

Inspector's Report ABP-301576-18

Development	CONSTRUCT A FOREST ACCESS ROAD WITH AN ENTRANCE OFF AN EXISTING PRIVATE ROAD, AND ALL ANCILLARY WORKS (INCLUDING AMENDED AGRICULTURAL ACCESS GATES)
Location	LETTEREENEEN, BARNAHOWNA, TOURMAKEADY
Planning Authority	Mayo County Council
Planning Authority Reg. Ref.	17/529
Applicant(s)	Coillte
Type of Application	Permission
Planning Authority Decision	Refuse permission
Type of Appeal	First Party
Appellant(s)	Coillte
Observer(s)	Tuar Mhic Éadaigh Coiste Pobal
Date of Site Inspection	20 th July 2018
Inspector	Donal Donnelly

Contents

1.0 Site	e Location and Description	4
2.0 Pro	posed Development	4
3.0 Pla	nning Authority Decision	5
3.1.	Decision	5
3.2.	Planning Authority Reports	5
4.0 Pla	nning History	7
5.0 Pol	icy Context	7
5.1.	Mayo County Development Plan, 2014-2020	7
5.2.	Natural Heritage Designations	3
6.0 The	e Appeal	3
6.1.	Grounds of Appeal	3
6.2.	Planning Authority Response	2
6.3.	Observations	4
7.0 Ass	sessment16	6
7.2.	Development Principle	6
7.3.	Landscape and Visual Impact	7
7.4.	Impact on the Environment	9
8.0 Env	vironmental Impact Assessment22	2
8.1.	Introduction	2
8.2.	Reasonable Alternatives	3
8.3.	Land Take	4
8.4.	Assessment of the potential direct and indirect effects of the project	4
8.5.	Reasoned Conclusion	9
9.0 App	propriate Assessment	С

10.0	Recommendation	47
11.0	Reasons and Considerations	48

1.0 Site Location and Description

- 1.1. The appeal site is located in the townlands of Lettereeneen and Barnahowna in southern Co. Mayo between the Partry Mountains and Lough Mask. Maumtrasna is the highest peak in the vicinity rising to 673m OD at a distance of approximately 5km to the west. The site is accessed off the R300 Regional Road, which continues along the western shore of Lough Mask.
- 1.2. The site of the proposed access road extends for a distance of 2.4km along the north-eastern side of the Owenbrin River. The site boundary commences off a private road that forms one arm of a 'Y' junction where the public road ends. The site then continues slightly up-gradient towards a number of dwellings before entering the steeper slopes of the valley. The forestry plantation continues further up the valley along the southern slopes of the Party Mountains. The south-eastern end of the site sits at an elevation of 69m OD and the north-western end is at a height of 134m OD.
- 1.3. A felling licence has been granted for 24.12 hectares of a 57.8 hectares site. The entire forestry plantation covers an area of approximately 120 hectares.

2.0 Proposed Development

- 2.1. Planning permission is sought for the construction of a c. 2.4km forestry access road with entrance off an existing private road, and all ancillary works (including amended agricultural access gates). The purpose of the proposed development is to provide access to an area of forestry for carrying out of felling, timber extraction and replanting operations. The proposal also includes the following main elements:
 - Road running width of 3.8m;
 - Permeable unbound hardcore stone surface;
 - Cut and fill with majority of materials sourced at site;
 - Retaining wall structure combined with anti-erosion protection measures;
 - 3 no. clear span bridge watercourse crossings and 34 no. smaller water crossings;
 - 18 month construction phase and 8 month settlement period;

• Average annual extraction of 7,600 tonnes of timber over a period of 8 years after completion of road.

3.0 Planning Authority Decision

3.1. Decision

- 3.1.1. Mayo County Council issued notification of decision to refuse permission for three reasons.
- 3.1.2. Under the first reason, it is stated that the proposal would result in a haphazard isolated development in a rural mountainous area, would result in development incapable of assimilating into this sensitive mountainous rural setting, and would have a serious detrimental impact on the character of the landscape. The proposal is also considered contrary to Objective LP-01 of the Development Plan.
- 3.1.3. The second reason states that the proposal would result in significant potential for sediment run-off and nutrient additions, both from construction and felling, having regard to the location of the site is proximity to the Owenbrin River, which requires significant protection in terms of water quality management.
- 3.1.4. The third reason refers to the Owenbrin River being a tributary into the Lough Carra/ Mask Complex SAC. Mayo County Council is not satisfied that the proposed development is not likely to have a significant effect, individually or in combination with other plans or projects, on the integrity and qualifying interests/ conservation objectives of this European Site.

3.2. Planning Authority Reports

3.2.1. Further information was sought from the applicant to include an archaeological assessment; a flood risk assessment; a felling licence application; proposals for water quality monitoring; an assessment on public water abstraction from Lough Mask; alternative access routes proposed and evaluated; details on type of water crossing proposed; details of mitigation for run-off; details of noise sources; incombination details with regard to felling, transportation and replanting; details on functioning of 'Siltbuster' system; NIS details relating to construction sequencing, site preparation in-stream details, best practice measures, presence of otter and

drainage; schedule of works operations; and temporary storage of excavated material from a geotechnical perspective.

- 3.2.2. Under the assessment of the application after submission of further information, the Case Planner determined that the key issues are the potential visual impact, the potential environmental impact and the potential European Habitats impact.
- 3.2.3. With respect to visual impact, it is noted that the site location is open, exposed and very visible from numerous locations in the surrounding area. This area is also defined as having a "highly scenic view" in the Development Plan, and the Landscape Appraisal Strategy highlights the visually significant nature of the site and immediate area. It is considered that the proposed development would be incapable of assimilating into this sensitive setting.
- 3.2.4. The Environment Section consider that the chosen option (preferred route of four) would require significant independent supervision of works to ensure there would be no impact on receiving waters. The Owenbrin River is classified as moderate and at risk and therefore requires significant protection.
- 3.2.5. A felling licence is being sought for 24.12 hectares of the 57.8 hectares on this site. However, it is noted that the maps with this application show access routes which are currently non-existent. The Environment Section sought clarification on the impact of road construction and the subsequent forest felling; however, the Case Planner states that clarification cannot be sought at this stage of the planning application. The Environment Section had also sought clarification on issues relating to Appropriate Assessment and the Construction Environmental Management Plan.
- 3.2.6. Having considered the information accompanying the planning application, together with internal reports, the Case Planner is satisfied that the proposed development would have significant negative impacts on visual, environmental amenities and European Habitats and refusal is therefore recommended.
- 3.2.7. The report received from the Environment, Climate Change and Agricultural Section also recognises the significant potential for sediment run-off and therefore stringent protection measures are required to ensure the protection of water quality.
- 3.2.8. Reports were received from the Environment Section and the Senior Archaeologist recommending further information. The Roads Design Section has no objections subject to conditions.

4.0 Planning History

Mayo County Council Ref: 17/19

- 4.1. It was decided by the Council that the construction of a forestry access road and associated entrance off an existing private road constitutes development and that such development is not exempted development.
- 4.2. In reaching its decision, the Council had particular regard to Section 4(4) of the Planning and Development Act, 2000 (as amended) and Articles 6 and 8(G) and Schedule 5, Part 2, Class 10 of the Planning and Development Regulations, 2001 (as amended).

5.0 Policy Context

5.1. Mayo County Development Plan, 2014-2020

- 5.1.1. It is an objective of the Council (LP-01), "...through the Landscape Appraisal of County Mayo, to recognise and facilitate appropriate development in a manner that has regard to the character and sensitivity of the landscape and to ensure that development will not have a disproportionate effect on the existing or future character of a landscape in terms of location, design and visual prominence."
- 5.1.2. Under Objective LP-02, "...all proposed developments shall be considered in the context of the Landscape Appraisal of County Mayo with reference to the four Principal Policy Areas shown on Map 3A Landscape Protection Policy Areas and the Landscape Sensitivity Matrix (Figure 3), provided such policies do not conflict with any specific objectives of this Plan." The appeal site lies between Policy Area 3 (Uplands, Moors, Heath and Bog) and Policy Area 3A (Lakeland Sub-area). Within Policy Area 3 & 3A road projects are considered to have a low to medium landscape sensitivity.
- 5.1.3. Objective VP-01 seeks "...to ensure that development does not adversely interfere with views and prospects worthy of preservation and protection as outlined on Map 4, or on the views to and from places and features of natural beauty or interest (e.g. coastline, lakeshores, protected structures, important historic sites) when viewed from the public realm."

- 5.1.4. It is an objective of the Council (FY-01) "...to promote sustainable forestry development of appropriate scale in accordance with the Indicative Forest Strategy for Mayo or any amendment to it where it can be demonstrated that the development will not have significant adverse effects on the environment, including the integrity of the Natura 2000 network, residential amenity or visual amenity."
- 5.1.5. Under Objective FY-02, the Council will "...work in partnership with Coillte to identify opportunities for tourism and recreation facility development within commercially managed forests, where appropriate."

5.2. Natural Heritage Designations

- 5.2.1. The nearest European Sites to the proposed development are the Lough Carra/ Mask Complex SAC (site code: 001774), located approximately 2.43km to the southeast; the Mweelrea/Sheeffry/Erriff Complex SAC, which is approximately 1.75km to the north-west and the Lough Mask SPA, situated 2.74km to the south.
- 5.2.2. The site adjoins the Maumtrasna Mountain Complex Proposed Natural Heritage Area.

