

10 Risk Management

10.1 Introduction

This chapter provides an assessment of potential likely significant effects deriving from the vulnerability of the Proposed Development to relevant environmental and major accident and disaster risks, as they relate to environmental receptors. It also considers potential ‘accident and disaster risks’ and associated environmental effects from the development proposal.

This chapter is provided solely to satisfy relevant requirements of the EIA Regulations - it is not intended to present a full risk assessment of the Proposed Development or to be used outwith the context of this EIA. No liability relating to potential risks, accidents or disasters is therefore accepted as a consequence of the inclusion of this chapter in the EIA Report.

10.2 Approach to Risk Assessment and Management

Statutory Requirements

This assessment seeks to confirm that all environmental and major accident and disaster risks of relevance to the Proposed Development, being likely to result in significant environmental effects, have been assessed within this EIA Report.

Schedule 4 of the EIA Regulations sets out the following requirements regarding the assessment of environmental risks and the vulnerability of a development proposal to major accidents and disasters (leading to associated environmental effects):

- A general requirement to describe within an EIA Report the likely significant effects “*resulting from...risks to human health, cultural heritage or the environment (for example due to accidents or disasters)*”. This can be summarised as requiring consideration of the ‘environmental risks’ from a development proposal; and,
- A specific requirement to identify, describe and assess “the expected effects deriving from the vulnerability of the development to risks, so far as relevant to the development, of major accidents and disasters”. There is also a similar requirement for EIA Reports to describe “the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned”. These requirements can be summarised as requiring consideration of ‘major accident and disaster risks’ and associated environmental effects from a development proposal. In line with other EIA requirements, the assessment should focus on those risks likely to result in significant effects on environmental receptors.

The EIA Regulations also require that “where appropriate, this description (of a project’s vulnerability to major accidents and disasters) should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies”. This dovetails with the overarching requirement set out within Schedule 4 to identify mitigation measures and monitoring arrangements to address identified likely significant adverse environmental effects.

Scope

Applicable legislation pertaining to the safety of construction and operational works must be complied with during the construction and operational phases of the Proposed Development. These wider legal requirements operate separately from and should not be considered in the context of the EIA Regulations, the function of which is solely to assess likely significant effects from the Proposed Development. Risks addressed through applicable health and safety legislation (e.g. risks to the health and safety of construction workers and employees on the Site during operation) have therefore been scoped out of this assessment.

The assessment of risk has been informed by the environmental characteristics of the Site and surrounding area, including:

- 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 site also falls within . In addition, the Great Glen Way, one of Scotland's Great Trails, follows the western shore of Loch Lochy; and,
- The site also sits entirely within the Blar Na Leine Inventory Battlefield designation.

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

- Multiple recreational routes passing through Gairloch and along Loch Lochy, including Core Paths, National Cycle Network route 78 (part of the Caledonia Way) 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).

Policy Context

This assessment has been prepared in accordance with relevant planning policy considerations as detailed in **Chapter 4 – Legislative and Policy Context**.

Key Terms and Definitions

To remain proportionate, this assessment focuses on the identification, assessment and management of 'relevant risks' (i.e. risks relating to the Site and the Proposed Development) which have the potential to occur and to result in 'serious damage' to the environment, which for this EIA is defined as: *'The loss of life or permanent injury and/or permanent or long-lasting damage to an environmental receptor which cannot be restored through minor clean up and restoration efforts'*.

Risks unrelated to the Site or the Proposed Development or risks which have no possibility of resulting in serious damage to the environment even if they did occur have therefore not been considered. The UK Government's National Risk Register – 2023 Edition was used to define potential major accident and disaster risks, and the scope of this EIA was used to define potential environmental risks. From this, 'relevant risks' relating to the Site and the Proposed Development were then identified and subject to further consideration.

