

KILFINNAN ROAD IMPROVEMENTS Environmental Impact Assessment Report Non-Technical Summary



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REPORT VERSIONS

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1 Introduction & Background

1.1 Overview

This document is the Non-Technical Summary (NTS) of the Environmental Impact Assessment (EIA) Report prepared to accompany an application for Planning Permission for the proposed Kilfinnan Road improvements (referred to as 'the Proposed Development').

The Site, which has a total area of approximately 43.15 ha starts at the A82 / Kilfinnan Road junction and ends at the South Laggan Forest gate. A Site Location Plan showing the proposed Site boundary is included as Figure 2.1 in Volume 2 (see Appendix A).

This document has been prepared by Stantec on behalf of Coire Glas Hydro Pumped Storage Limited (referred to as 'the Applicant'). It summarises the EIA Report in non-technical language and presents the EIA Report in an easily understood, concise format.

1.2 Terms and Definitions

For ease of reference, the following terms used throughout the EIA and NTS are defined:

- The Applicant Coire Glas Hydro Pumped Storage Limited;
- The proposed development Upgrading of Kilfinnan Road, including site clearance works, associated landscaping and infrastructure to facilitate temporary construction phase traffic access to the Coire Glas site, and permanent reinstatement as a single-track rural road following completion of the Coire Glas construction phase;
- The Site the circa 43.15 ha development site that is the subject of the full planning application and EIA, as described in Chapter 2 and detailed on Figure 2.1 - Site Location Plan;
- Operational Stage 1 operation of the upgraded two-way Kilfinnan Road for the duration of the construction of the Coire Glas scheme;
- Operational Stage 2 reinstatement of the adopted section of Kilfinnan Road to a single-track road with passing places, following completion of construction of the Coire Glas scheme, for permanent operation as the public road;
- The EIA Regulations The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended);
- EIA Scoping Report the EIA Scoping report in relation to the proposed Kilfinnan Road development submitted to The Highland Council (THC) in November 2022 (provided as Appendix 4.1); and,
- EIA Scoping Opinion Highland Council's Scoping Opinion on 18 January 2023 outlining the key issues considered relevant to the proposal and advising on the matters required to covered in the EIAR (provided as Appendix 1.4).

1.3 The EIA, EIAR and Related Documents

The EIA Report presents the findings of the EIA carried out for the Proposed Development, which has been undertaken in accordance with the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017. These are generally referred to throughout the submission as the TCPA EIA Regulations.

Running alongside the design process, the EIA has sought to:

- Identify the likely significant environmental effects of the Proposed Development;
- Identify opportunities for environmental enhancement and measures required to mitigate any potential significant adverse environmental effects that may occur; and



• Determine the potential residual environmental effects from the Proposed Development. Residual effects are those which remain after all proposed mitigation and enhancement measures have been taken into account.

The EIA Report is comprised of the following documents:

- Volume 1 EIA Report Main Text;
- **Volume 2** Figures and Technical Appendices; and,
- EIA Report Non-Technical Summary (this document).

In addition to the plans and drawings, the other documents submitted with this application include:

- ePlanning Application Forms and Landownership Certificate;
- Planning Statement inc. Sustainability Statement;
- Transport Assessment; and,
- Ecological Appraisal.

All of the documents provided as part of the planning application, including the EIA Report and accompanying information, can be viewed on Highland Council's website.

Hard copies of the EIAR report and non-technical summary are available free of charge by emailing coireglas@sse.com. Digital copies will also be available for download online at https://www.coireglas.com.



2 The Site and Surrounding Area

2.1 Main Development Site

The Site (Volume 2 - figure 2.1), which has a total area of approximately 43.15 ha starts at the A82 / Kilfinnan Road junction and ends at the South Laggan Forest gate.

Kilfinnan Road is typically a single-track road, approximately 3.5m wide x 4.6km in length with passing places at different locations. The road itself is low lying, cut into the slope of the hill to the north, and is undulating with grass verges along most of its route. At various points, the road abuts commercial forestry or other vegetation, property fences, and crosses over several watercourses.

Kilfinnan Road also forms part of the Great Glen Way, a national long-distance route used by walkers, cyclists, and horse riders. The section southeast of Laggan Locks also serves as the Caledonia Way or NCN78 Oban to Inverness route. It is operated and maintained by The Highland Council (THC) including the associated structures.

2.2 The Surrounding Area

The character of the surrounding land is rural in nature with a small number of residential dwellings, farm steadings and tourist accommodation located along it. There are several private properties along the boundary of Kilfinnan Road. The existing road is cut into the hill side to the north along the route.

The waterbody of Loch Lochy, together with the Caledonian Canal, are the most notable features in the immediate area. To the west is elevated hill land and forestry.

2.3 Environmental Characteristics and Designations

Relevant environmental characteristics and potentially sensitive receptors within the surrounding area are detailed within Chapters 5 - 9, as appropriate, and are illustrated on the figures which accompany those chapters.

The Site is situated within a wider area with notable environmental characteristics, including the Caledonian Canal, the Laggan Locks to Loch Oich Scheduled Monument, and wider Lochaber Geopark. The Geopark stretches from Rannoch Moor in the south to Glen Garry in the north, and from Loch Laggan in the east to the Small Isles of Eigg, Muck, Rum and Canna in the west and is recognised for its outstanding and unique geological heritage.

The Site also falls within the Loch Lochy and Loch Oich Special Landscape Area (SLA). the Great Glen Way, one of Scotland's Great Trails, follows the western shore of Loch Lochy.

The Site also sits entirely within the <u>Blar Na Leine</u> Inventory of Historic Battlefields designation. However, there are no cultural heritage designations present within the proposed site boundary.

Scottish Environment Protection Agency (SEPA) flood mapping confirms flood extents are typically confined to the watercourses and loch corridors. A slightly wider extent of flooding is noted near Ceann Loch situated at the northeast end of Loch Lochy

In addition to those which cover the Site, environmental assets and designations present within the surrounding area include:

- Multiple recreational routes passing through Gairlochy and along Loch Lochy, including Core Paths and the Great Glen Way National Trail.
- Listed Buildings:
 - Kilfinnan Burial Ground and McDonnell Mausoleum (Category: C);
 - Store, Caledonian Canal, Laggan Locks (Category: B);
 - Ivy Cottage, Caledonian Canal, Laggan Locks, Laggan (Category: C); and,
 - Glenjade Cottage, Caledonian Canal, Laggan Locks, Laggan (Category: C)



3 The Proposed Development

3.1 Introduction

This chapter provides an overview of the key characteristics of the proposed development during construction as well as Operational Stage 1 and 2. It explains how the design and layout has evolved in response to site constraints and feedback received through EIA Scoping and pre-application processes. The proposed site layout plans for Operational Stages 1 and 2 are shown on Figure 3.1 and 3.2 in Volume 2. Additional plans and drawings showing key aspects of the development are also provided within Volume 2.

This chapter also documents the 'alternatives' considered by the Applicant and provides an overview of the embedded mitigation which forms an inherent part of the scheme.

3.2 **Overview of Development**

The three discrete stages of the proposed development and its description of development are set out in Section 1.3 above.

The Operational Stage 1 road (drawing reference LH000012-COIG-SID-SD-0002-02 sheet 1 - 16) will support the HGVs and load combinations (in terms of dimensions, weight loading and turning radius / gradient capabilities) to travel safely along the route. Although Kilfinnan Road will be utilised for access to the lower works, it is anticipated the Caledonian Canal will also be used for larger loads unsuitable for road transport.