6.0 The Appeal

6.1. Grounds of Appeal

- 6.1.1. A first party appeal was submitted on behalf of the applicant. Appended to this submission is a letter from Coilte outlining its environmental commitment; a copy of the Department of Agriculture, Food and the Marine felling licence; and a technical note from Hydro Environmental Services regarding surface water quality and public health. The grounds of appeal and main points raised in the appeal are summarised as follows:
 - Works could be considered exempted development despite the fact that AA and EIA are required.
 - Where the road edge is adjacent to, or comes in immediate contact with the river edge, a gabion basket retaining wall structure is proposed. Gabion wall

and anti-scour protection measures are proposed where there is a risk of erosion of the proposed road from the river.

- Felling licence has since been granted by the Department of Agriculture, Food and the Marine and map has been updated with rights of way.
- CEMP includes comprehensive details in relation to supervision of works, including the provision of an Environmental Manager, and monitoring of turbidity levels in river before, during and post construction and during operational phase.
- Section 7.3.13 of the EIAR assesses the potential for impacts on groundwater supplies (springs and wells) - Any potential pathway for health effects from a drinking water perspective as a result of the proposed development does not exist.
- A full range of mitigation measures for protection of surface water quality is proposed in the EIAR with respect to best practice forestry guidance. Water control/ drainage measures are also proposed, including up-gradient interceptor drains, roadside collector drains and check dams.
- Do nothing scenario and absence of road to facilitate forestry management increases potential for wind throw in medium to long term where trees fall in high winds.
- Do nothing scenario would avoid the potential short term effects of silt and water quality issues that can be adequately mitigated – alternative unmitigated scenario is increased risk of contaminated run-off if wind-throw expands.
- Proposed development should proceed so intended forestry management is implemented and to prevent future long term impacts that might change the WFD status of the river or water quality changes in downstream designated sites.
- Council stated that copy of correspondence with IFI should be provided this information was neither requested or raised.
- Applicant can use fully fabricated gabion baskets filled with stone sourced off site rather than taken from site.

- Landscape context is in a deep valley flanked by mountains on three side and not a landscape of 'open and exposed mountainous nature'.
- Dramatic landform which encloses the valley prevents visibility until very close proximity to the development.
- Policy VP01 is taken to indicate that views are visible from publicly accessible locations, as opposed to private lands. A number of Highly Scenic Views on Map 4 of the Development Plan do not appear to be from public roads or the public realm.
- Only part of the development will be seen within the direction of the intended scenic view – there are also panoramic views of the valley, as well as views to the west to the ridge and to Binnaw and south over Lough Mask. Mapped view to the north is not a local road but a mountain track and visibility of the proposed development is extremely localised.
- There will be several glimpse views of the valley and conifer plantation along the Scenic Route but the majority of these will not have visibility of the proposed development.
- Proposed forestry access could potentially offer improved access to the valley as a recreational amenity.
- Lough Carra/ Mask Complex SAC is approximately 2.4km from the proposed works and over 4.2km downstream via the Owenbrin River.
- Protection of the river was one of the key considerations at design stage NIS describes in great detail the construction and operational measures that will be in place to avoid any significant effects.
- Route of river is so variable and deposition of large rocks so abundant that the use of some rocks to stabilise one of the banks is highly unlikely to result in significant effects on the hydromorphology spawning habitat within the river.
- Since the only identified pathway for effect is via surface water to downstream European sites, and the proposed development has been designed to avoid significant effects on any watercourse, the NIS concludes that there will be no residual effects on the conservation objectives of the European Sites if general and project specific effects are employed.

- No potential for cumulative effects on any European Site was identified felling and replanting operations were considered.
- If mitigation is sufficient, the value of ecological receptors is recognised and appropriate supervision is committed to, then there are no grounds to conclude that the proposed development would have significant negative effects on a European Site.
- 6.1.2. The main points raised in the technical note appended to the appeal are as follows:
 - Potential impact on private and public drinking water supplies was thoroughly assessed in the EIS/ EIAR Water Chapter and in response to the further information request.
 - Potential pathway for health effects from a drinking water perspective as a result of the proposed development does not exist.
 - A full range of mitigation measures for protection of surface water quality was proposed within the EIAR with respect to best practice forestry guidance.
 - Surface water control/ drainage measures will include interceptor drains 3m up-gradient of route corridor, road side collector drain upside of road, a downslope collector drain and check dams.
 - Independent supervision of works will be carried out and an Environmental Manager will be appointed independent of the main contractor.
 - 'Do nothing' scenario resulting in trees falling over in uncontrolled manner in high winds will lead to exposure of root plates and underlying soils, standing water in root bowls, blocking/ diversion of drainage channels and streams, impeding of vegetation colonisation, uncontrolled soil disturbance from rocking effect, difficulty in retrieving timber and uncontrolled silt and nutrient loss.
 - Thin peaty soils and increased frequency of severe winter storms will increase risk of wind throw.
 - If site becomes inaccessible due to wind throw, any potential fires could not be controlled easily.

- Unmitigated and unmanaged scenario will be increased risk of contaminated runoff if wind throw expands.
- Legacy decision to plant the forest needs to be addressed in terms of forestry management and to prevent long-term water impacts from occurring that could potentially affect and change the WFD status of the Owenbrin River and designated sites.

6.2. Planning Authority Response

6.2.1. The Planning Authority responded to the first party appeal with the following comments:

Reason 1

- Landscape is open and exposed, particularly from the public domain creation of a 2.4km access road, due to its scale and length, would interfere with the character of the landscape at this location.
- Map 4 distinguishes the scenic views listed in the landscape appraisal to scenic views and highly scenic views. Landscape Appraisal states that new development should only be considered where it can be demonstrated that it does not obstruct designated highly scenic vistas nor alters or degrades the character of the surrounding landscape.
- It is not the intention of the arrows representing the direction of the scenic view along the scenic route on Map 4 to depict the view at this exact location.
- Difficult to see how a 2.4km access road would have a positive amenity impact – could be considered that an access road of this scale would take from the recreational amenity value at this location.
- Objective LP-01 is not confined to views from public roads but on the landscape character of the area – development as proposed would interfere with the character of the landscape at this location which is considered necessary to preserve.

Reason 2

- Forestry plantation is in a mountainous and steeply sloping site in close proximity to the sensitive Owenbrin River and associated tributaries, a number of which flow through the plantation – proposal will require 3 no. watercourse crossings and 34 no. minor watercourse/ drain crossings.
- Decision to plant the forest in 1960 in this highly sensitive and unsuitable location with no suitable access was taken in the absence of current understanding of the potential impact of forestry on water quality, habitat and species. Under current guidelines, this forestry plantation would have been considered unsuitable.
- Felling licence was not in place at the time of the initial application to Mayo County Council. Felling licence was then granted for 24.12 hectares of the 57.60 hectare total planned extraction area – map submitted with felling licence application mistakenly showed the presence of forestry roads which are only rights of way.
- River Basin Management Plan for Ireland (2018-2021) outlines that the Department of Agriculture, Food and Marine recognises that inappropriately sited forests and poorly managed forest operations can negatively impact on water quality and of aquatic habitats and species, particularly in terms of sediments and species.
- Proposal will result in significant potential risk for sediment and nutrient run-off having regard to the extremely sloping nature of the site and proximity of Owenbrin River and tributaries.
- Access road should be considered in combination with the proposed clear felling operation and the potential for significant impact on water quality and on aquatic habitat and species.
- The Owenbrin waterbodies form part of the Lough Mask/ Carra Prioritised Areas for Action identified in the River Basis Management Plan. The two waterbodies are currently at 'moderate ecological status' and 'at risk' and clear felling of forestry and hydromorphological impacts of overgrazing are significant pressures in the Owenbrin waterbodies (EPA's WFD App).

- Bank erosion is also major source of sediment input in the Owenbrin River system – proposed bridge construction at the 'large stream' WC2 location and associated gabion and reno mattresses, where part of the road is proposed to be constructed on the actual braided river bed, have potential to result in significant change in hydromorphology and may result in increased sediment loss upstream and downstream.
- Increased sedimentation may result in failure to improve from moderate to good status under the WFD.
- Mayo County Council has identified that the proposed development has the potential to result in significant sediment run-off and nutrient additions, both from road construction and large-scale felling operations.

Reason 3

• No further comment except to reiterate Appropriate Assessment Report.

6.3. Observations

Tuar Mhic Éadaigh Coiste Pobal

- 6.3.1. The main points raised in this submission are as follows:
 - Project will be a great addition to the local community of Tourmakeady as a whole.
 - Coillte have gone above and beyond their responsibilities in accommodating the community and they have an excellent working relationship.
 - Proposal would gain vehicular access into Barnahowna, bringing about recreational benefits such as fishing, walking and cycling, as well as additional facilities for the aspiring Joyce Country and Western Lakes GeoPark.
 - Construction will improve site stability and help mitigate against the risk of landslides and siltation.
 - Proposal will allow access for emergency services such as ambulances and fire engines in the case of fires and rescues.

