3,300 to 3,500, it is anticipated that there would only be a marginal change in terms of the air and noise environment. However, this change would be most pronounced for houses that would be closer to the new road or above it, including where new slip roads are proposed.

6.2.18. The development will result in an improvement in road safety through improved junction layouts and separation of vehicular and bicycle/pedestrian traffic, which would be to the benefit of all road users.

6.3. Location of the Project

6.3.1. Existing and Approved Land Use

6.3.2. The area is characterised by farmland and mountain grazing land. Predominant land uses in the area will not be significantly impacted, apart from possible severance of some farmholdings and demolition of farm buildings at one location. Recent permissions for residential development in the vicinity are cognisant of the road project⁴.

6.3.3. The Relative Abundance, Availability, Quality and Regenerative Capacity of Natural Resources (including in particular Soil, Land, Water and Biodiversity) in the Area and its Underground

6.3.4. The surrounding rural area is largely undeveloped and contains an abundance of natural resources for the road construction works. Materials such as crushed stone would be availed of from local quarries according to the developer. Quality of water based on Water Framework Directive Status suggests that the smaller watercourses have good status, while the status of the Tully River has not been assigned. The project area sits between an expansive upland mountain area, included within the Crockauns / Keelogyboy Bogs pNHA (Site Code: 002435) and the Sligo/Leitrim Uplands SPA (Site Code: 004187), adjoining and 100m to the southeast, and marine aquatic habitat, included within Cummeen Strand/Drumcliff Bay (Sligo Bay) cSAC (Site Code: 000627) and Drumcliff Bay SPA (Site Code: 004013), 4.3km to the northwest. There are other sensitive biodiversity areas, including Annex 1 wetland habitats (petrifying springs and alkaline fen) within c.5m to 100m of the project embankment works, whose quality and regenerative capacity could be significantly undermined via drainage and construction activity and the spread of invasive species.

6.3.5. Absorption Capacity of the Natural Environment

The proposed works would involve crossings over watercourses and drainage ditches. All watercourses draining the study area ultimately drain into Drumcliff Bay. Adverse impacts to water quality draining the site potentially could have direct or indirect impacts on the qualifying interests of the designated sites, Cummeen

⁴ For example, see Sligo County Council Planning Register Reference 17/330 (October 2017)

Strand/Drumcliff Bay (Sligo Bay) cSAC and Drumcliff Bay SPA, approximately 4.3km to the northwest.

There are two locations proximate to the proposed works with petrifying springs, which are listed as priority habitat in Annex I (Code: 7220) of the EU Habitats Directive. The springs sit amongst broadleaf woodland which would directly adjoin the new offline road embankment at Castlegal. There are three springs in this area, approximately 40m to 100m from the new road embankment. The developer states that direct impacts to these habitats would be avoided, as the vertical alignment of the road would avoid interception of the groundwater table. These localised habitats are of considerable ecological and hydrogeological interest and are a rare habitat in Ireland that can be significantly impacted and undermined by drainage activities. The springs and neighboring drainage ditches emerge as a stream in the valley below that has a direct downstream hydrological link with designated sites at Drumcliff Bay and would need to be traversed by the road embankment, which would extend over 100m in width. Given the proximity to the springs and the hydrological link, there is the potential for impacts on sensitive ecological and hydrogeological habitat, as well as the qualifying interests of nearby European sites.

- 6.3.6. Embankment works are proposed to an online section of the new road at the junction with the L3404. This work would be within metres of a fourth petrifying spring and alkaline fen, which is also an Annex 1 habitat (Code: 7230) under the EU Habitats Directive. Given the proximity to the spring and alkaline fen, there is the potential for impacts on sensitive ecological and hydrogeological habitats. Also in this vicinity the proposed works would adjoin the Crockauns / Keelogyboy Bogs pNHA, which is stated to feature a variety of habitats including lowland blanket bog, wet heath, wet grassland, woodland and scrub on the lower slopes of Cope's Mountain. Works have potential to marginally encroach on this pNHA based on proposals illustrated in Figure 2.8 of the 'EIA Screening Report' submitted. Sligo/Leitrim Uplands SPA is located on higher ground to the west approximately 100m to 150m from the existing N16 road and the proposed project works. A line of oak, ash and hazel woodland leading from the southwest mountain slopes and the Sligo/Leitrim Uplands SPA at the junction with the L3404 local road would be intercepted to facilitate a new slip road.