Thereafter, it is proposed that Operational Stage 2 be implemented (drawing ref LH000012-COIG-SID-SD-0002-03 sheet 1 - 16), becoming the public road in-perpetuity and serving as a continual operational route for the Coire Glas project.

The proposed development is outlined in detail under the relevant headings below.

3.3 Site Clearance

The site clearance related works includes the following:

- Tree felling: a number of trees will require to be felled within the areas of road and earthworks, as well as an area of plantation forestry west of Laggan Locks (Glengarry Lodges). Please note that where the removal of Junipers is required, these will be transplanted as outlined within the Ecological Appraisal;
- Dismantling of agricultural shed at North Laggan Farm. This will be stored and rebuilt elsewhere on a site to be determined (subject to a separate planning application, if required);
- Replacement of private water supply infrastructure;
- Removal and replacement of existing road surfaces and cattle grids;
- Removal and replacement of existing bridge structures and culverts;
- Removal and replacement of fencing, gates, and road signs; and,
- Dismantling and replacement of dry-stone dyke walls.

In relation to tree felling, there will be permanent removal of some coniferous commercial plantation woodland which amounts to approximately 3.1 ha. This woodland is identified by FLS for felling in the Glengarry Land Management Plan as part of standard forestry operations, regardless of the proposed Kilfinnan Road plans.

Limited tree felling is also required along Kilfinnan Road because of the proposed earthworks.

A tree survey and felling plan will be submitted prior to any tree felling activities where required. It is suggested that this is a pre commencement conditional requirement attached to the consent.

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A scheme of compensatory planting for the equivalent area of trees permanently removed as part of the Kilfinnan Rd planning application will be delivered within the local area as part of the compensatory planting for the Coire Glas scheme.

newables

3.4 Proposed Road Layout and Design (Operational Phase 1)

As per the 'National Roads Development Guide' (2014), the minimum surfaced road width required to facilitate two-way HGV movements is 6.3m. This is based on a HGV total width sizing of 3.0m (NRDG CL3.1.3).

The proposed upgrade shall follow the line of the existing road as much as practical, but in constrained areas realignment will be necessary.

The adopted road will be widened to 6.3 m and the unadopted section up to 10 m with verges between 0.5 and 1 m wide. Public access will be maintained throughout. The unadopted section of road width is proposed with additional earth works adjacent. Following further detailed design by the principal contractor, this width may decrease, and there may be the requirement for special geotechnical measures, which will be informed by further detailed ground investigation. The proposed design therefore assumes the worst-case scenario for the purpose of assessing potential impacts.

Widening of the junction with the A82 is required to achieve the required swept path for abnormal load deliveries. The area immediately north of the junction will also require some modification for this to be achieved and to ensure the adjacent residential properties are not affected by any abnormal load movements.

Public access will be maintained during this stage, with a temporary active travel route from South Laggan Forest to Kilfinnan Burn, where the route will tie into the existing Kilfinnan Road with segregated access to the junction at Laggan Locks where users can choose to either continue along Kilfinnan Road or turn off to follow the route along the Caledonian Canal using the routes available as at present, the indicative routeing is illustrated in Figure 3.1. The proposed arrangements in this respect will be outlined within an Access Management Plan.

A section of the existing Kilfinnan Road forms part of the Great Glen Way / Caledonian NCN78 as previously outlined. Access to the Great Glen Way / Caledonia Way (NCN78) will be maintained on the existing road alignment to ensure access is always maintained, and to segregate its users from construction traffic. Access to the hill route to Ben Tee, Coire Buidhe will be maintained throughout the project.

3.5 Watercourse Crossings

A new bridge across the Kilfinnan Burn is proposed, designed to current standards.

Two additional minor bridging structures are also proposed and will be designed to current standards. Please see figures 7.1 a - d for further information in relation to the existing and proposed watercourse crossings.

3.6 **Temporary Diversions Road**

During construction of Kilfinnan Road, an offline sealed-surface (tarmac) temporary diversion road is proposed for use by the public and construction vehicles, including for access to the Coire Glas scheme site, for part of the Kilfinnan Road.

The temporary diversion road is proposed to begin immediately southwest of the residential properties adjacent to the A82 junction at the northern extent of the Site boundary. It will run through the fields to the east of the existing road, avoiding residential properties and proposed site compounds to the west. Culverted crossings of the Cruinneachaidh and Oighre Burns will be installed to current standards. The road will tie-in immediately north of the residential property known as Stoneyfield, and from this point access will be maintained within the envelope of the existing road, where there is sufficient width for works in this location to take place offline.



There are currently 10 junctions from Kilfinnan Road that provide access to private properties, as well as various additional field accesses, which will be retained from the temporary diversion road, where required.

Following the construction of Kilfinnan Road for Operational Stage 1, the temporary diversion road will be removed and the land reinstated. Construction duration is estimated at approximately 18 months, although this timescale is dependent on the delivery programme that will be developed by the appointed contractor.

3.7 Landscaping

Given that the construction phase road is temporary in nature, no formal landscaping works are proposed. The permanent road landscaping measures will involve the provision of grassed verges, and slopes, complemented by planting, where appropriate. An Outline Landscaping Plan (figure 3.4) indicates areas for proposed landscaping, details of which will be prepared by the consultant appointed to design and build the road. It is proposed that further landscaping details be secured through appropriate conditions to the consent.

3.8 Utilities and Services

Subject to agreement with utility providers and the roads authority, new and existing utility infrastructure will be incorporated within the road. Most of this infrastructure will be buried within the road and its verges, although where existing, relocation of overhead lines may be required.

The proposal will involve construction works where water collection systems and pipework for several private water supplies are located. To mitigate disruption to water supplies, the Applicant is considering the following two options:

- Option 1 Maintain the existing stream fed supplies using existing or new stream fed supply infrastructure and pipework; and,
- Option 2 Provision of new water well boreholes.

Confirmation of the preferred mitigation measure will be subject to agreement with land and property owners. As an absolute minimum, existing stream fed supplies shall be maintained as per option 1.

3.9 Drainage

It is proposed to adopt Sustainable Drainage Systems (SuDS) as part of the proposed development. SuDS techniques aim to mimic pre-development runoff conditions and balance or throttle flows to the rate of runoff that might have been experienced prior to development. The principles and size(s) of the attenuation measures provided onsite will be agreed with THC as detailed designs are prepared through the Road Construction Consent process. Good practice in relation to the management of surface water runoff rates and volumes will include the following:

- Drainage systems will be designed to ensure that any sediment, pollutants or foreign materials which may cause blockages are removed before water is discharged into a watercourse;
- Onsite drainage will be subject to routine checks to ensure that there is no build-up of sediment or foreign materials which may reduce the efficiency of the original drainage design causing localised flooding;
- Appropriate drainage will attenuate runoff rates and reduce runoff volumes to ensure minimal effect upon flood risk; and,
- Where necessary, check dams will be used to prevent trenches developing into preferential flow pathways.



3.10 Operational Stage 2

Following completion of Operational Stage 1, the surfaced road width will be reduced, given that it will no longer be required to facilitate the Coire Glas scheme's construction traffic.

This final state of the road will be constructed in the corridor formed to accommodate Operational Stage 1. The final road will be designed to THC Standards, in consultation with the Transport Planning Service through the Road Construction Consent Process and will generally comprise a 3.3 m wide single-track rural road with minimum 2m wide verges. Passing places will be located at maximum spacings of 150m dependant on vertical and horizontal geometry requirements.

The permanent road will serve as a public road and operational work route for the Coire Glas project.