Department of Culture, Heritage and the Gaeltacht

- 6.3.2. The Department are of the view that the proposed development could:
 - Affect habitats listed in Annex I of the EU Habitats Directive that are qualifying interests/ features of the Lough Carra/ Mask Complex SAC.
 - Affect the habitat of Otter, which is listed in Annex II and IV of the EU Habitats Directive and is a qualifying interest/ feature of the Lough Carra/ Mask Complex SAC.
 - Affect the habitat of Slender Green Feather-moss, which is listed in Annex II
 of the EU Habitats Directive and is a qualifying interest/ feature of the Lough
 Carra/ Mask Complex SAC. The Owenbrin area of the SAC supports a
 population of this rare biophyte and is the only known lakeshore site for this
 species.
 - Affect wetlands and waterbirds, including Common Tern and Greenland white-fronted Goose, both of which are listed in Annex I of the EU Birds Directive and are special conservation interests for the Lough Mask SPA.
 - Affect habitat of aquatic species, including Atlantic Salmon, lamprey species, Brown Trout, Arctic Char and a rare shrimp – Lough Mask, including the Owenbrin River is a very important Brown Trout fishery. Owenbrin also known to support Atlantic Salmon and lamprey, which are listed in Annex II of EU Habitat Directive.
 - Affect peatland habitats, including blanket bog and health, which are listed in Annex I of the EU Habitats Directive.
- 6.3.3. It is stated that potential impacts could be caused by deterioration of water quality in the Owenbrin River and downstream in Lough Mask resulting in pollution from surface water run-off during site preparation and construction and post construction from the development; damage/ destruction to nearby habitat due to poor site management and inappropriate site preparation and construction techniques and from the footprint of the development; and disturbance to local wildlife, in particular Otter and avifauna.
- 6.3.4. It is noted that a detailed method statement and monitoring programme for works is not available and there is a significant gap in the EIS and NIS in relation to the

consideration of cumulative impacts associated with forest harvesting and management.

7.0 Assessment

- 7.1. In my opinion, the main issues to be addressed under this assessment are as follows:
 - Development principle;
 - Landscape and visual impact;
 - Impact on environment;
 - Environmental Impact Assessment; and
 - Appropriate Assessment.

7.2. **Development Principle**

- 7.2.1. Planning permission is sought for the development of a 2.4km long 3.8m wide forestry access road off an existing private road to allow for felling and removal of timber and replanting operations.
- 7.2.2. A felling licence has been granted for 24.14 hectares of forestry and the total site area is given as 57.6 hectares. I have measured from GIS mapping that the wider plantation is approximately 120 hectares from plan view. The plantation is on the steeply sloping side of the river valley where levels fall from approximately 300m OD down to 120m OD. The Owenbrin River flows south-eastwards down the river valley to Lough Mask, which is designated a SAC and SPA. The two Owenbrin waterbodies that form part of the Lough Mask/ Carra Prioritised Areas for Action identified in the River Basin Management Plan are currently at "moderate ecological status" and "at risk". Clear felling of forestry is identified as a significant pressure in these waterbodies.
- 7.2.3. The proposed felling and replanting of the forestry forms part of the rotation and normally a development such as this would be acceptable in principle. However, consideration should also be given to the appropriateness of this location for a forestry plantation by today's standards. The Planning Authority submitted in response to the first party appeal that the decision to plant the forest in 1960 in this

highly sensitive and unsuitable location without appropriate access was taken in the absence of current understanding of the potential impact of forestry on water quality, habitat and species.

- 7.2.4. The Department of Agriculture, Food and the Marine document "Land Types for Afforestation" (October 2017) sets out examples of unsuitable land for afforestation due to inhibiting site factors. This includes sites over 300m above sea level in the west of Ireland, sites that cannot be adequately drained, lands excluded for environmental reasons and sites where it is not possible or practical to access or construct forest roads to facilitate the movement of timber to a suitable public road network.
- 7.2.5. The area of the plantation for which the felling licence has been granted is below the 300m contour line. However, parts of the overall plantation continue up to heights of approximately 400m OD at a steeply sloping location. The proposed road will eventually be used to extract timber from the entire plantation at this location and in my opinion the cumulative impacts in this regard should be fully presented in the planning application and associated documentation. There is approximately 120 hectares of forestry at this location and a felling licence relates to a small proportion of the overall plantation. In my opinion, the reasons for felling and extracting timber apply to the entire plantation. I would therefore have difficulty in recommending that the proposal as presented is acceptable in principle in this instance.
- 7.2.6. Notwithstanding this, it is an objective (FY-01) of the current Mayo County Development Plan "...to promote sustainable forestry development of appropriate scale in accordance with the Indicative Forest Strategy for Mayo or any amendment to it where it can be demonstrated that the development will not have significant adverse effects on the environment, including the integrity of the Natura 2000 network, residential amenity or visual amenity." The visual and environmental impacts of the proposed development are assessed in further detail below.

7.3. Landscape and Visual Impact

7.3.1. It is considered under Mayo County Council's first reason for refusal that the proposed development would result in haphazard isolated development in a rural mountainous area that would have a serious impact on the character of the

landscape. The proposal is also considered to be contrary to Development Plan Objective LP-01 which seeks "...through the Landscape Appraisal of County Mayo, to recognise and facilitate appropriate development in a manner that has regard to the character and sensitivity of the landscape and to ensure that development will not have a disproportionate effect on the existing or future character of a landscape in terms of location, design and visual prominence." The reason for refusal also refers to the open and exposed nature of the receiving environment and its location in an area defined as having a "highly scenic view".

- 7.3.2. The Mayo Landscape Appraisal includes a number of landscape protection policy areas for the county. The road alignment lies between Policy Area 3 Upland, Moors, Heath or Bog and Policy Area 3A Lakeland Sub-area. The "development impact land sensitivity" matrix set out in the Development Plan for development types in different policy areas shows that road projects have a medium to low potential to create adverse impacts on the existing landscape character. Under a "medium" scenario road projects are considered likely to be clearly discernible and distinctive; however, with careful siting and design, the significance and extent of impacts can be minimised to an acceptable level.
- 7.3.3. Objective VP1 seeks "...to ensure that development does not adversely interfere with views and prospects worthy of preservation and protection as outlined on Map 4, or on the views to and from places and features of natural beauty or interest (e.g. coastline, lakeshores, protected structures, important historic sites) when viewed from the public realm."
- 7.3.4. I would be satisfied that the proposed road along the valley floor will not be visible from nearby scenic routes, scenic views and highly scenic views. The applicant has adequately demonstrated within the Landscape and Visual assessment within the EIS/ EIAR and appeal submission that views of the proposed development will be extremely localised and longer distance views from the nearest scenic route and highly scenic views will be interrupted by intervening topography and vegetation.
- 7.3.5. Notwithstanding this, the appeal submission suggests that the proposed development will have an intrusive impact on the designated viewing point into the valley from north of the site, which would appear to be situated on a track accessing

the Partry Mountains. The EIS/ EIAR also shows that the proposed road will be clearly visible along a gravel roadway on the opposite side of the valley.

7.3.6. I would therefore be of the opinion that the proposed development would adversely interfere with the viewing point as outlined on Map 4 of the Development Plan as being worthy of preservation and protection, notwithstanding that this point does not appear to be on publicly owned land. It should be noted that the Planning Authority stated in its response to the first party appeal that Objective LP-01 is not confined to views from public roads but on the landscape character of the area. I would be in agreement that the development as proposed would interfere with the character of the landscape at this location which is considered necessary to preserve.

7.4. Impact on the Environment

- 7.4.1. Mayo County Council states under its second reason for refusal that the proposed development would result in significant potential for sediment run-off and nutrient additions from both construction impacts and subsequent felling operations. The location of the Owenbrin River is noted and the fact that it requires significant protection in terms of water quality management.
- 7.4.2. The third reason for refusal also refers to the Owenbrin River being a tributary into Lough Carra/ Mask Complex SAC. Mayo County Council is not satisfied, based on the Natura Impact Statement and Environmental Management Plan submitted with the application, that the proposed project is not likely to have a significant effect, individually or in combination with other plans or projects, on the integrity and qualifying interests/ conservation objectives of the European Site.
- 7.4.3. The main argument put forward by the project hydrologists in response to these reasons for refusal is that the "do nothing" scenario is the primary driver for the proposal in the first instance. It is submitted that if the trees are left standing and unattended, the potential for windthrow increases significantly in the medium to long term. In this regard, trees falling in an uncontrolled manner may lead to exposure of root plates and underlying soils; standing water in root bowls; localised impacts on hydrology through blocking and/ or diversion of drainage channels and streams; fallen trees impeding vegetation colonisation; rocking effect of trees left standing

leading to soil disturbance; difficulties in removing timber; and uncontrolled site and nutrient loss.