- 6.3.7. In terms of invasive species, signage relating to the existence of same was observed at two locations along the N16, at the junction with the Local Road L3406 (Drum Road) and close to the junction with the L3404 local road. In the absence of mitigation, the inadvertent introduction or spread of invasive species could lead to significant adverse impact on habitats, particularly in proximity to the aforementioned Annex 1 habitats, the Crockauns / Keelogyboy Bogs pNHA and the oak, ash and hazel wooded strip connecting with the Sligo/Leitrim Uplands SPA southeast of the junction with the L3404 local road. It is stated that works would be carried out in accordance with the relevant guidance documents relating to the control of invasive species.
- 6.3.8. The surrounding area comprises a highly-scenic landscape, defined by the distinctive plateaued summits and steep scree-laden slopes to King's Mountain to the north and Cope's Mountain to the south, overlooking Glencar valley and Glencar Lough. Sligo County Development Plan 2017-2023 identifies the existing N16 and the L3404 as scenic routes, which provide access to Glencar waterfall and the surrounding Sligo Leitrim uplands. There are other scenic routes in the valley below, including the L3403, 1.2km to the northwest, where the project works area would be visible from. The initial lower section of the proposed road project traverses 'normal rural landscape' and the higher northeastern section traverses 'sensitive rural landscape' based on the county landscape designations contained in the Sligo County Development Plan 2017-2023. Both of these proposed sections of the road would require substantial engineering elements, such as cut and fill embankments, to facilitate construction of the new road and associated side roads. Consequently, the area has a landscape sensitivity which could be materially impacted by the proposed road project, particularly the extensive cut sections and the realignment embankments, one of which would be over 150m in length, 120m in width and 10m to 15m in height.
- 6.3.9. In terms of cultural heritage there are two recorded monuments adjacent to the existing N16 at Drum East and Lugatober. Approximately 67% of the road would be offline, and the potential for unknown archaeological features in the area cannot be ruled out. In terms of archaeological sensitivity, the area is considered to be medium to high.

6.4. **Type and Characteristics of Potential Impact**

6.4.1. **Magnitude and Spatial Extent of the impact (for example geographical area and size of the population likely to be affected)**

6.4.2. The magnitude of the impact of this development would not be extensive. The footprint of the proposed works are relatively small, entailing both offline works and use of the existing road alignment at the project tie-ins. However, there is potential for adverse impacts that could be significant across a number of environmental topics including water, ecology, hydrogeology, landscape and archaeology.

6.4.3. **Nature of the Impact**

6.4.4. The impacts of the proposed road itself would range from potentially slight to significant, with both positive and negative impacts likely.

6.4.5. **Transboundary Nature of the Impact**

6.4.6. There are no transboundary impacts associated with this proposed development.

6.4.7. **Intensity and Complexity of the Impact**

6.4.8. The potential for complexity arises from the unknown impact of the project works on sensitive ecological/hydrogeological sites and designated sites, in terms of water quality and impact on species/habitats. This is particularly the case in the absence of any detailed plans/drawings for ecologically and hydrogeological-sensitive sections of the road project and as there are numerous watercourses and drainage ditches that would be traversed by the road with direct hydrological links to designated sites. While I recognise that the Outline Erosion & Sedimentation Plan sets out various measures to be employed in the various phases of the project, including those to avoid, control and mitigate against pollutants to water, this Plan and the documentation submitted by the developer does not provide sufficient assurances that the project would not significantly impact on habitat that would be susceptible to minor changes in the drainage regime. Failure of the proposed drainage regime arising from the substantial embankment and culvert works, would be likely to significantly impact on priority and rare habitat of ecological and hydrogeological interest.

6.4.9. I also note the signage referring to the presence of invasive species in proximity to Crockauns / Keelogyboy Bogs pNHA and the oak, ash and hazel woodlands forming

part of this pNHA and connecting with the Sligo/Leitrim Uplands SPA. This adds a degree of complexity in the consideration of the interaction of the foregoing.

6.4.10. The landscape in the area is defined by the topography and includes sensitive rural landscape that would be subject to substantial cut and fill works. Furthermore, the works in proximity to two RMP and in a medium to high area of archaeological sensitivity may have unknown archaeological impacts.