An active travel route has been proposed to be integrated into the permanent works of Kilfinnan Road, as agreed with THC and Sustrans and illustrated in Figure 3.2. These facilities aim to promote sustainable forms of travel in the region and to provide links between long distance walking paths and to serve communities in the area. The proposed active travel solution is a 2.5m-wide shared path segregated from the adjacent carriageway by a verge between Kilfinnan Farm and the junction to the existing single-track road leading to Laggan Locks.

3.11 Construction Programme and Management

Construction Programme

It is anticipated that construction of Operational Stage 1 will commence in early 2025, however this is based on the assumption of securing relevant consents for the works and discharging any precommencement conditions.

It is estimated that the temporary road will be in place for approximately 8 years (indicative) to facilitate the Coire Glas lower works construction phase. Following this, the permanent road will be constructed.

A high-level indicative construction programme for the construction of the Kilfinnan Road up to Operational Stage 1 is set out in the table below.

| Task | M 1 | M 2 | М 3 | M4 | М5 | M 6 | M 7 | M 8 | M 9 | M 10 | M 11 | M 12 | M 13 | M 14 | M 15 | M 16 | M 17 | M 18 |
|--|-----|-----|-----|----|----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| Site Set Up | | | | | | | | | | | | | | | | | | |
| Temporary By- Pass Road Construction | | | | | | | | | | | | | | | | | | |
| Kilfinnan Road Construction | | | | | | | | | | | | | | | | | | |
| Structures | | | | | | | | | | | | | | | | | | |
| Kilfinnan Road Surfacing | | | | | | | | | | | | | | | | | | |
| Temporary By- Pass Road Removal | | | | | | | | | | | | | | | | | | |
| Kilfinnan Road Finishing Works | | | | | | | | | | | | | | | | | | |

Table 3.1: Indicative Construction Programme

3.12 Materials and Natural Resource Usage

The construction of the Proposed Development will utilise land and construction materials (stone, asphalt, piping, etc). Soil (reused from onsite resources wherever practicable) and seeded grass or turf will also be used for landscaping purposes. Where possible, excavated material from the construction process will (depending on type) be used to backfill excavations and for site re-profiling purposes.

It is not expected that any material would be unsuitable for re-use in this way, though in the unlikely event that such material arises it would be disposed of off-site in line with relevant waste disposal regulations.

Circa 35,000 m³ of suitable fill material will be required to be imported into the Site to instate the proposed road levels.

A key aim of the project is to ensure that spoil generated from the works can be retained on site and reused for the construction of the Coire Glas scheme. It is currently estimated that, of the spoil generated from the road's construction, an excess of 50,000 cubic metres will be generated (i.e., will not be re-used in the road's construction). It is proposed that 10,000 cubic metres of this spoil will be used in the formation of the project's temporary site compounds, and that the remaining 40,000 cubic meters will be temporarily stored for 12 months (and likely reused in the Coire Glas scheme during this period) following completion of construction, in the area shown in Figure 3.1 (drawing ref LH000012-COIG-SID-SD-0002-02). This spoil will be formed into a 200m-long, 55mwide area level with Kilfinnan Road with a bund on top that will be no greater than 2m high, 40m wide and 200m long.

In line with the consent for the main Coire Glas works, it is expected that a Spoil Management Plan would be a conditional requirement attached to the consent, and any necessary further detail could be provided by the principal contractor appointed to develop the detailed design and construction programme for the project.

3.13 Expected Residues, Emissions and Waste

Construction waste is expected to include typical non-hazardous materials such as off-cuts of timber, bricks, wire, fibreglass, cleaning cloths, paper, materials and packaging. These will be sorted and recycled if possible or disposed of to an appropriately licensed landfill by the relevant contractor appointed (whether directly by the Applicant or a sub-contractor).

The site clearance works will also result in waste. This includes fence posts, concrete from the demolition of bridges and culverts, and existing pipe culverts.

Should contaminated material from remediation require to be exported off site, this will be undertaken in accordance with all relevant waste management legislation and policy.

3.14 Construction Management

As shown on plan reference LH000012-COIG-SID-SD-0002-02 (Site layout plan - Operation Stage 1), temporary construction compounds will be established within the Site for the duration of the construction phase. These areas are indicative and all of them may not be required, depending on land agreements and the construction methods prepared by the principal contractor for the works. The extent of these compounds is therefore a worst-case scenario (the exception to this is the Kilfinnan Farm Spoil Storage compound). Temporary compounds would generally include welfare facilities including toilets, a kitchen and a mess room; storage and laydown for material, spoil, equipment, plant and construction vehicles, mobile concrete batching plant, and areas for storage of materials including oils and fuel.

Areas of the compound which represent an increased pollution risk, e.g., oil or fuel storage and vehicle refuelling, would be bunded and drained into an isolated holding tank for treatment and disposal. Drainage would be directed to an oil interceptor to prevent pollution if any spillage occurred.

Appropriate flood, sedimentation and pollution risk management measures will be adopted, including appropriate materials handling measures and site management procedures.

More widely, a Construction Environmental Management Plan (CEMP) will be developed and submitted to Highland Council for approval (as the relevant Local Planning Authority) as a condition of permission. The CEMP will be updated as the development progresses and implemented throughout the construction phase.

Measures proposed to be incorporated into the CEMP are set out in Chapter 10 - Schedule of Mitigation and Monitoring.



During the construction phase, it is anticipated that the daily two-way flows on Kilfinnan Road will increase from 263 vehicles (Existing 2023 Traffic Flows) to 374 vehicles (Future Year Baseline Plus Peak Construction Traffic Flows), with the majority being of HGV type. Please see the Traffic and Transport Chapter for further information.

Appropriate Traffic Management measures will be agreed with THC as part of a Construction Traffic Management Plan.

3.15 Mitigation and Enhancement

Through the implementation of the design strategy, the Proposed Development incorporates several Embedded Mitigation measures and design principles designed to avoid, prevent, minimise and compensate for likely significant adverse environmental effects. Where potentially significant adverse effects were identified through the EIA process, the emerging design has been reviewed to consider if further mitigation can reasonably be incorporated into the design. Additional opportunities to address likely adverse environmental effects and to improve the environmental performance of the development have also been identified through the assessment process, referred to as Further Mitigation.

The embedded and further mitigation (and enhancement) measures are summarised in **Chapter 12 – Schedule of Mitigation Monitoring.** Along with the embedded mitigation, these measures are proposed to be secured by THC through suitably worded planning conditions attached to any forthcoming planning permission.

3.16 Consideration of Alternatives

The EIA Regulations require an EIA Report to include a description of the reasonable alternatives considered by the Applicant, indicating the main reasons for the choices made, including a comparison of the environmental effects. Only alternative options which have actually been studied by the Applicant and are considered to be "reasonable" are required to be described, rather than all potential alternatives to the development proposal.

The purpose of the proposed development is to provide construction phase related access to the lower works area of the approved Coire Glas Hydro Pumped Storage site. Kilfinnan Road is the only suitable road option in this respect, given that there are no other existing routes which could facilitate the necessary access. The principle of this approach is already established through the principal development consent. The proposed design has attempted to adhere to the consented alignment as far as possible.

However, during the consideration and evolution of the wider Coire Glas scheme design, consideration was given to creating an alternative access route, avoiding the requirement to upgrade Kilfinnan Road.

Options considered included new alignments above (to the northwest of) or below (towards the Caledonian Canal) Kilfinnan Road. These were discounted due to the steepness of the topography to the west of the existing road and the requirement for extensive ground stabilisation works as well as space limitations in land to the east of Kilfinnan Road.