- 7.4.4. The appellant contends that a "do nothing" scenario would avoid the potential short-term effect of silt and water quality issues caused by roading and future thinning/harvesting operations but that the alternative unmitigated and unmanaged scenario will be an increased risk of contaminated run-off if windthrow expands. It is also noted that the top height of the trees, the thin peaty soils and climate change predictions make the site more susceptible to windthrow.
- 7.4.5. In my opinion, the main issue in terms of the assessment of the environmental impacts of the proposed development is that there would appear to be a deficiency within planning application documentation regarding the impact of the proposed felling and replanting operations that the proposed road will facilitate. I do not consider that it is appropriate to assess the impact of the road construction on the adjoining river in isolation without assessing the impact of felling/ replanting operations, particularly when clear felling of forestry is identified as a significant pressure on the status of the Owenbrin Waterbodies. It should be noted again that a felling licence has been granted for 24.14 hectares when the entire plantation measures approximately 120 hectares.
- 7.4.6. I accept that there is need to manage this legacy plantation to avert the long-term deterioration of the forestry. However, as noted above this location may be unsuitable for the plantation of forestry by today's standards owing to access, drainage and site topography. It is also recognised in Department of Agriculture, Food and the Marine document "Environmental Requirements for Afforestation" (December 2016) that *"of particular concern are peat soils, steep slopes capable of generating higher water velocities, and old land drains and other possible pathways that may become reactivated. Also of particular concern is the capacity of the new drainage network to withstand high rainfall events, without the failure of sediment traps and water setbacks."*
- 7.4.7. In my opinion, it is all the more important that detailed proposals for the management of the entire forestry plantation are also presented as part of this planning application. There may be ways of cutting and extracting timber that will minimise the potential impact on drainage systems. There may also be certain methods of

felling trees to minimise the possibility of windthrow. The reasons for excluding aerial felling should be explained as part of a comprehensive harvesting plan.

- 7.4.8. The plantation may need to be brought up to current standards before harvesting in terms of drainage. Furthermore, it is unclear if recommended water set backs have been adhered to. It would appear that the plantation continues up to the banks of the Owenbrin River in places without any buffer of natural ground vegetation to protect the river from possible sediment and nutrient run-off throughout the forestry rotation. Greater set backs are required for steeper slopes leading to the river, for peaty soils and within the catchment of high status objective waterbodies. The Forestry and Water Quality Guidelines recommend that roads should be located at least 50m from an aquatic zone, where possible. The proposed road is for the most part is less than or around 50m from the Owenbrin River.
- 7.4.9. The cumulative effect of the proposed development with felling and replanting operations set out within the reasoned conclusion of the EIA below is that it has not been demonstrated that the mitigation measures with respect to drainage are adequate to address both the road construction itself and the potential risk of sedimentation and nutrient run-off throughout the forestry rotation. Furthermore, the Stage II Appropriate Assessment concludes that there is an absence of information pertaining to the impact of the forestry operations on European Sites in-combination with the construction of proposed road, and having regard to the key factors to be considered when assessing the potential for risk of sedimentation and nutrient run-off entering into receiving waters, as set out in The Department of Agriculture, Food and the Marine document "Environmental Requirements for Afforestation" (Dec. 2016).
- 7.4.10. In view of the above, I would be in agreement with the Planning Authority that the proposed development would result in significant potential for sediment run-off and nutrient additions during construction and operational phases of the development and associated forestry plantation. The environmental impact of the proposal is assessed in more detail under the EIA and Stage II Appropriate Assessment below.

8.0 Environmental Impact Assessment

8.1. Introduction

- 8.1.1. The planning application and EIS/ EIAR was received by Mayo County Council on 4th July 2017, which is after the date for transposition of Directive 2014/52/EU amending Directive 2011/92/EU (16th May 2017). Having regard to the content of Circular Letter 1/2017 regarding the implementation of the 2014 Directive by competent authorities, it is considered that the provisions of the Directive 2014/52/EU are applicable in the assessment of the scope and content of the submitted EIS/ EIAR.
- 8.1.2. The application falls under Item 10dd of Part 2 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended) as a development for the purposes of Part 10, i.e. "all private roads which would exceed 2000 metres in length".
- 8.1.3. An examination has been carried out of the information presented by the applicant, including the EIS/ EIAR, and the submissions made during the course of the appeal. A summary of the results of the submissions by the planning authority, prescribed bodies, appellants and observers has been set out at Section 6 of this report. The main issues raised specific to EIA can be summarised as follows:
 - The effect on the Owenbrin River in terms of the potential for release of suspended solids to surface waters;
 - The effects on water quality and biodiversity when considered cumulatively with felling operations;
 - Adverse visual impacts on Scenic Views; and
 - Positive impact in terms of improved recreational access to the valley.
- 8.1.4. These issues are addressed below under the relevant headings, and as appropriate in the reasoned conclusion and recommendation. I am satisfied that the EIS/ EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIS/ EIAR and supplementary information provided by the developer, adequately identifies and describes the direct, indirect and cumulative effects of the proposed development on the environment and complies with article 94 of the Planning and Development Regulations 2000, as amended.

8.2. Reasonable Alternatives

- 8.2.1. The EIAR must include a description of the reasonable alternatives studied by the developer, which are relevant to the project and its specific characteristics, as well as an indication of the main reasons for the option chosen, taking into account the effects of the project on the environment.
- 8.2.2. An overview of the alternative sites, designs and processes for the project are provided in Section 2.4 of the EIS/ EIAR. The "do nothing" scenario is considered, along with alternative means to access the plantation, alternative road routes, alternative road surface and materials and alternative construction methods.
- 8.2.3. It is stated that it will not be possible to manage the existing forestry plantation under a "do nothing" scenario and this will lead to the continued potential for trees to be uprooted in poor weather and for the forestry to degrade through wind-throw, thereby causing a potential increase in sediment release downstream.
- 8.2.4. Aerial felling of the forest is not considered practical and alternative road access would have to take place at higher elevations or would require additional watercourse crossing points. Alternative less permeable surface materials have the potential to increase the pace of run-off and alternative construction methodology would require import of stone, increased traffic volumes, more in-stream works and the use of ready mixed concrete for retaining walls within/ adjacent to the watercourse.
- 8.2.5. Further information was sought from the applicant to include additional mapping or alternative access route options and detail in relation to the criteria and scoring system by which the options were evaluated.
- 8.2.6. In general, all reasonable alternatives that are relevant to the project and its specific characteristics are clearly presented in the EIS/ EIAR. The main reasons for the chosen site and the development of the design process are set out, together with the background for the chosen option. I would be satisfied, therefore, that this section of the EIS/ EIAR is sufficient to comply with the provisions of Paragraph 1(d) of Schedule 6 of the Planning and Development Regulations, 2001 (as amended).

8.3. Land Take

8.3.1. The proposed development will occupy an area of approximately 6.2 hectares comprising a 2.4km strip of land. The site currently comprises improved agricultural grassland, wet grassland, dense bracken, scrub, exposed siliceous rock and conifer plantation. The existing agricultural and forestry land uses will be altered to road corridor and the existing adjoining uses will continue to co-exist with the proposed road.

8.4. Assessment of the potential direct and indirect effects of the project

8.4.1. This section of the EIA **identifies**, **describes and assesses** the potential direct and indirect effects of the project under each of the individual factors of the environment (population and human health; biodiversity; land, soil, water, air and climate; material assets, cultural heritage and the landscape; and the interactions between these factors). In addition to these individual factors, the interrelationship between the factors are identified, described and assessed to reach a stated conclusion in respect of the significant effects.

Population and Human Health

- 8.4.2. Chapter 4 of the EIS/ EIAR describes the general characteristics of human activity in the study area, the likely significant effects of the project on population and human health, appropriate mitigation measures and residual and cumulative impacts.
- 8.4.3. The EIS/ EIAR sets out details relating to the receiving environment including the resident population in the area and other demographic and employment details. Land use and tourism information is also included.
- 8.4.4. There are a number of one-off residential and agricultural developments in the vicinity of the site with the nearest dwelling located at a distance of approximately 140m. The site is within the Baile an Chalaidh DED, which recorded a population of 226 over an area of 33.49 square kilometres in the 2011 census, representing a decrease of 13.4% since 2006. The population density at 6.7 persons per square kilometre is significantly lower than the national average of 65.4 persons per square kilometre. The highest employment in the area was from the farmer socio-economic group.

Characteristics of the Proposed Development

8.4.5. It is estimated that the proposed road construction will take approximately 18 months including an 8 month settlement period. A temporary construction compound will be provided with site welfare facilities. An average of 7,600 tonnes of timber will be extracted from the plantation per annum.

Potential Impacts of the Proposed Development

- 8.4.6. There is potential for negative impacts on human health during the construction phase from emissions to air, land and water of hydro-carbons and from noise emissions. There is also potential for negative impacts on public and private water supplies.
- 8.4.7. There is potential for positive impacts during the construction phase arising from an increased demand for goods and services in the local area.
- 8.4.8. The operational phase of the development is likely to bring about tourism benefits in the form of improved access to scenic lands. This may be off-set by the adverse visual impact of the proposed road.
- 8.4.9. Employment benefits will occur through the creation of temporary jobs during the construction phase and full-time jobs during the operational phase of the proposed development.

Mitigation Measures

- 8.4.10. The following mitigation measures are proposed:
 - All staff to adhere "Guidelines on the Procurement, Design and Management Requirements of Safety, Health and Welfare at Work (Construction) Regulations, 2006".
 - Construction traffic speeds limited to 25kph.
 - Put in place a traffic management plan.
 - Adhere to best practice measures for noise control.
 - Sporadic wetting of loose stone.

Residual Impacts

8.4.11. The residual impacts of the proposed development during the construction phase following mitigation are likely to be short-term, slight and negative. There will be both long-term slight negative and positive impacts during the operational phase through cumulative visual and employment impacts.