Assessment Methodology

A systematic approach was adopted to identify and assess relevant risks arising from the Proposed Development. This considered:

- Whether potential risks are 'relevant' and could result in 'serious damage' to the environment (as defined above). Only relevant risks with the potential to result in 'serious damage' were considered further;
- Risk characteristics - the nature of the potential exposure of sensitive receptors to hazards, major accidents or disasters and of the potential consequences, i.e., considering the likelihood and severity of the relevant risk occurring as they pertain to the environment;

- Whether or not the risk has been sufficiently assessed through the technical assessments presented in **Chapters 5 – 9** to identify all likely significant effects on the environment. This demonstrates compliance with the requirement in Schedule 4 of the EIA Regulations to describe “the expected significant adverse effects of the development on the environment deriving from the vulnerability of the development to risks of major accidents and/or disasters which are relevant to the project concerned”; and,
- Whether or not suitable prevention, management, preparedness, and response measures are proposed to address the identified risks arising from or affecting the Proposed Development. This would ensure the avoidance of any likely significant effects resulting from identified environmental and major accident and disaster risks.

10.3 Assessment of Relevant Risks

The only environmental or major accident and disaster risks relevant to the Site and the Proposed Development are:

- Noise Impacts – assessed in Chapter 5 – Noise and Vibration. No significant residual effects are anticipated;
- Poor air quality events – assessed in Chapter 6 – Air Quality. Provided effective mitigation measures are implemented, residual effects and environmental risks are considered to be not significant;
- Flooding – assessed in Chapter 7 – Geology, Hydrology and Hydrogeology. No residual significant risks are considered likely;
- Landscape and Visual – Chapter 8 – Landscape and Visual. 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; and,
- Transport incidents - assessed in Chapter 9 – Traffic and Transport. No residual significant risks are considered likely.

Other potential risks (e.g. risks of fire and explosion, security breaches, etc.) are either not relevant to the Site and the Proposed Development, managed by other applicable legislation and policy, or would not result in likely significant environmental effects in the event that such risk events did occur.

Potential risks from the construction and operation of the Proposed Development will be addressed through relevant management plans, specifically including the development and implementation of a comprehensive Construction Environmental Management Plan (CEMP) and the implementation of appropriate operational procedures.

10.4 Conclusion

The assessment provided above demonstrates that:

- Relevant environmental and major accident and disaster risks associated with the Proposed Development which have the potential to result in likely significant effects on the environment have already been assessed in this EIA Report. No further assessment is considered to be required to demonstrate compliance with the EIA Regulations and applicable planning policy considerations; and,
- Appropriate mitigation and management measures have been proposed to address any environmental or major accident and disaster risks arising from the Proposed Development.

10.5 Summary

This chapter has set out a proportionate assessment of likely risks arising from the Proposed Development. 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.

10.6 References

Cabinet Office, HM Government (2023) The UK Government's National Risk Register – 2023 Edition: [2023 NATIONAL RISK REGISTER NRR.pdf \(publishing.service.gov.uk\)](https://publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1214422/2023_NATIONAL_RISK_REGISTER_NRR.pdf)

11 Summary and Impact Interactions

11.1 Introduction

All of the potentially significant effects of the Proposed Development on the factors listed in Regulation 4(3) of the EIA Regulations (i.e., population and human health, biodiversity, land, soil, water, air and climate, material assets, cultural heritage and landscape) have been assessed within the individual topic specific assessments presented in **Chapters 5 – 9** where relevant. This chapter builds on and summarises these assessments to consider the potential for ‘impact interactions.’

Impact interactions (also referred to as synergistic or intra-project related effects) arise from the reaction between topic-specific effects of a project on aspects of the environment, or an identified sensitive receptor. By assessing effects on a topic-specific basis there is a residual risk that impact interactions are overlooked - to address this, this chapter considers whether each identified likely residual effect (identified in **Chapter 5 – 9**) would be likely to interact with any other effects and what the consequences of this are likely to be, with specific reference to the factors above and to sensitive receptors subject to adverse effects.

This assessment focuses on the factors considered to at least have the potential to experience impact interactions which may lead to a significant adverse effect. This comprises population and human health, biodiversity and landscape interests. This chapter has been prepared by Stantec, drawing on the assessment work prepared by the wider project team presented in this EIAR. In accordance with the EIA Regulations, a statement outlining the relevant expertise and qualifications of competent experts appointed to prepare this chapter is provided in **Appendix 1.1**.

11.2 Methodology

The assessment of likely significant effects in this EIA has been based on the generic significance criteria provided in **Table 1.1** (Generic Significance Criteria) within Appendix 4.1 (Assessment Methods) and the topic-specific impact assessment methodologies, as detailed within **Chapters 5 – 9**. To identify likely impact interactions, summary tables are provided below which detail all residual adverse and beneficial effects reported with an effect level above Negligible. The effects are summarised below using the terminology and significance criteria used in the respective chapters.