Consideration was also given to providing access to the lower reservoir works from the south via the B8005 and utilising existing forestry tracks. This route was determined to be less favourable because of restrictions on the minor roads linking both the A82 at Spean Bridge and A830 at Banavie to the forestry entrance at Clunes. Both of these alternative routes would have required significantly greater works than the proposed access at North Laggan, and could have presented wider cumulative traffic impacts, given the timber transport routes in that part of the public road network.

In summary, the proposed scheme is considered to be the most suitable access route for the development and can accommodate the proposal without significant adverse environmental impacts. It represents a unique locational opportunity to accommodate the proposed access and the proposed layout is considered to present the best balance of development on this site.



4 Likely Significant Effects

4.1 Overview

This chapter summarises the main findings the detailed technical assessments provided in **Chapters 5 – 9** in **Volume 1 – Main Text** of the EIA Report. This chapter outlines the baseline conditions, proposed mitigation measures, and likely significant residual effects from the construction and operation of the proposed development.

4.2 Noise and Vibration

Chapter 5 of the EIA (Noise and Vibration) provides an assessment of the likely significant noise and vibration effects from the proposed development on the existing environment.

It was conoted within Section 6.7 of the Scoping Report that noise from road traffic using Kilfinnan Road had already been considered within the 2018 EIA for the Revised Coire Glas Pumped Storage Scheme. As no significant increase in road traffic flows beyond that which have already been considered is anticipated, an assessment of operational noise and vibration was Scoped Out.

Baseline Conditions

Existing noise levels in the area of the development have already been quantified as part of the noise study for the Coire Glas Pumped Storage Scheme EIA. Specifically, a baseline survey was undertaken in 2017 at five Noise Monitoring Locations (NMLs), four of which are considered suitable for use in the assessment of the Kilfinnan Road upgrade.

No additional monitoring was undertaken as the levels measured in 2017 are still considered appropriate for use in 2022, with no significant changes in the local noise environment.

Detailed information regarding the baseline survey can be found in Volume 2 Chapter 17 (Noise and Vibration) of the approved Coire Glas Pumped Storage Scheme.

Mitigation and Enhancement

Embedded

There is a commitment to develop and implement a comprehensive CEMP, including a Construction Traffic Management Plan (CTMP), Pollution Prevention Plan (PPP) and Controlled Activities Regulations (CAR) License(s). These documents will include best practice noise control measures designed to minimise noise effects throughout construction.

Further Mitigation and Enhancement

There are no specific requirements for mitigation to lessen noise levels during the daytime, as no significant effects are anticipated, however, any noise control measures adopted for evening or weekend periods would also be implemented during the daytime to further reduce noise levels and duration of exposure.

Section 8 of BS 5228-1 (Code of Practice for Noise and Vibration Control on Construction and Open Sites) recommends a number of simple control measures which will be adopted throughout the construction period. Furthermore, all mobile plant will be fitted with white noise reversing alarms (as opposed to tonal 'beeping' alarms) in accordance with a request from Highland Council within the Scoping Response,

Where access and space restrictions allow, temporary noise barriers will also be installed. The location of where barriers will be deployed will be detailed within the CEMP.

Residual Effects

Although a range of good practice measures will be employed during construction to minimise noise impacts, at some locations elements of construction noise will be audible at the closest NSRs for



certain periods during the construction phases. Nonetheless, no significant residual effects are anticipated.

4.3 Air Quality

Chapter 6 of the EIA provides an assessment of the likely significant effects from the Proposed Development on air quality. The aims of this chapter are to consider the potential effects, including cumulative effects, of the Proposed Development on air quality during the construction works associated with the proposed upgrades to Kilfinnan Road.

The effects from dust and vehicle emissions associated with the operational phase are considered unlikely to affect air quality and have been scoped out of the assessment.

Baseline Conditions

The nearest Air Quality Monitoring Area (AQMA) is located >50km north of the Proposed Development (Inverness City Centre AQMA). As such, with respect to air quality and human health, the surrounding locale is not believed to be sensitive.

THC operate three automatic monitors within their administrative area, all of which are located in Inverness approximately 35km from the Site. All of the relevant major air pollutants are well below the annual mean Air Quality Objectives (short and long-term concentration targets).

Mitigation and Enhancement

Embedded

The construction phase mitigation measures are listed below:

- Wheel wash located appropriately to prevent material being tracked onto public roads;
- Part of Kilfinnan Road closed for public access whilst upgrading works undertaken (temporary diversion road provided);
- Construction sequencing allows for works to be undertaken in discrete sections, minimising the potential for dust impacts;
- Existing road surface is hard paved;
- Excavated material would either be used onsite or as part of the spoil management programme for the consented Coire Glas scheme; and,
- Material cut from road construction would be used as general fill, eliminating the requirement to import additional fill.

Further Mitigation and Enhancement

The CEMP will specify conditions to limit fugitive dust emissions.

Kilfinnan Road Construction Phase Dust

Institute of Air Quality Management (IAQM) Guidance outlines several site-specific mitigation measures based on the assessed site risk. The measures are grouped into those which are highly recommended and those which are desirable, and cover the following topics:

- Communications;
- Earthworks;
- Monitoring;
- Operating Vehicle / Machinery and Sustainable Travel;
- Operations;
- Preparing and Maintaining the Site;
- Site Management;



- Trackout (The transport of dust and dirt from the construction/ demolition site onto the public road network, where it may be deposited and then re-suspended by vehicles using the network);
- Waste Management;
- Construction; and,
- Non-Road Mobile Machinery.

Residual Effects

Providing effective mitigation measures are implemented, residual effects are considered to be not significant. In addition, road traffic emissions associated with construction activities are considered to have an insignificant effect on both ecological and human factors. As such, residual effects from the construction phase of the Proposed Development are concluded to be not significant.

4.4 Geology, Hydrology and Hydrogeology

Chapter 7 of the EIA provides an assessment of the likely significant effects from the proposed development on hydrogeology, flood risk and drainage.

The Chapter outlines embedded good practice methods which have been incorporated in the design and used to prevent/reduce identified effects and risks. Further mitigation methods to assess potential effects are proposed, where appropriate, and residual effects are assessed.

Baseline Conditions

Soils and Geology

Soils beneath the proposed development generally comprise brown soils and mineral podzols. No peat deposits are shown within the site boundary or within the study area. An extract of the peatland classification dataset published by Scottish Natural Heritage (now NatureScot) shows the site lies within soils where peatland habitats are not typically found.

Hydrogeology

Local Hydrology - Numerous minor watercourses cross the site and drain into the lochs. The site lies within the Loch Ness Drinking Water Protected Area.

Flood Risk Assessment

The proposed development is not at risk from fluvial flooding subject to adaptation of good practice measures. Surface water is not considered a development constraint.

A review of the SEPA groundwater flood map shows that the site is not at risk from groundwater flooding.

The proposed development lies downstream of the proposed Coire Glas upper reservoir. This will be subject to routine inspection as required by the Reservoirs Act and regulated by a Controlled Activity Regulations authorisation, and therefore flood risk from this source is mitigated and not considered further in this assessment.

Mitigation and Enhancement

Kilfinnan Road Construction

Embedded

The following embedded measures are also applicable:

 Avoiding areas considered ecologically and hydrologically sensitive, other than where these are unavoidable, such as crossing of watercourses;



- The proposed development will be developed in accordance with good practice guidance, including UK and Scottish guidance on good practice for construction projects;
- Construction Environment Management Plan (CEMP) This document would detail how the Principal Contractor would manage the works in accordance with all commitments and mitigation detailed in the EIA Report;
- Environmental Clerk of Works To ensure all reasonable precautions are taken to avoid negative effects on the soils and water environment, a suitably qualified Environmental Clerk of Works (ECoW) will be appointed;
- Safeguarding of Soils The soil (topsoil and sub-soil) would be excavated from the footprint of permanent works during the construction phase, kept on site and used for landscaping the shoulders of the improved road;
- Pollution risk Good practice measures in relation to pollution prevention will be undertaken;
- Erosion and Sedimentation Good practice measures for the management of erosion and sedimentation will be undertaken;
- Flood Risk and Drainage It is proposed to adopt Sustainable Drainage Systems (SuDS) as part of the proposed development; and,
- Watercourse Crossings The new bridge over the Kilfinnan Burn has been designed to accommodate the 1 in 1000 flood event without overtopping. Good practice measures have also been taken in relation to the design of all other new water crossings.