Biodiversity

- 8.4.12. A desk study was carried out of information relating to the local ecological environment and habitat and flora surveys were conducted in August 2015 and May 2018. This included dusk and dawn bat activity surveys and daytime breeding bird activity surveys.
- 8.4.13. The subject site is not located within any designated site; however, potential pathways of connectivity have been identified via surface water networks to Lough Carra/ Mask Complex SAC (site code: 001774) and Lough Mask SPA (site code: 004062). The site is also adjoined by the Maumtrasna Mountain Complex pNHA (000735). The Owenbrin River is within the pNHA.
- 8.4.14. The site is within "Policy Area 3 Uplands, Moors, Health or Bog" within the Mayo County Development Plan, 2014-2020.
- 8.4.15. The desktop study recorded a number of bird species associated with coastal or lowland wetland habitat, included lakes and marshes. However, these habitats are not present on site. Merlin and other birds of prey utilise an extensive area and are not likely to be reliant on the small area of habitat that will be lost on site. Bird populations recorded within surveys can avail of suitable alternative habitat in the wider area. The Owenbrin River is a spawning area for brown trout.
- 8.4.16. Along the footprint of the proposed works, conifer plantation, improved agricultural grassland, wet grassland, dense bracken, scrub and exposed siliceous rock are present but are classified as species poor. Dry-humid acid grassland, upland eroding rivers, poor flushes and stonewalls are classified as local importance (higher value).

Characteristics of the Proposed Development

8.4.17. The proposed development will use cut and fill methodology to construct the 2.4km road at a running width of 3.8m comprising a permeable unbound hardcore stone surface.

- 8.4.18. The road edge will come into contact with the river edge in places and number of watercourse crossing points are proposed including three clear span structures and smaller culverts. Drainage proposals are intended to protect water quality in adjoining watercourses and downstream.
- 8.4.19. A felling licence has been granted for 24.14 hectares of the forestry. The total site area is given as 57.6 hectares and the wider plantation measures approximately 120 hectares from plan. The plantation is on the steeply sloping side of the river valley where levels fall from approximately 300m OD down to 120m OD.

Potential Impacts of the Proposed Development

- 8.4.20. During the construction phase there will be loss of locally important (lower and higher) value habitat along the footprint of the road. These habitats are not deemed to provide significant faunal habitat.
- 8.4.21. There will be temporary disturbance to a number of common bird species and other faunal species, including fox, pigmy shrew and otter. There are no suitable natural or artificial structures on site that may be used by roosting bats and the open nature of the site does not offer optimal foraging or commuting routes.
- 8.4.22. There is significant potential for release of suspended solids to surface waters due to earthworks, release of hydrocarbons, release of cement based products, and changes to surface watercourses and drainage patterns. The Owenbrin River provides habitat for aquatic species and there is potential for disturbance to this species.
- 8.4.23. During the operational period, it is stated in the EIS/ EIAR that no cumulative hydrological impacts are anticipated in respect of tree felling as the construction phase of the road will be completed. It is stated that drainage control measures along with best practice tree felling will ensure no significant hydrological impacts.
- 8.4.24. Notwithstanding this, it is concluded in the Stage 2 Appropriate Assessment below that there is an absence of information regarding the impact of forestry operations incombination with the construction of the proposed road. There is the potential risk of sedimentation and nutrient run-off entering into receiving waters during afforestation and throughout the remainder of rotation having regard to soil type, slope, available pathways for water, the erodibility of soil and subsoil, downstream SACs, and the status objective of the waterbody itself. It should be noted that the Owenbrin

waterbodies form part of the Lough Mask/ Carra Prioritised Areas for Action and are currently at 'moderate ecological status' and 'at risk', and clear felling of forestry and hydromorphological impacts of overgrazing are significant pressures.

Mitigation Measures

- 8.4.25. The following main mitigation measures are proposed:
 - Adherence to relevant fisheries, construction and water pollution guidelines.
 - Detailed method statement and monitoring programme to be prepared by contractor.
 - Measures including silt fencing and check dams/ silt traps to prevent the transportation of silt laden water or pollutants from entering the wider environments and downstream watercourses.
 - No large excavations and movement of soil/ subsoil or vegetation stripping if heavy rainfall is forecast.
 - In stream works in low water and surrounded by a solid barrier and outside of the salmon spawning period.
 - Pumping of clean water from works area and settlement of silt prior to draw down.
 - No works on foot or with the use of machines outside confines of designated works area.
 - Replacement of substrate to replicate pre-work conditions.
 - Refuelling within a double skinned fuel bowser.
 - No batching of wet cement and no washing of plant on site. Pour site to be maintained free of standing water.
 - All culverts sized to cope with minimum 100-year flood event and to adhere to best practice guidance.
 - Completion of works during daylight hours and no artificial lighting will be required.

Residual Impacts

8.4.26. It is considered that the identified impacts on biodiversity will not be avoided, managed and mitigated by the proposed measures contained within the EIS/ EIAR. The proposed development would therefore have unacceptable direct and indirect impacts on biodiversity when considered cumulatively with the felling operations that the proposed road is intended to serve. I am not satisfied that the proposed mitigation measures with respect to drainage are adequate to deal with both the road construction itself and the potential risk of sedimentation and nutrient run-off throughout the forestry rotation.

Land, Soils, Geology and Water

- 8.4.27. Chapter 6 of the EIS/ EIAR provides an assessment of the proposed road in terms of land, soils and geology. Water aspects (hydrology and hydrogeology) are covered in Chapter 7 and an assessment on air and climate, and noise and vibration is undertaken within Chapters 8 and 9 respectively.
- 8.4.28. The route of the proposed road commences towards the end of a public road that provides access to the valley and continues north-west, following a margin of rough scrubby ground for c. 1km and then onto the lower slopes of the steep sided valley. Ground levels slope in a south-westerly direction towards the Owenbrin River.
- 8.4.29. Trial holes confirmed that soils underlying the first kilometre comprise mainly of sand and gravel deposits and the remaining 1.4km is sandy with some clay, silt and cobbles. Groundwater inflows were recorded in two of the nine trial holes. Groundwater vulnerability underlying the proposed road is rated as extreme. The groundwater body has a good status and the Owenbrin surface water bodies have been assigned an overall moderate and at risk status.
- 8.4.30. The site is located in the Owenbrin River surface water catchment which drains into Lough Mask. Underlying bedrock is classified as a poor aquifer in terms of potential water supply.
- 8.4.31. The Owenbrin River is a braided channel with the south-eastern section underlain by fluvial glacial sands and gravels. High run-off rates are more likely on the northwestern section of the route due to slope and wetter ground conditions. Water

samples for various parameters were below the Freshwater Fish Directive for Salmonid and Cyprinid waters.

Characteristics of the Proposed Development

- 8.4.32. The proposed road construction will utilise cut and fill methodology with trial holes confirming the suitability of the material on site. The estimated volume of cut and fill material is 13,000 m³ and 11,500m³ respectively.
- 8.4.33. The south-eastern section of the proposed road runs close to the flood plain. Further upstream, several streams that rise upslope of the proposed route will be intercepted by the proposed road.
- 8.4.34. Due to the nature of the proposed development, impacts on groundwater are generally negligible with surface water being the main sensitive receptor.

Potential Impacts of the Proposed Development

- 8.4.35. There are potential impacts from soil, subsoil and bedrock excavation. However, this is an unavoidable part of the proposed development. Contamination by oil leakages and spillages and alteration of peat/ soil geochemistry, as well as erosion of exposed subsoils and peat during road construction work are also outlined as potential impacts.
- 8.4.36. The Owenbrin River and local tributaries being intercepted by the proposed road are very sensitive to potential contamination from earthworks resulting in suspended solids entrainment; potential release of hydrocarbons during construction and storage; release of cement based products; and changes to surface watercourses and drainage patterns. There is also potential impact on hydrologically connected designated sites.
- 8.4.37. Operational phase impacts may occur from road surface and development areas run-off to surface waters; access road erosion and scouring due to fluvial flooding; and increased flood risk as a result of the proposed road within the floodplain.
- 8.4.38. No impacts are anticipated on any wells within farmyards and dwellings owing to the setback of the proposed development of at least 100m and the shallow nature of proposed excavation works at this location.

Mitigation Measures

- 8.4.39. The following measures are proposed to mitigate against the impacts of the proposed road on land, soil, water, air and climate:
 - Erosion protection measures will be provided along the south-eastern section of the road adjoining the river.
 - Employment of best practice environmental measures for use and handling of oils, fuels, cement, etc. and to prevent erosion during the storage and movement of overburden.
 - Best practice adherence in terms of culvert design and construction.
 - No stripping of soil during extremely wet periods.
 - Use of silt fences, sand bags and straw bales across natural surface depressions/ channels that slope towards the watercourse.
 - Check dams/ silt traps every 20-30m in the down-gradient collector drain.
 - Reseeding of disturbed ground as soon as possible to prevent erosion.
 - Use of bog mats to support vehicles on soft ground.
 - Best practice surface water drainage controls to be put in place to ensure surface water run-off will be of a high quality.
 - Introduced drainage works to mimic the existing hydrological regime.

Residual Impacts

- 8.4.40. The EIS/ EIAR states that there will be no significant residual impacts on land, soils and geology from the proposed road during construction and operational phases. It is acknowledged that there will be negative, direct, slight and permanent impacts on oil, subsoil and bedrock during construction. The possibility of cumulative impacts is ruled out in the EIS/ EIAR by the fact that the access road will be completed before commencement of the proposed felling or timber extraction operations.
- 8.4.41. Notwithstanding this, I note that Mayo County Council is not satisfied that the identified impacts on land, soil, geology and water would be avoided, managed and mitigated by the measures that form part of the proposed scheme, the proposed

mitigation measures and through suitable conditions. Unacceptable and direct impact and therefore anticipated.