The potential for, and overall significance of, impact interactions on the factors listed above is then considered by way of a qualitative approach using professional judgement. Impact interactions are described in the table and associated effects are reported.

11.3 Potential Impact Interactions Summary

Table 11.1 and 11.2 below consider potential impact interactions from the Proposed Development on human health, amenity, biodiversity and cultural heritage interests during the construction and operational phases of the Proposed Development.

A summary and conclusion are provided in **Section 11.4**.

Table 11.1: Potential Impact Interactions – Kilfinnan Road Construction

Kilfinnan Road Construction Stage		
Factor / Receptor	Residual Effects	Potential Impact Interactions
Population and Human Health		
<p>Residential properties Kilfinnan Road;</p> <p>Residential properties, pedestrians and drivers on construction traffic routes; and</p> <p>Tourism and recreation receptors within the associated study area.</p>	<p><u>Chapter 5 – Noise and Vibration</u></p> <p>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 Noise Sensitive Receptors for certain periods during the construction phases. Nonetheless, no significant residual effects are anticipated.</p> <p><u>Chapter 8 - Landscape and Visual</u></p> <p>The LVIA has identified that there would be a number of significant landscape and visual effects arising from the construction of the Proposed Development.</p> <p>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 a number of 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.</p> <p>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.</p> <p><u>Chapter 6 - Air Quality</u></p> <p>Provided effective mitigation measures are implemented, residual effects are considered to be not significant.</p>	<p>Significant effects on human receptors during construction are reported in chapter 8 (Landscape and Visual). Negligible impacts are reported within Chapter 5 (Noise and Vibration), 6 (Air Quality) and Chapter 9 (Access and Transport).</p> <p>In terms of the local population, the only significant adverse effects identified are those reported in Chapter 8 (Landscape and Visual). It is not considered that when aggregated with the negligible effects identified in the other chapters, that impact interactions lead to a higher (or lower) effect level as to alter the magnitude and significance reported in topic chapters.</p> <p>While the effects outlined within Chapter 5, 6, 7 and 9 are not considered significant in the context of topic-specific assessments, or likely to exceed the relevant limits set to protect human health and amenity, there is at least the potential for impact interactions leading to a larger aggregated effect on the closest sensitive human receptors to the site; specifically, residential and tourism properties along Kilfinnan Road.</p> <p>A range of best practice construction measures related to all relevant topics are identified in each assessment and summarised in Chapter 13, in order to</p>

Kilfinnan Road Construction Stage		
Factor / Receptor	Residual Effects	Potential Impact Interactions
	<p>In addition, road traffic emissions associated with construction activities are considered to have an insignificant effect on human health factors.</p> <p>Whilst negligible residual dust effects (not significant) are predicted at residential properties within the vicinity of the site, it is acknowledged that construction activities have the potential to generate dust which, if unmitigated, could impact on human health and amenity.</p> <p>The sensitivity of the area with respect to dust soiling impacts on people and property is high. The sensitivity of the area with respect to human health impacts in relation to earthworks, construction and trackout is considered to be low.</p> <p><u>Chapter 7 – Hydrology and Flood Risk</u></p> <p>Without appropriate design and controls, construction of the proposed development has the potential to impact hydrogeology, flood risk and drainage.</p> <p>In relation to surface water and groundwater quality, drainage and flood risk, the proposed development and proposed safeguards embedded in the development design reduce the magnitude of potential change to negligible, during the construction phase. The significance of effect is therefore assessed as negligible.</p> <p><u>Chapter 9 – Access and Transport</u></p> <p>During construction, neither total nor HGV traffic flows are predicted to increase by more than 30% at any section of the A82 road within the study area. Therefore, no significant effects are anticipated. Any effects will be short lived during the construction phase, with the A82 not observed to be close to capacity.</p> <p>During construction, both total and HGV traffic flows are predicted to increase by more than 30% on Kilfinnan Road. However, based on the fact that Kilfinnan</p>	<p>reduce adverse effects as far as practicably possible.</p> <p>These measures will be secured and implemented through a comprehensive CEMP, including a complaints procedure implemented to enable residents to report non-compliance directly to the Principal Contractor.</p> <p>Overall, with the proposed mitigation measures in place, it is considered that the potential impact interactions on the local population, human and health and amenity would not give rise to a higher level of aggregated effect to be experienced at any identified receptor or alter the significance levels reported within each technical chapter.</p>