Operational Phases

Further Mitigation and Enhancement

As there are no predicated significant effects under the terms of the EIA Regulations, other than the good practice measures that the applicant would implement as standard, no specific mitigation during operation is required.

Residual Effects

No significant residual effects on surface water or groundwater receptors including designated water dependent sites, Groundwater Dependent Terrestrial Ecosystems, Private Water Supply sources and Drinking Water Protected Areas, and flood risk and drainage are predicted during the construction and operation of the proposed development.

4.5 Landscape and Visual

Chapter 8 of the EIA Report discusses the Landscape and Visual Impact Assessment (LVIA) undertaken for the Proposed Development and identifies the likely significant effects from the Proposed Development on landscape and visual amenity.

The aims of this chapter are to establish likely significant effects to views obtained by those present and travelling through the area, landscape designations or otherwise protected landscapes and the wider landscape character of the study area.

Baseline Conditions

Landscape

The site is located within the Loch Lochy and Loch Oich Special Landscape Area (SLA), a nonstatutory designation by THC and given protection through the Local Development Plan and NPF4. The SLA covers the area of the Great Glen from around 1.5 km to the south of Loch Lochy to the head of Loch Oich, and the mountainous area to the west of Loch Lochy.

NatureScot has undertaken detailed review and classification of various landscape areas and types in their National Landscape Character Assessment. The following three individual Landscape



Character Types (LCTs) from this study are identified within the 2 km study area for the Proposed Development:

- LCT 235: Broad Forested Strath;
- LCT 236: Smooth Moorland Ridges; and,
- LCT 239: Interlocking Sweeping Peaks Lochaber.

As the LCTs from the National Landscape Character Assessment have been identified at a very broad scale, a more detailed classification of landscape character has been adopted for this LVIA which bears a closer relationship to the scale and character of the study area.

Visual

Zones of Theoretical Visibility (ZTV) indicate theoretical visibility of the Proposed Development would be relatively focussed, across parts of the glen floor, and opposite valley side. Whilst some visibility of traffic is suggested along Loch Oich and Loch Lochy, when considering the scale of the features proposed, it is unlikely that this would be very noticeable.

The separate ZTVs for Operational Stage 1 and Operational Stage 2 indicate that there would be little difference in overall visibility between the two stages, but typically less extent of the route is shown as theoretically visible during operational Stage 2 when smaller vehicles are considered. This also suggests that during Operational Stage 1, it would be only higher parts of vehicles which would be seen using the additional sections of the route theoretically visible.

It should also be noted that vehicles would be substantially less frequent during Operational Stage 2 which would also reduce visibility as the potential to see vehicles using different parts of the road at the same time would be reduced.

Visual Receptors

Visual receptors within the study area comprise residents and or others present in and around buildings and settlement areas, including tourists, those using routes (including transport and recreational routes) through the study area, and those obtaining views from outdoor locations where enjoyment of the view is one of the principal reasons for being at the location.

Visual receptor buildings within the study area can be broadly grouped into four different area as follows:

- Properties around the shore of Loch Lochy, including Laggan Locks and Kilfinnan;
- Properties along the existing Kilfinnan Road, including North Laggan and Balmaglaster;
- Properties around the shore of Loch Oich including the Great Glen Water Park; and,
- Properties alongside the A82, between Loch Oich and Loch Lochy.

Potential route-based visual receptors within the study area include those using public roads, recreational users of paths and tracks and boat users on Loch Lochy, Loch Oich and the Caledonian Canal. The following routes within the study area have been included in the LVIA:

- Public Roads:
 - Route R1: A82; and,
 - Route R2: Kilfinnan Road.
- Recreational Routes:
 - Route R3: Caledonian Canal;
 - Route R4: Great Glen Way and Cycle Route;
 - Route R5: Walking route from Kilfinnan to Ben Tee; and,
 - Route R6: Core Path LO11.04 (Great Glen Way Alternative Route).

Please see EIA Chapter 8 for further information.



Mitigation and Enhancement

Kilfinnan Road Construction and Operational Stage 2

Given the temporary nature of effects relating to construction of both the road, and Coire Glas Pumped Storage scheme, no specific mitigation has been identified.

However, where visual receptor locations are close to construction works or construction traffic, there may be opportunities to install temporary fencing to provide a buffer between visual receptors and the works, depending on the site-specific nature of construction works. This could reduce the level of individual effects, although has the potential to form a visual effect in itself. Due to the uncertainty of this proposal, this has not been taken into account within the assessment.

Where practicable, there may be opportunities for planting proposed as mitigation for Operational stage 2 to be implemented early in Operational stage 1 which would begin to provide some mitigating effects as it established. Revegetation of cuttings and embankments would also occur during this stage of development.

Operational Phase 2

The following measures are proposed to help reduce landscape and visual effects in the longer term:

- Narrowing of the Road Corridor following the construction of Coire Glas to 3.3 m with passing places which would help to restore the character of the original road and smallscale diversity of the landscape;
- Revegetation of Embankments and Cuttings;
- Planting Suitable locations will be identified along the road to compensate for trees removed during construction; and,
- Re-establishment of other features Where possible the use of original materials would be used in the re-establishment of some features to help assimilate the Proposed Development into the existing landscape patterns. This would include the re-construction of stone dyke walls at North Laggan farm.

Residual Effects

The LVIA has identified that there would be a number of significant landscape and visual effects arising from the construction of the Proposed Development. However, there would be no significant effects occurring during the operation of the Proposed Development.

Significant landscape and visual effects would occur within a very localised area, affecting the landscape character of areas around a small section of shoreline at the northern end of Loch Lochy between Kilfinnan Farm and Laggan Locks, and a relatively enclosed area close to the road corridor, between Loch Lochy and Lochy Oich. This would affect some visual receptors within the area, including residents and visitors to a small number of properties, set along the existing road, and at Laggan Locks, and users of the existing Kilfinnan Road and the Great Glen Way cycling and walking routes.

Landform and existing woodland and scrub, in particular trees to be retained along the lower side of the existing road, and a shelterbelt which encloses the Caledonian Canal, would limit the range and extent of effects.

The above significant landscape and visual effects are also predicted to lead to some localised, temporary significant effects to the Loch Lochy and Loch Oich SLA during construction of the Proposed Development.

All significant effects would be temporary, during the construction stage only, and in the longer term, after construction of the Pumped Storage Scheme when the road would be narrowed to 3.3 m with passing places, all effects are predicted to be Negligible, because the upgraded road is expected to appear similar within the landscape to the existing road.

Mitigation including the revegetation of cut slopes, embankments and verges, and strategic compensatory planting would assist in ensuring that all long-term effects would be negligible.



4.6 Access and Transport

Chapter 9 of the EIA (Traffic and Transport) provides an assessment of the likely significant effects from the Proposed Development on Traffic and Transport.

This chapter considers the effects during the construction phase of the Proposed Development, when volumes of traffic generation are anticipated to be at their greatest due to the delivery of equipment and construction materials.