6.4.11. Probability of the Impact

6.4.12. The probability of impacts is unknown at present, in the absence of specific plans/drawings, addressing the drainage immediate to ecologically and hydro-geologically sensitive sections of the road. The probability of significant impacts will require further assessment.

6.4.13. Expected Onset, Duration, Frequency and Reversibility of the Impact

6.4.14. The proposed construction works would be short-term and would take 10 to 12 months to complete. Landscaping measures may require additional maturation time. The duration of the impact would be continuous and permanent and the impact of the proposed road would not be readily reversible.

6.4.15. Cumulation of the Impact with the Impact of other Existing and/or Approved Projects

6.4.16. There are no cumulative impacts associated with this proposed development and other existing and/or approved projects.

6.4.17. Possibility of Effectively reducing the Impact

6.4.18. A tailored approach to the project adhering to best practise and detailed design, including measures to ensure the existing drainage regime is maintained, based on an understanding of the sensitivities of European (SPA, cSACs), national (pNHA) and Annex 1 habitats (petrifying springs, alkaline fens) would be essential to effectively reducing the impact. Following from this, there is a reasonable possibility that the impact of the proposed development on the environment could be effectively reduced. Possibility of effectively reducing impacts on archaeology would be dependent on the project findings, but would have scope to be effectively reduced. The possibility of effectively reducing the impacts of the development on the landscape can only be tailored as part of the detailed design stages.

7.0 Conclusion & Recommendation

- 7.1. Having regard to the submitted information, with particular reference to the information contained in the titled 'N16 Lugatober (Drumkilsellagh to Lugnagall) Environmental Impact Assessment (EIA) Screening Report (& Provision of Information)', together with my site inspection, I would consider that, given the description of the development and the nature of the receiving environment, the proposal is likely to have significant effects on the environment. An Environmental Impact Assessment Report should be prepared and an Environmental Impact Assessment should be carried out for the project.
- 7.2. Having regard to the above, I recommend that the Board directs the Road Authority, Sligo County Council, under Section 50(1)(b) of the Roads Act, 1993 (as amended), to prepare an Environmental Impact Assessment Report in respect of the proposed road development, for the reasons and considerations set out below.

8.0 Reasons and Considerations

- 8.1. Having regard to:
- The information provided by the developer;
 - Measures/features envisaged for the project to avoid or prevent what might otherwise have been significant adverse effects on the environment;
 - The characteristics, nature, scale and location of the proposed road development;
 - The location of the proposed road development upstream of a number of European sites, which are nature conservation sites of international importance, where there is the potential to impact on protected species and habitats;
 - The location of the proposed road development in a highly scenic area, along a scenic route and comprising 'sensitive-rural landscape';
 - The characteristics of potential impacts and the possibility of significant impact on environmental attributes, including, in particular, ecology and hydrogeology;

It is considered that the proposed road development may be likely to have a significant effect on the environment, and that an Environmental Impact Assessment Report should be prepared in respect of the proposal.

8.2. I recommend that the Board issue a Direction in the following form-

Having regard to:

- (i) article 27 of the European Communities (Environmental Impact Assessment) Regulations, 1989 (as amended);
- (ii) EU Directive 2014/52/EU of 16th April 2014, amending Directive 2011/92/EU (the EIA Directive) on the Assessment of the Effects of Certain Public and Private Projects on the Environment;
- (iii) the Roads Act, 1993 (as amended);
- (iv) the document 'EIA of Projects - Guidance on Screening' (2017) issued by the European Commission;
- (v) the document 'Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-Threshold Development' issued by the Department of Environment, Heritage and Local Government in August 2003,
- (vi) the ecological and hydrogeological sensitivity of the receiving environment, including the Annex I Priority Habitats the EU Habitats Directive, Petrifying Springs (Code: 7220) and Alkaline Fens (Code:7230), and the Crockauns / Keelogyboy Bogs pNHA (Site Code: 002435);
- (vii) the nature, scale and characteristics of the proposed road development, including significant engineering embankment and cut works;
- (viii) the characteristics of the potential environmental impacts on ecology, protected habitats, the fabric and settings of features of cultural heritage and the visual impact within a sensitive rural landscape;
- (ix) the information provided by the developer to An Bord Pleanála;
- (x) the report and recommendation of the Board's Inspector.

It is considered that the proposed road development would be likely to have significant effects on the environment and that the preparation of an Environmental Impact Assessment Report is required.

Colm McLoughlin
Planning Inspector

27th March 2018