Kilfinnan Road Construction Stage		
Factor / Receptor	Residual Effects	Potential Impact Interactions
	Road can be classified as a receptor of low significance and can be mitigated through amendments to the CTMP associated with the Proposed Development, no significant effects are anticipated.	
Biodiversity and Landscape		
Important Ecological Features	<p><u>Chapter 6 – Air Quality</u></p> <p>With respect to ecological designations, areas of the South Laggan Fen SSSI and areas of Ancient Woodland are found within 20m of the Site.</p> <p>Road traffic impacts associated with construction activities on air quality can be considered as having an insignificant / neutral effect on ecological designations. Effects are concluded to be not significant in terms of the EIA Regulations.</p> <p><u>Chapter 7 – Hydrology and Flood Risk</u></p> <p>Without appropriate design and controls, construction of the proposed development has the potential to cause an adverse change of surface and groundwater flow paths and contribution to areas of peat, designated sites and water dependent habitat (including GWDTE). As a consequence of the proposed design, the potential change on groundwater levels and flows is assessed as negligible however and thus the resultant significance of effect is negligible.</p>	There is considered to be no potential for impact interactions
Landscape and Visual i.e., character, designation)	<p><u>Chapter 8 - Landscape and Visual</u></p> <p>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.</p> <p>The above significant landscape and visual effects are predicted to lead to some localised, temporary significant effects to the Loch Lochy and Loch Oich</p>	There is no potential for impact interactions. Chapter 8 fully considers all potential impact interactions

Kilfinnan Road Construction Stage		
Factor / Receptor	Residual Effects	Potential Impact Interactions
	<p>SLA within the area around northern Loch Lochy and between Loch Lochy and Loch Oich, close to the Proposed Development. This would lead to some temporary and localised significant effects to the Special Landscape Qualities (SLQs): 'The Great Glen', 'Classic Highland Scenery' and 'Intimate Drama', but these would be localised, short-term effects which would reduce to non-significant levels during operation.</p> <p>All significant effects would be temporary, during the construction stage only, and in the longer term, when the road would be narrowed to 3.3 m with passing places, all effects are predicted to be Negligible.</p>	

Table 11.1: Potential Impact Interactions – Operational Stages

Operational Stages 1 and 2		
Factor / Receptor	Residual Effects	Potential Impact Interactions
Population and Human Health		
<p>Residential properties, pedestrians and drivers on Kilfinnan Road;</p> <p>Residential properties, pedestrians and drivers on construction traffic routes;</p>	<p><u>Chapter 7 – Hydrology and Flood Risk</u></p> <p>Surface Water and Groundwater Quality</p> <p>The magnitude of a potential change on surface water or groundwater during the operational phases of the proposed development would be negligible, as no detectable change would likely occur. Therefore, the significance of effect during the operational phases of the proposed development is predicted to be negligible on surface water and groundwater.</p> <p>Flood Risk</p> <p>The likelihood, magnitude of change and duration of works which have the potential to alter surface and groundwater flow paths would be negligible, by following good practice measures. Therefore, the potential significance of effect on surface and groundwater is negligible.</p> <p><u>Chapter 9 – Access and Transport</u></p> <p>No significant operational or decommissioning effects were considered, due to the nature of the Proposed Development which will function as a public road.</p>	<p>No potential for interaction of effects. Chapter 6, 7 and 9 considers all potential impact interactions from the proposed development.</p>
Biodiversity		
<p>Ecology</p>	<p><u>Chapter 7 – Hydrology and Flood Risk</u></p> <p>The likelihood, magnitude and duration of works which have the potential to change surface and groundwater flow paths would be negligible, by following good practice measures. Therefore, the potential significance of effect on surface and groundwater is negligible.</p>	<p>No potential for interaction of effects.</p>