- 8.4.42. The Department of Culture, Heritage and the Gaeltacht also submitted that potential impacts could be caused by deterioration of water quality in the Owenbrin River and downstream in Lough Mask resulting in pollution from surface water run-off during site preparation and construction and post construction from the development. It is noted that a detailed method statement and monitoring programme for works is not available and there is a significant gap in the EIS and NIS in relation to the consideration of cumulative impacts associated with forest harvesting and management.
- 8.4.43. Having regard to the above, and to the conclusions of the Stage II Appropriate Assessment that there is an absence of information pertaining to the impact of the forestry operations on European Sites in-combination with the construction of proposed road, I am not satisfied that the proposed development will not have significant and direct environmental effects and the measures proposed will not fully mitigate against these effects.

Air & Climate and Noise & Vibration

- 8.4.44. Chapter 8 of the EIS/ EIAR addresses air and climate and Chapter 9 covers noise and vibration.
- 8.4.45. Air quality sampling was not deemed to be necessary in the preparation of the EIS/ EIAR having regard to the surrounding environment and the non-industrial nature of the proposed development.
- 8.4.46. There are three dwellings that are considered to be sensitive receptors for noise and vibration, the nearest of which is at a distance of 140m from the site. Ambient noise levels are low in this rural area.

Characteristics of the Proposed Development

- 8.4.47. The proposed road construction will take approximately 10 months with an additional 8 month settlement period. The major of impacts associated with air & climate and noise & vibration will therefore occur during the initial 10 month period.
- 8.4.48. The operational phase of the proposal will involve the use of the proposed road for removing felled timber from the forestry plantation.

Potential Impacts of the Proposed Development

- 8.4.49. During the construction phase, dust can be generated from on site activities including excavation, back filling and construction traffic movements. Dust emissions will be negligible given the small-scale and localised nature of the works.
- 8.4.50. There will be negative but imperceptible impacts on air quality arising from greenhouse gas emissions from construction and operational vehicles.
- 8.4.51. The total predicted noise levels for plant are predicted to be below the value of 65 dBL_{Aeq,1hr.} within 100m of the site.

Mitigation Measures

- 8.4.52. The following measures are proposed to mitigate against the impacts of the proposed road on air & climate and noise & vibration:
 - Regular inspection and cleaning of access roads, use of tarpaulin covered vehicles for transport of materials and dampening down of site.
 - Maintenance of construction vehicles in good working order.
 - Limiting hours during which site activities are likely to create high level of noise or vibration.
 - Establishing channels of communication and monitoring noise levels at sensitive locations.

Residual Impacts

8.4.53. Residual impacts with be negative and imperceptible.

Material Assets

- 8.4.54. Chapter 12 of the EIS/ EIAR assesses the likely significant effects of the proposed development on transportation infrastructure and other material assets including enhanced access to natural amenity.
- 8.4.55. The study years chosen for the assessment of traffic are 2018 and 2019-2026 during which tree felling and replanting may occur.

Characteristics of the Proposed Development

- 8.4.56. Construction materials will travel from the direction of Castlebar on the N84, along the R300 and onto the L5630 before accessing the un-named local road to the site.
 Potential Impacts of the Proposed Development
- 8.4.57. There will be 71 passenger car units (PCUs) per day on the surrounding road network on the 153 days per year during the construction phase when both materials and staff will be delivered/ access the site. This will give rise to increased PCUs of 6.7% on the R300 and 12.2% on the L5630 respectively. No deliveries will take place during the remaining 102 days of the construction phase. Traffic impacts during the construction phase are considered to be slight and temporary.
- 8.4.58. It is forecast that tree felling will generate an additional 125 PCUs on the surrounding road network, representing an 11% increase on the R300 and a 20% increase on the L5630. This will occur for 15 days per year over a 6-year period. Traffic impacts during the operational phase are also considered to be slight and temporary.
- 8.4.59. Coillte will adopt an open access policy to the forestry during the operational phase by allowing general public access for recreational purposes and to avail scenic views. In particular, access will be improved for angling. It is stated in the EIS/ EIAR that the proposed road will provide access to the forestry plantation that, if left unmanaged, has the potential to deteriorate and cause wind blown trees and debris enter the river causing sediment release and potentially blocking bridges and causing localised flooding issues.
- 8.4.60. The junction of the R300 and L5630 was assessed using junction simulation software and it was concluded that the additional traffic generated during construction and operational phases will have a minor effect.

Mitigation Measures

- 8.4.61. The following mitigation measures may be considered in terms of traffic and transport and other material assets for the proposed development:
 - Mini buses for transporting staff to and from the site to minimise traffic generation and parking demand on site.
 - Stop signs and markings in accordance with the Traffic Signs Manual.

- A layover area on the proposed road for vehicles accessing and leaving the site.
- Access to the forestry for the general public will be forbidden during the construction stage.

Residual Impacts

8.4.62. There will be a temporary slight negative impact in terms of construction and operational traffic on the surrounding road network as a result of the proposed development. A permanent slight positive impact will occur from the provision of improved access to the valley for recreational and amenity purposes.

Cultural Heritage and Landscape:

Landscape and Visual

- 8.4.63. Chapter 10 of the EIS/ EIAR assesses the landscape and visual impacts of the proposed development. Archaeology and cultural heritage are covered in Chapter 11.
- 8.4.64. Visibility mapping, viewpoints and photomontages are used to assess the visual impact of the proposed development having regard to landscape value, sensitivity, viewpoint value and visual receptor sensitivity. Nearby scenic routes and views are included in the study area, a number of which do not appear to be from public roads.

Characteristics of the Proposed Development

- 8.4.65. The proposed development is located along the floor of a valley surrounded by mountains on three sides with heights of over 500m and 600m. The proposed road will continue along the Owenbrin River on its northern side. Access to the site is via a local road that forks into two private cul de sacs. Levels at the proposed road will be between 80m at the south-east rising to 130m OD to the north-west.
- 8.4.66. It is stated in the EIS/ EIAR that the visibility of the proposed development is generally confined to the immediate vicinity; however, views may be possible from the valley sides and surrounding ridges and mountain tops.

Potential Impacts of the Proposed Development

- 8.4.67. Views towards the site are restricted by topography of the area and intervening vegetation. There are some glimpse views of the valley and forestry plantation from the Scenic Route to the south. Clear views of the proposed development are only likely from close proximity or the opposite side of the valley. The lower part of the road will also be visible from the proposed junction off the existing road. Hillwalkers in the area will have a clear view of the road from the valley slopes and surrounding peaks and ridges.
- 8.4.68. Three viewpoint/ viewshed reference points were chosen for assessment at the junction with the existing road (Viewpoint 1), along the road/ track on the opposite side of the river valley (Viewpoint 2) and on the private road to the east/ north-east of the proposed road (Viewpoint 3).
- 8.4.69. The EIS/ EIAR predicts the impact on Viewpoint 1 to be of medium magnitude in terms of change and the predicted visual impact to be long term slight to moderate negative.
- 8.4.70. Viewpoint 2 is considered in the EIS/ EIAR to be of high scenic quality and tranquillity with elements of wilderness and naturalness. The proposed road will be appear in most of the view towards the north, increasing in visibility as levels rise towards the plantation. This impact on this view is also considered to be medium magnitude in terms of change and of long term slight to moderate negative visual impact.
- 8.4.71. Viewpoint 3 appears at a lower elevation than the arrow indicating the location of the Scenic View in the Development Plan. The Scenic View appears on a track shown on OS mapping that would be used by hillwalkers climbing the Partry Mountains. The magnitude of change on the recorded viewpoint is considered in the EIS/ EIAR to be slight and the predicted visual impact is long term slight negative.
- 8.4.72. The EIS/ EIAR notes that the geometric forestry plantation itself represents a visual impact on the landscape. Tree felling to accommodate the proposed road will have a permanent slight negative impact. However, the assessment does not cover the visual impact of tree felling operations that will take place in the operational phase of the proposed development.

Mitigation Measures

- 8.4.73. The following measures are proposed to mitigate against the landscape and visual impacts of the proposed road:
 - Positioning of road to ensure impact on Owenbrin River is minimal.
 - Reuse of soil and overburden as part of the reinstatement along the road edge and general landscaping.
 - Road edges allowed to re-vegetate naturally where possible.
 - Landscape effects of the proposed road will be more pronounced at the construction phase.

Residual Impacts

- 8.4.74. The EIA carried out by the Planning Authority concludes that the proposed development fails to adequately prove that it will not have a negative visual impact. Mayo County Council is therefore not satisfied that the identified impacts would be avoided, managed or mitigated.
- 8.4.75. I would be in agreement with the first reason for refusal that the site lies in an exposed mountainous area and within a location defined as having a "highly scenic view" in the Development Plan. The EIS/ EIAR does not properly consider the impact of the nearest Scenic View to the north. The information and views submitted with the third party appeal gives an indication that the proposed development will have an intrusive visual impact on the Scenic View.
- 8.4.76. A positive impact will occur from the proposed road providing increased recreational access to the valley and a greater appreciation of its landscape and visual qualities.