Baseline

Existing Traffic Conditions

To determine the existing road usage, 2022 Annual Average Daily Traffic Flow (AADT) data from the following two sites were extracted from the online Transport Scotland (TS) databases of count sites:

- A82 north of Invergarry village; and,
- A82 north of Stronaba.

As well as the information available from the databases, one Automatic Traffic Count (ATC) was deployed at the northern end of Kilfinnan Road, where no data was previously available. The National Road Traffic Forecast (NRTF) high growth factor for 2022 to 2023 was applied to the 2022 TS count data sites (A82 north of Invergarry village; and A82 north of Stronaba).

Future Baseline

Future year baseline traffic flows were determined by applying a NRTF 2026 high growth factor (the year when construction traffic is expected to peak) to the existing traffic flows within the study area. Traffic flows associated with any nearby operational wind farms were captured within the existing traffic flows.

Accident Data

Within the study area only one common accident location has been identified, in the vicinity of the secondary access to The Whispering Pine Lodges. This is located on the southwestern shore of Loch Lochy, where five Road traffic personal injury accidents (PIAs) have been recorded. The speed limit on this section of the A82 is 50mph. A review of Streetview images show this reduced speed limit was introduced sometime between June 2017 and May 2021, presumably in response to the identified accident cluster. Of the five PIAs, three occurred prior to May 2021, with the remaining two occurring after May 2021.

The online source Crashmap.co.uk reveals that no PIAs were recorded along Kilfinnan Road between 2017-2021, the years with the most recent data available.

Mitigation and Enhancement

Kilfinnan Road Construction

Embedded Mitigation

During the construction period, a community liaison group will be set up to disseminate information and take feedback, and a project website will be set up and regularly updated to provide the latest information relating to traffic movements associated with vehicles accessing the Site.

All construction deliveries will be undertaken at appropriate times (to be agreed with the relevant roads authorities) with the aim to minimise the effect on the local road network.

A number of measures will be implemented during the construction phase, through the Construction Traffic Management Plan (CTMP).

There will also be a daily road inspection on the A82, in the vicinity of the Site entrance. Debris and mud (if required) will be removed from the carriageway, using a road sweeper.



Further Mitigation and Enhancement

No further mitigation has been considered as a requirement for the construction phase.

Operational Phases

No embedded mitigation has been considered a requirement for operational phase 2 of the Proposed Development as it will function as a public road.

Residual Effects

No residual significant risks are considered likely.

4.7 Risk Management

Chapter 10 of the EIA (Risk Management) provides a proportionate assessment of likely risks and associated significant environmental effects arising from the vulnerability of the proposed development to major accidents and disasters.

The assessment concludes that no risks likely to give rise to permanent residual significant adverse effects have been identified and that appropriate management measures have been proposed (as embedded or further mitigation) to address any environmental or major accident risks arising from the Proposed Development.

4.8 Impact Interactions

Chapter 11 of the EIA (Summary and Impact Interactions) provides an assessment of likely impact interactions and effects from the construction and operation of the development.

The assessment concludes that whilst a range of adverse residual effects are predicted, the interaction of these effects is not likely to result in any additional significant effects on the factors listed in the EIA Regulations, or specific sensitive receptors considered.



5 Mitigation and Monitoring Requirements

5.1 Overview

Chapter 12 of the EIA (Schedule of Mitigation and Monitoring) provides a consolidated schedule of all mitigation and enhancement measures proposed to avoid significant adverse effects and enhance beneficial effects from the proposed development. It is reproduced in full here as the measures are reported in summary form and in non-technical language.

The chapter is provided primarily to assist THC as the relevant Planning Authority and EIA competent authority with its obligation under Regulation 29(f) of the TCPA EIA Regulations to secure any proposed mitigation measures and monitoring arrangements relating to significant adverse effects within any planning permission granted for the Proposed Development.

5.2 Proposed Mitigation Measures

Table 5.1 below summarises all mitigation and enhancement measures committed to by the

 Applicant for the construction and operational phases of the proposed development.



Table 5.1: Proposed Mitigation and Monitoring Measures

| EIA Report Chapter | Development Phase | Proposed Measures |
|-----------------------|----------------------|--|
| Chapter 5: Noise | Kilfinnan Road | Embedded Mitigation |
| and Vibration | Construction | There is a commitment to develop and implement a comprehensive Construction Environmental Management Plan (CEMP), inclusive of a Construction Traffic Management Plan (CTMP), Pollution Prevention Plan (PPP) and Controlled Activities Regulations (CAR) License(s). These documents will include best practice noise control measures designed to minimise noise effects throughout the construction period. |
| | | Further Mitigation and Enhancement |
| | | There are no specific requirements for mitigation to lessen noise levels during the daytime, as no significant effects are anticipated, however, any noise control measures adopted for evening or weekend periods would also be implemented during the daytime to further reduce noise levels and duration of exposure. |
| | | Section 8 of BS 5228-1 (Code of practice for noise and vibration control on construction and open sites) recommends the following simple control measures which will be adopted throughout the construction period: |
| | | keep local residents informed of the proposed working schedule, where appropriate, including the times and duration of any abnormally noisy activity that may cause concern; |
| | | ensure site work is within core hours wherever possible and any occasional required work outside of core hours shall be programmed carefully, with consideration to noise and nearby local residents; |
| | | ensure all vehicles and mechanical plant will be fitted with effective exhaust silencers and be subject to programmed maintenance; |
| | | select inherently quiet plant where appropriate; |
| | | ensure all ancillary pneumatic percussive tools will be fitted with mufflers or silencers of the type recommended by the manufacturers; |
| | | instruct that machines will be shut down between work periods or throttled down to a minimum; |
| | | undertake regular maintenance of all equipment used on site, including maintenance related to noise emissions; and, |
| | | ensure all ancillary plant such as generators and pumps will be positioned to cause minimum noise disturbance and, if necessary, temporary acoustic screens or enclosures should be provided. |
| | | In addition to the above best practice measures; |
| | | In accordance with a request from Highland Council within the Scoping Response, all mobile plant will be fitted with white noise reversing alarms (as opposed to tonal 'beeping' alarms); and, |
| | | Where access and space restrictions allow, temporary noise barriers will be installed. Further detail is provided below. |



| EIA Report Chapter | Development Phase | Proposed Measures |
|---------------------------|--------------------------------|---|
| | | Use of Noise Barriers |
| | | The use barriers can typically reduce noise levels by around 10 dB when installed in optimum locations and noise modelling assuming 2.2m high Herras fencing fitted with temporary sound barrier mats indicates that noise levels at the houses at North Laggan could be reduced in the region of 5 – 8dB, whilst noise levels at the houses closest to the road at Glengarry Lodges could be reduced by up to 12 dB. The location of where barriers will be deployed will be detailed within the CEMP. |
| | Operational Phases | It was noted within Section 6.7 of the Scoping Report that noise from road traffic using Kilfinnan Road had already been considered within the 2018 EIA for the Revised Coire Glas Pumped Storage Scheme. As no significant increase in road traffic flows beyond that which have already been considered is anticipated, an assessment of operational noise and vibration was scoped out. |
| Chapter 6: Air Quality | Kilfinnan Road Construction | Embedded |
| | | Construction phase mitigation measures that have been incorporated into the scheme design of relevance to Air Quality are listed below: |
| | | Wheel wash located appropriately to prevent material being tracked onto public roads; |
| | | Part of Kilfinnan Road closed for public access whilst upgrading works undertaken (temporary diversion road provided); |
| | | Construction sequencing allows for works to be undertaken in discrete sections, minimising the potential for dust impacts; |
| | | Existing road surface is hard paved; |
| | | Excavated material would either be used onsite or as part of the spoil management programme for the consented Coire Glas scheme; and, |
| | | Material cut from road construction would be used as general fill, minimising the requirement to import additional fill. |
| | | Further Mitigation and Enhancement |
| | | A Construction Environmental Management Plan (CEMP) will be prepared by the appointed Principal Contractor. In particular, the CEMP would specify conditions to limit fugitive dust emissions. |
| | | Construction Phase Dust |
| | | IAQM guidance outlines several site-specific mitigation measures based on the assessed site risk. The measures are grouped into those which are highly recommended and those which are desirable, and cover the following topics: Communications; Earthworks; Monitoring; Communication (Abiaba (Machineseeral Quatringhts Terral) |
| | | Operating Vehicle / Machinery and Sustainable Travel; Operations; Preparing and Maintaining the Site; |