Archaeology and Cultural Heritage

8.4.77. Chapter 11 of the EIS/ EIAR presents the results of an archaeological and cultural heritage impact assessment for the proposed development. Desk top research and a field inspection were carried out and it was discovered that there are no monuments in State ownership/ guardianship within 5km of the site. There is only one archaeological monument (Megalithic tomb – wedge tomb) located 1.26km south-east of the site. The nearest architecturally significant buildings are located

2.9km from the site. A number of probable clearance cairns and limekilns are identified along the proposed road alignment.

Characteristics of the Proposed Development

8.4.78. The proposed road will utilise cut and fill construction methods that will include excavation of the proposed road to design levels and transfer of materials to areas requiring fill. Concrete abutments will be required for the larger watercourse crossings. Culverts and land drainage are also proposed.

Potential Impacts of the Proposed Development

- 8.4.79. Ground works may negatively affect unknown sub-surface archaeological features along the road alignment.
- 8.4.80. There will be direct negative and permanent effects on stone walls along the road alignment thought to date from mid-19th to early 20th century.
- 8.4.81. The limekilns and clearance cairns will be impacted upon by the proposed development.
- 8.4.82. It is recommended in the EIS/EIAR that signage should be available in both Irish and English in view of the location of the site in a Gaeltacht.

Mitigation Measures

- 8.4.83. The following mitigation measures may be considered in terms of archaeology and cultural heritage for the proposed development:
 - Monitoring of ground works by an archaeologist, who shall, if necessary, liaise with the licencing authority.
 - Submission of report outlining results of monitoring should be submitted to the Local Authority and National Monuments Service.
 - Photography of stone walls in advance of removal and description included in monitoring report.
 - Protective buffer around one limekiln and monitoring of any potential subsurface finds at the levelled kiln. Photographic and descriptive record to be made of this feature.
 - Careful removal of any clearance cairns under supervision of archaeologist.

Residual Impacts

8.4.84. There are a number of items of local cultural heritage merit on site, none of which are subject to statutory protection. Mitigation measures are proposed to record/ avoid these features and monitoring will be undertaken by an archaeologist.

Environmental Interactions and Cumulative Impacts

- 8.4.85. Table 14.1 of the EIS/ EIAR provides a matrix of interactions between environmental factors during the construction and operational phases of the proposed development. Interactions are listed between human beings and hydrology & hydrogeology, air & climate, noise, landscape and material assets. The EIS/ EIAR also lists the potential interactions with other factors including flora & fauna, soils & geology and cultural heritage.
- 8.4.86. The only positive impact in terms of interactions is between landscape and human beings. All other identified interactions are deemed to have a negative impact. This includes potential water pollution to users of that water, inconvenience to road users and the removal of soils disturbing flora and fauna.
- 8.4.87. In my opinion, the removal of soils and the impact on water quality is the most significant interaction. This will also lead to significant interactive impacts on biodiversity. There will be cumulative impacts arising from these interactions when considered with the tree felling operations that the proposed development will facilitate. As noted above, the cumulative impacts have not been fully assessed in this regard.

8.5. Reasoned Conclusion

- 8.5.1. Having regard to the examination of environmental information contained above, and in particular to the EIS/ EIAR and supplementary information provided by the applicant, and the submissions from the prescribed body and other observer in the course of the application, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:
 - Adverse impact on Owenbrin River terms of the potential for release of suspended solids to surface waters from earthworks, release of hydrocarbons, release of cement based products, and changes to surface

watercourses and drainage patterns – mitigated through measures including silt fencing and check dams/ silt traps; avoidance of large excavation during heavy rainfall; and adherence to best practice in terms of in stream works, machinery cleaning and maintenance, refuelling and use of cement based products.

- Direct and indirect impacts on water quality and biodiversity when considered cumulatively with the felling operations that the proposed road is intended to serve – not demonstrated that mitigation measures with respect to drainage are adequate to address both the road construction itself and the potential risk of sedimentation and nutrient run-off throughout the forestry rotation.
- Adverse visual impacts on Scenic Views mitigated by the fact that the scenic view does not appear to be taken from the public road.
- A positive impact from the proposed road providing increased recreational access to the valley and a greater appreciation of its landscape and visual qualities.
- 8.5.2. There are currently no approved plans or projects in the vicinity of the proposed development that will give rise to significant cumulative effects. However, the proposed road development is intended to provide access for forestry felling and there are significant cumulative effects that have not been fully considered. These effects may occur individually on environmental factors as listed above or cumulatively with other environmental factors.
- 8.5.3. I cannot, therefore, be satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment.

9.0 Appropriate Assessment

9.1. The EU Habitats Directive (92/43/EEC) requires competent authorities to review planning applications and consents that have the potential to impact on European designated sites, i.e. Special Protection Areas (SPA's) and Special Areas of Conservation (SAC's). To assist this process, the applicant has prepared an Appropriate Assessment Screening Report and a Natura Impact Statement (NIS).

Stage 1: Screening

9.2. The first step of this stage is to identify all European sites which could potentially be affected using the Source-Pathway-Receptor model. Having regard to the nature and scale of the proposed development and the implications and receiving environment, it is reasonable in this instance to evaluate sites within a 15km radius for the purposes of identifying sites that could potentially be affected. These are summarised as follows:

European Site:	Site	Approximate	Direction
	Code:	distance from	from appeal
		appeal site	site
Lough Carra/ Mask Complex SAC	001774	2.43 km	South-east
Mweelrea/Sheeffry/Erriff Complex SAC	001932	1.75 km	North-west
Maumturk Mountains SAC	002008	13km	South-west
Brackloon Woods SAC	000471	14km	North
Ballymaglancy Cave, Cong SAC	000474	12.3km	South-east
Lough Corrib SAC	000297	9.8km	South
Lough Carra SPA	004051	13.8km	East
Lough Corrib SPA	004042	13km	South
Lough Mask SPA	004062	2.74km	South

9.3. Having regard to the nature and scale of the proposed development, impact pathways would be restricted to hydrological pathways and mobile species pathways. Using the source-pathway-receptor risk assessment principle, the Lough Carra/ Mask Complex SAC (site code: 001774) and the Lough Mask SPA (site code: 004062) cannot be reasonably ruled out in this case on the basis of objective scientific information. The Mweelrea/Sheeffry/Erriff Complex SAC is the closest European site to the appeal site; however, this designated site is located hydrologically upstream of the proposed development and predominately within a separate catchment. No source-pathway-receptor chain is therefore identified. The distance to all other European Sites is in excess of 5km. It can be reasonably concluded that the proposed development would not have a significant effect

individually or in combination with other plans or projects on European sites in excess of 5km from the site having regard to the conservation objectives for these European Sites, the nature of discharge from the development site, and the sourcepathway-receptor risk assessment principle.

9.4. I consider that likely significant effects, either individually or in combination with other plans or projects, on Lough Carra/ Mask Complex SAC (site code: 001774) and Lough Mask SPA (site code: 004062) cannot be reasonably ruled out in this case on the basis of objective scientific information. A Stage 2 Appropriate Assessment must be carried out to establish if the project will adversely affect the integrity of these European sites, either individually or in combination with other plans and projects, in view of the sites' conservation objectives. I agree that a Stage 2 Appropriate Assessment can be confined to the above sites and that the other European Sites within 15km of the site can be screened out having regard to the nature of the proposal and the distance of these European Sites from the appeal site.

Stage 2: Appropriate Assessment

- 9.5. The purpose of the Stage 2 Appropriate Assessment is to establish if the project will adversely affect the integrity of the European sites, either individually or in combination with other plans and projects, in view of the site's conservation objectives. The Stage 2 Appropriate Assessment should consider mitigation measures where appropriate, both those proposed by the applicant and those that may be considered necessary to be required by the Board.
- 9.6. Firstly, the conservation objectives shall be identified for the European Sites that could potentially be affected using the Source-Pathway-Receptor model. The Conservation Objectives and Qualifying Interests for both the Lough Carra/ Mask Complex SAC and Lough Mask SPA are set out in Sections 4.1 and 4.2 of the Natura Impact Statement. The Natura Impact Statement also includes an impact assessment for each of the qualifying interests.

Potential likely and significant effects

9.7. Table 4.1 of the Natura Impact Statement provides an assessment of the pathways for impacts on individual Qualifying Interests of the Lough Carra/ Mask Complex SAC. The QIs for which a potential pathway for significant effects as a result pollution of surface water from the proposed development are listed as follows:

- Oligotrophic waters containing very few minerals of sandy plains (3110)
- Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea (3130)
- Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.
- Otter Lutra Lutra (1355)
- 9.8. No potential for significant direct or indirect effects on the remaining habitat were identified due to the nature of the habitats or distance from the proposed works
- 9.9. Table 4.5 of the Natura Impact Statement provides an assessment of the pathways for impacts on individual Qualifying Interests of the Lough Mask Complex SPA. The QIs for which a potential pathway for significant effects as a result of deterioration of surface water quality from the construction of the proposed development are listed as follows:
 - Tufted Duck (Aythya fuligula) [A061]
 - Black-headed Gull (Chroicocephalus ridibundus) [A179]
 - Common Gull (Larus canus) [A182]
 - Lesser Black-backed Gull (Larus fuscus) [A183]
 - Common Tern (Sterna hirundo) [A193]
- 9.10. No potential for significant direct or indirect effects on Greenland White-fronted Goose were identified due to the nature of the habitats or distance from the proposed works. However, the NPWS are of the view that the proposed development could affect wetlands and waterbirds, including Common Tern and Greenland white-fronted Goose, both of which are listed in Annex I of the EU Birds Directive and are special conservation interests for the Lough Mask SPA.
- 9.11. There is potential for indirect effects on the Qualifying Interests (QIs) of the Lough Carra/ Mask Complex SAC and Lough Mask SPA through deterioration of surface water quality from pollution and sedimentation associated with the construction of the proposed forestry track over an 18 month period. Elements of the construction phase with the potential to give rise to effects on European sites include site preparation works, excavations to provide level roadway, instream works and bankside works. The proposed road construction will involve cut/ fill construction

methodology and 37 no. watercourse crossings, 3 of which will be clear span bridges.