Kilfinnan road Improvements Non-Technical Summary



| EIA Report Chapter | Development Phase | Proposed Measures |
|----------------------------------|-----------------------|--|
| Chapter 7: Geology, | Kilfinnan Road | Site Management; Trackout; Waste Management; Construction; and, Non-Road Mobile Machinery. Embedded |
| Hydrogeology and Hydrogeology | | The following embedded measures are of relevance to Geology, Hydrogeology and Hydrogeology: avoiding areas considered ecologically and hydrologically sensitive, other than where these are unavoidable, such as crossing of watercourses; the proposed development will be developed in accordance with good practice guidance, including UK and Scottish guidance on good practice for construction projects; construction Environment Management Plan (CEMP) - This document would be a conditional requirement attached to the consent and would detail how the successful Principal Contractor would manage the works in accordance with all commitments and mitigation detailed in the EIA Report; environmental Clerk of Works - To ensure all reasonable precautions are taken to avoid negative effects on the soils and water environment, a suitably qualified Environmental Clerk of Works (ECOW) will be appointed prior to the commencement of construction badvise the Applicant and the Principal Contractor on all ecological and hydrological matters; safeguarding of Soils - The soil (topsoil and sub-soil) would be excavated from the footprint of permanent works during the construction phase, kept on site and used for landscaping the shoulders of the improved road. Soils beneath areas of temporary tracks and compounds will be carefully excavated and stockpiled adjacent to the temporary works so that the soils can be replaced when the temporary works are removed. Topsoil and subsoil will be stored in separate stockpiles so that they are not mixed and can be replaced in the same order they were excavated; pollution risk - Good practice measures in relation to pollution prevention will be undertaken; erosion and Sedimentation - Good practice measures for the management of erosion and sedimentation; flood Risk and Drainage - It is proposed to adopt Sustainable Drainage Systems (SuDS) as part of the proposed development. SuDS techniques aim to mimic pre-development runof |
| | | Construction Phase |
| | | As there are no predicated significant effects under the terms of the EIA Regulations, other than the good practice measures that the developer would implement as standard (and as described above), no specific mitigation during construction is required. |
| | Operational Phases | As there are no predicated significant effects under the terms of the EIA Regulations, other than the good practice measures that the applicant would implement as standard, no specific mitigation during operation is required. |



| Chapter 8: andscape and /isual Construction and Operational Phase 1 Given the temporary nature of construction effects (Killinnan Road and Coire Glas scheme), no specific mitigation has been identifie with Chapter 8. Phase 1 Given the temporary nature of construction of effects (Killinnan Road and Coire Glas scheme), no specific mitigation has been identifie with Chapter 8. Phase 1 File chapter does however state that where visual receptors and the works, depending on the site-specific nature of construction works. This could reduce the level of individual effects, although has the potential to form a visual effect in itself. Due to the uncertainty of this proposal, this has not been taken into account within the assessment. Where practicable, there may be opportunities for planting proposed as mitigation for Operational stage 2 (see paragraph 8.6.9) to b implemented early in Operational stage 1 which would begin to provide some mitigating effects as it established. Revegetation of cutting and embankments would also occur during this stage of development as described in paragraph 8.6.8. Protection of Trees Chapter 8 states the following in relation to the protection of trees: The referition of existing trees would be important in minimising the short and longer term landscape and visual effects, particularly tree close to the existing rese would be in occurdance with BS 5837.2012. Operational Stage 2 The following measures are proposed to help reduce landscape and visual effects in the longer term: • narrowing of the Road Coridor - Following the construction Coric Glas, the road would be in more mankments and cuttings violable tree stablishement of the existing treese would be inarcocapae tetain stabilishement of viol following | EIA Report Chapter | Development Phase | Proposed Measures |
|--|-------------------------------------|----------------------|---|
| Phase 1 The chapter does however state that where visual receptor locations are close to construction works or construction traffic, there may be opportunities to install temporary foncing to provide a buffer between visual receptors and the works, depending on the site-specific natur of construction works. This could reduce the level of individual effects, although has the potential to form a visual effect in itself. Due to the uncertainty of this proposal, this has not been taken into account within the assessment. Where practicable, there may be opportunities for planting proposed as mitigation for Operational stage 2 (see paragraph 8.6.9) to b implemented early in Operational stage 1 which would begin to provide some mitigating effects as it established. Revegetation of cutting and embankments would also occur during this stage of development as described in paragraph 8.6.8. Protection of Trees Chapter 8 states the following needstide on its lower side, and between properties and the road. Protection of these trees, including the root zone would therefore be essential during construction. Tree protection measures should be in accordance with BS 5837: 2012. Operational The following measures are proposed to help reduce landscape and visual effects in the longer term: and scape is not infinite or to zone would therefore be essential during construction. Tree protection measures should be in accordance with BS 5837: 2012. Operational Stage 2 The following measures are proposed to help reduce landscape and visual effects. In the longer term: interiming would b in accordance with BS 5837: 2012. • narrowing of the Road Corridor - Following the construction of Coire Gias, the road would be established where possible to eabor inpota | Chapter 8: Landscape and | Construction and | Given the temporary nature of construction effects (Kilfinnan Road and Coire Glas scheme), no specific mitigation has been identified within Chapter 8. |
| Implemented early in Operational stage 1 which would begin to provide some mitigating effects as it established. Revegetation of cutting and embankments would also occur during this stage of development as described in paragraph 8.6.8. Protection of Trees Chapter 8 states the following in relation to the protection of trees: The retention of existing trees would be important in minimising the short and longer term landscape and visual effects, particularly tree close to the existing roadside on its lower side, and between properties and the road. Protection of these trees, including the root zone would therefore be essential during construction. Tree protection measures should be in accordance with BS 5837: 2012. Operational Stage 2 Operational Stage 2 The following measures are proposed to help reduce landscape and visual effects in the longer term: narrowing of the Road Corridor - Following the construction of Coire Glas, the road would be narrowed to 3.3 m with passin places which would help to restore the character of the original-local diversity of the landscape; revegetation of Embankments and Cuttings - The re-establishment of vegetation on embankments and cuttings would be important in limiting operational landscape and visual effects, in particular, the visual prominence of the road construction for areas at greater distances. With the exception of reces would be identified along the road to compensate for trees removed durin construction, to help retain the small-scale diversity of character along the route, and where relevant, to help mitigate visu effects. Illustrative examples of these potential location proposates are shore would be identified along the road to compensate for trees removed durin construction, to help retain the small-scale diversity of ch | VISUAI | | The chapter does however state that where visual receptor locations are close to construction works or construction traffic, there may be opportunities to install temporary fencing to provide a buffer between visual receptors and the works, depending on the site-specific nature of construction works. This could reduce the level of individual effects, although has the potential to form a visual effect in itself. Due to the uncertainty of this proposal, this has not been taken into account within the assessment. |
| Chapter 8 states the following in relation to the protection of trees: The retention of existing trees would be important in minimising the short and longer term landscape and visual effects, particularly tree close to the existing roadside on its lower side, and between properties and the road. Protection of these trees, including the root zone would therefore be essential during construction. Tree protection measures should be in accordance with BS 5837: 2012. There would be a requirement for pruning to some existing trees to accommodate construction works. Pruning works should be carried out following a detailed tree survey and by a suitably qualified person to minimise damage to trees and retain their future integrity. Operational Stage 2 The following measures are proposed to help reduce landscape and visual effects in the longer term: • narrowing of the Road Corridor - Following the construction of Coire Glas, the road would be narrowed to 3.3 m with passin places which would help to restore the character of the original road and small-scale diversity of the landscape; • revegetation of Embankments and Cuttings - The re-establishment of vegetation on embankments and cuttings would b important in limiting operational landscape and visual effects, in particular, the visual prominence of the road construction for areas at greater distances. With the exception of rock cuttings, gradients would be established where possible to enabl important to help retain the small-scale diversity of character along the route, and where relevant, to help mitigate visu effects. Illustrative examples of these potential location proposals are shown on Figure 7.5; and, • re-establishment of Other Cultural Features - The road construction would be used in the re-establishment some features to help assimilate the Proposed Development into the existing landscape patterns. This would include the ro construction of stone | | | Where practicable, there may be opportunities for planting proposed as mitigation for Operational stage 2 (see paragraph 8.6.9) to be implemented early in Operational stage 1 which would begin to provide some mitigating effects as it established. Revegetation of cuttings and embankments would also occur during this stage of development as described in paragraph 8.6.8. |
| Construction The retention of existing trees would be important in minimising the short and longer term landscape and visual effects, particularly tree close to the existing roadside on its lower side, and between properties and the road. Protection of these trees, including the roat zone would therefore be essential during construction. Tree protection measures should be in accordance with BS 5837: 2012. Operational Stage 2 There would be a requirement for pruning to some existing trees to accommodate construction works. Pruning works should be carried out following a detailed tree survey and by a suitably qualified person to minimise damage to trees and retain their future integrity. Operational Stage 2 The following measures are proposed to help reduce landscape and visual effects in the longer term: narrowing of the Road Corridor - Following the construction of Coire Glas, the road would be narrowed to 3.3 m with passin places which would help to restore the character of the original road and small-scale diversity of the landscape; revegetation of Embankments and Cuttings - The re-establishment of vegetation on embankments and cuttings would be important in limiting operational landscape and visual effects, in particular, the visual prominence of the road construction for areas at greater distances. With the exception of rock cuttings, gradients would be established where possible to enable areas at greater distances. With the exception of rock cuttings or proved to a domenting of trees would be identified along the road to compensate for trees removed durin construction, to help retain the small-scale diversity of character along the rolevant, to help mitigate visus effects. Illustrative examples of these potential location proposals are shown on Figure 7.5; and, chapter 9: Traffic | | | Protection of Trees |
| Operational Stage 2 out following a detailed tree survey and by a suitably qualified person to minimise damage to trees and retain their future integrity. Operational Stage 2 The following measures are proposed to help reduce landscape and visual effects in the longer term: narrowing of the Road Corridor - Following the construction of Coire Glas, the road would be narrowed to 3.3 m with passin places which would help to restore the character of the original road and small-scale diversity of the landscape; • revegetation of Embankments and Cuttings - The re-establishment of vegetation on embankments and cuttings would be important in limiting operational landscape and visual effects, in particular, the visual prominence of the road construction for areas at greater distances. With the exception of rock cuttings, gradients would be established where possible to enable replacement of soils and minimise potential for erosion; • planting - Suitable locations for the replanting of trees would be identified along the road to compensate for trees removed durin construction, to help retain the small-scale diversity of character along the route, and where relevant, to help mitigate visual effects. Illustrative examples of these potential location proposals are shown on Figure 7.5; and, • re-establishment of Other Cultural Features - The road construction would lead to the disruption or removal of some other feature including fences, walls, gates and culverts. Where possible the use of original materials would be used in the re-establishment or some features to help assimilate the Proposed Development into the existing landscape patterns. This would include the re- construction of stone walls at North Laggan farm. Chapter 9: Traffic and Transport Kilfinnan Road Constructi | | | The retention of existing trees would be important in minimising the short and longer term landscape and visual effects, particularly trees close to the existing roadside on its lower side, and between properties and the road. Protection of these trees, including the root zone |
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| And Transport Construction During the construction period, a community liaison group will be set up to disseminate information and take feedback, and a project website will be set up and regularly updated to provide the latest information relating to traffic movements associated with vehicles | | Stage 2 | The following measures are proposed to help reduce landscape and visual effects in the longer term: narrowing of the Road Corridor - Following the construction of Coire Glas, the road would be narrowed to 3.3 m with passing places which would help to restore the character of the original road and small-scale diversity of the landscape; revegetation of Embankments and Cuttings - The re-establishment of vegetation on embankments and cuttings would be important in limiting operational landscape and visual effects, in particular, the visual prominence of the road construction from areas at greater distances. With the exception of rock cuttings, gradients would be established where possible to enable replacement of soils and minimise potential for erosion; planting - Suitable locations for the replanting of trees would be identified along the road to compensate for trees removed during construction, to help retain the small-scale diversity of character along the route, and where relevant, to help mitigate visual effects. Illustrative examples of these potential location proposals are shown on Figure 7.5; and, re-establishment of Other Cultural Features - The road construction would lead to the disruption or removal of some other features including fences, walls, gates and culverts. Where possible the use of original materials would be used in the re-establishment or some features to help assimilate the Proposed Development into the existing landscape patterns. This would include the re-establishment include the re-establishment of Development into the existing landscape patterns. |
| website will be set up and regularly updated to provide the latest information relating to traffic movements associated with vehicle | Chapter 9: Traffic and Transport | | |
| | | | website will be set up and regularly updated to provide the latest information relating to traffic movements associated with vehicles |

Kilfinnan road Improvements Non-Technical Summary



| EIA Report Chapter | Development Phase | Proposed Measures |
|-----------------------|-----------------------|--|
| | | All construction deliveries will be undertaken at appropriate times (to be discussed and agreed with the relevant roads authorities) with the aim to minimise the effect on the local road network. |
| | | A number of measures, including those outlined below will be implemented during the construction phase, through the Construction Traffic Management Plan (CTMP): all material delivery lorries (dry materials) will be sheeted to reduce dust and stop spillage on public roads; and, a wheel wash facility will be established in the vicinity of the Site entrance, if required. Working hours will be limited to between 0700 – 1900 Monday to Friday, and 0800 – 1400 on Saturday; and, appropriate traffic management measures will be put in place at the Site entrance, off the A82, to avoid conflict with general traffic, subject to agreement with THC. |
| | | All drivers involved in the works will be required to attend an induction to include: a safety briefing; the need for appropriate care and speed control; a briefing on driver speed reduction agreements (to slow Proposed Development traffic at sensitive locations); identification of specific sensitive areas; identification of the specified access route; and, the requirement not to deviate from the specified route. |
| | | There will be a daily road inspection on the A82, in the vicinity of the Site entrance. Debris and mud will be removed from the carriageway, using an onsite road sweeper, if required. |
| | | Further Mitigation and Enhancement |
| | | No further mitigation has been considered as a requirement for the construction phase of the Proposed Development. |
| | Operational Phases | No embedded mitigation has been considered a requirement for the operational phase of the Proposed Development as it will function as a public road. |