9.12. During the operational phase, the Screening Report states that there is potential for effects on European sites from increased traffic in the area. There is also potential for significant effects from tree felling operations giving rise to sediment in the Owenbrin River from clear felling, drainage, and tree planting and establishment. It is confirmed in the Planning Authority's response to the first party appeal that *"the Owenbrin waterbodies form part of the Lough Mask/ Carra Prioritised Areas for Action identified in the River Basis Management Plan. The two waterbodies are currently at 'moderate ecological status' and 'at risk' and clear felling of forestry and hydromorphological impacts of overgrazing are significant pressures in the Owenbrin waterbodies (EPA's WFD App)."*

In combination effects

- 9.13. Section 5 of the NIS states that no planning applications in the vicinity of the appeal site were of a nature or scale that were likely to result in significant in-combination impacts with the proposed development.
- 9.14. The submission from the Department of Culture, Heritage and the Gaeltacht noted, however, that there is a significant gap in the NIS in relation to the consideration of cumulative impacts associated with forest harvesting and management.
- 9.15. The Environment Section of Mayo County Council stated that in-combination effects of felling (2019), transportation of timber and replanting operations (within 2 years of felling) have not been considered and clarification of further information in this regard was recommended.
- 9.16. The applicant has not provided any additional detail within the appeal submission to assess the in-combination effects of felling, transportation and replanting of the entire forestry plantation at this location. The proposed development will result in significant potential for sediment run-off and nutrient additions during the construction phase, and from felling operations during the operational phase. Furthermore, the felling licence granted for the site is only for 24.14 hectares and the total site area is given as 57.6 hectares. I also note from GIS mapping that the entire forestry plantation at this location measures approximately 120 hectares. The near

eastern section is approximately 66 hectares and there is a further 54 hectares to the west.

Mitigation Measures

9.17. Section 2 of the NIS describes the construction and operational measures that will be put in place to avoid significant effects on the Owenbrin River.

Construction phase:

- 9.18. A gabion basket retaining wall will be used where the proposed road edge comes into immediate contact with the river edge. Gabion baskets with anti scour protection measures will also be used where there is a risk of erosion of the proposed road from river water. Culverts are proposed to prevent the built up of surface water from higher ground on the upslope of the proposed road. A wrap around retaining wall system will be installed on both the upslope and downslope sides of the road at various locations.
- 9.19. Drainage proposals are designed to ensure protection of the watercourses within and surrounding the site and downstream catchments. No natural drainage routes will be altered and there will be no direct discharges to watercourses, with all drainage waters dispersed as overland flows or directly into artificial drainage ditches following installation of silt traps and check dams. Buffer zones will also be applied around natural drainage features wherever possible, and interceptor drains will be installed upgradient of works areas. Collector drains or drainage swales downgradient of the road will be used to intercept and collect run off from the construction areas and swales will be left in place to collect run-off during the operational phase of the proposed road. Check dams will also be left in place and these will require regular maintenance. A siltbuster will be available to filter any water pumped out of excavation areas.
- 9.20. In-stream works will take place over a dry period outside of salmon spawning. A solid barrier capable of withstanding rises in water levels and flow velocities will be constructed around a small works area. Clear water will be pumped from the works area after any suspended silt has been allowed to settle. Turbidity levels will be monitored downstream.
- 9.21. A total of 34 no. river crossing points are proposed. The three larger crossings will be constructed using concrete abutments and pre-cast spanning slabs. A concrete

deck will be poured over pre-cast concrete slabs spanning the river and this will be shuttered, sealed and water tested before commencement of concrete pouring. Mitigation measures are set out to prevent impacts caused by cement based products, including the use of ready mixed wet concrete and the prevention of washing out of any plant on site.

- 9.22. An environmental clerk of works or supervising hydrologist will respond to changing weather conditions and will stop all works in the event of a rise of siltation to watercourses. An inspection and maintenance plan for the on-site drainage system will be prepared before commencement of works. Weekly inspections during the construction phase will be reduced to monthly, bi-monthly and eventually quarterly during the operational phase.
- 9.23. A Construction and Environmental Management Plan has been prepared to accompany the planning application. This is a working document for precommencement, construction and operational phases of the proposal, incorporating mitigation principles to minimise the potential for environmental impact. On-site construction staff will be responsible for implementation of mitigation measures and this will be overseen by supervising hydrologists, environmental scientists, ecologists and design/ geotechnical engineers.
- 9.24. To avoid impacts caused by disturbance to fauna, all works will be conducted during daylight hours and no artificial lighting will be used during night time hours.

Operational phase

9.25. An annual average of 7,600 tonnes of timber will be extracted from the forestry after completion of the proposed road. The NIS states that no major works will be required during the operational phase other than general maintenance and upkeep of the access road and drainage infrastructure. It is also stated that there will be no cumulative impact between the construction of the road and the proposed felling and replanting operations.

Evaluation of potential effects taking account of mitigation

9.26. It is recognised by the Environment, Climate Change and Agriculture Section of Mayo County Council that while the mitigation measures for the proposed route may be sufficient, the proposed route, along an extremely sensitive site would require significant independent supervision of works to ensure that the development does not impact adversely on the quality of receiving waters.

- 9.27. The Department of Agriculture, Food and the Marine document "Environmental Requirements for Afforestation" (Dec. 2016) states that the key factors to be considered when assessing the potential risk of sedimentation and nutrient run-off entering into receiving waters during afforestation and throughout the remainder of rotation include soil type, slope, available pathways for water, the erodibility of soil and subsoil, downstream SACs, and the status objective of the waterbody itself. Particular regard is needed if the forestry is within the catchment area of a high status objective waterbody or a waterbody at risk of decline in status.
- 9.28. In my opinion, there is an absence of information pertaining to the impact of the forestry operations on European Sites in-combination with the construction of proposed road having regard to the above factors. I agree with the Department of Culture, Heritage and the Gaeltacht that there is a significant gap in the NIS in relation to the consideration of in-combination impacts associated with forest harvesting and management. The proposal will result in significant potential for sediment run-off and nutrient additions during the construction phase and from subsequent felling operations to river bodies that are currently at "moderate ecological status" and "at risk", and clear felling of forestry is a significant pressure.
- 9.29. On the basis of the information provided with the application and appeal, including the Natura Impact Statement, and in light of the assessment carried out above, I am not satisfied that the proposed development individually, or in combination with other plans or projects would not adversely affect the integrity of European sites No's. 001774 and 004062, in view of the sites' Conservation Objectives. In such circumstances the Board is precluded from granting approval/permission.

10.0 **Recommendation**

10.1. I recommend that planning permission should be refused for the reasons and considerations as set out below.

11.0 Reasons and Considerations

- 1. On the basis of the information provided with the application and the appeal, including the Natura Impact Statement, and having regard to the potential for incombination effects from sediment run-off and nutrient additions during the construction phase and from subsequent felling operations to the Owenbrin River, which has a hydrological pathway to the Lough Carra/ Mask Complex SAC (site code: 001774) and the Lough Mask SPA (site code: 004062, the Board is not satisfied that the proposed development either individually, or in combination with felling and replanting operations, would not adversely affect the integrity of these European Sites, in view of the sites' conservation objectives. In such circumstances, the Board is precluded from granting permission for the proposed development.
- 2. On the basis of the information contained in the planning application, the Environmental Impact Statement/ Environmental Impact Assessment Report (EIS/ EIAR), and the submissions on file, the Board is not satisfied that a full and adequate assessment of the potential impacts of the proposed development on the environment has been carried out and that the submitted EIS/ EIAR meets the requirements of Article 94 of the Planning and Development Regulations, 2001 (as amended). In particular, the potential adverse cumulative impacts from the proposed road construction and subsequent felling and replanting operations in terms of sediment run-off and nutrient additions to surface water, have not been adequately addressed in the EIS/ EIAR. In the absence of such a full and adequate assessment, it is not considered that it has been demonstrated that the proposed development would not have significant negative impacts on the environment. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.
- It is an objective the Mayo County Development Plan, 2014-2020 (VP-01) to ensure that development does not adversely interfere with views and prospects worthy of preservation and protection. This objective is considered reasonable. The proposed development, extending along the floor of a scenic valley, would appear as an intrusive feature from an elevated viewing point illustrated on Map 4 of the Development Plan as being worthy of preservation and protection. The

proposed development would interfere with the character of the scenic mountainous landscape and would, therefore, be contrary to the proper planning and sustainable development of the area.

Donal Donnelly Planning Inspector

9th May 2019