Operational Stages 1 and 2		
Factor / Receptor	Residual Effects	Potential Impact Interactions
Landscape and Visual (i.e., character, designations and views)	<p><u>Chapter 8 - Landscape and Visual</u></p> <p>There would be no significant effects occurring during the operation of the Proposed Development including cumulative effects with the Coire Glas Pumped Storage Scheme, either during the interim phase when Coire Glas Pumped Storage Scheme is being constructed, or in the longer term when the Pumped Storage Scheme is operational.</p> <p>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.</p> <p>Mitigation including the revegetation of cut slopes, embankments and verges, and strategic compensatory planting would assist in ensuring that there would be no long-term effects.</p>	<p>No potential for interaction of effects. Chapter 8 considers all potential impact interactions from the proposed development on landscape character and views.</p>

11.4 Summary

All of the relevant potentially significant effects of the Proposed Development on the factors listed in Regulation 4(3) of the EIA Regulations have been assessed within the individual topic specific assessments presented in **Chapters 5 – 9**. This chapter builds on previous chapters to consider the potential for impact interactions on these factors.

Impact interactions (also referred to as synergistic or intra-project effects) arise from the reaction between topic specific effects of a project on aspects of the environment, or an identified sensitive receptor. This assessment focused on impact interactions on human health and population, biodiversity and landscape.

The assessment concludes that whilst a range of residual effects are predicted from the construction and operation of the Proposed Development, the interaction of these effects is not likely to result in any additional significant effects on the factors listed above. A range of best practice construction measures and mitigation for all identified adverse significant effects are summarised in **Chapter 12 – Schedule of Mitigation and Monitoring**.

12 Schedule of Mitigation and Monitoring

12.1 Introduction

This chapter of the EIA Report provides a consolidated schedule of all mitigation and monitoring measures proposed to avoid significant adverse effects and enhance beneficial effects from the construction and operation of the Proposed Development.

The chapter is provided primarily to assist The Highland Council as the relevant Local 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.

12.2 Proposed Mitigation and Monitoring Measures

Table 12.1 below summarises all mitigation and enhancement measures committed to by the Applicant.

Table 12.1: Proposed Mitigation and Monitoring Measures

EIA Report Chapter	Development Phase	Proposed Measures
Chapter 5: Noise and Vibration	Kilfinnan Road Construction	<p>Embedded Mitigation</p> <p>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.</p> <p>Further Mitigation and Enhancement</p> <p>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.</p> <p>Section 8 of BS 5228-1 recommends the following simple control measures which will be adopted throughout the construction period:</p> <ul style="list-style-type: none"> ▪ 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. <p>In addition to the above best practice measures;</p> <ul style="list-style-type: none"> ▪ 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. <p><u>Use of Noise Barriers</u></p> <p>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.</p>
	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

EIA Report Chapter	Development Phase	Proposed Measures
		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	<p>Embedded</p> <p>Construction phase mitigation measures that have been incorporated into the scheme design of relevance to Air Quality are listed below:</p> <ul style="list-style-type: none"> ▪ 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. <p>Further Mitigation and Enhancement</p> <p>A Construction Environmental Management Plan (CEMP) would be a conditional requirement attached to the consent and will be prepared by the appointed Principal Contractor. In particular, the CEMP would specify conditions to limit fugitive dust emissions.</p> <p><u>Construction Phase Dust</u></p> <p>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:</p> <ul style="list-style-type: none"> ▪ Communications; ▪ Earthworks; ▪ Monitoring; ▪ Operating Vehicle / Machinery and Sustainable Travel; ▪ Operations; ▪ Preparing and Maintaining the Site; ▪ Site Management; ▪ Trackout; ▪ Waste Management; ▪ Construction; and, ▪ Non-Road Mobile Machinery.
Chapter 7: Geology, Hydrogeology and Hydrogeology	Kilfinnan Road Construction	<p>Embedded</p> <p>The following embedded measures are of relevance to Geology, Hydrogeology and Hydrogeology:</p> <ul style="list-style-type: none"> • 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.

EIA Report Chapter	Development Phase	Proposed Measures
		<ul style="list-style-type: none"> • 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 to advise 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 runoff conditions and balance or throttle flows to the rate of runoff that might have been experienced prior to development. • Watercourse Crossings - The new bridge over the Kilfinnan Burn has been designed to accommodate the 1 in 1000 event without overtopping. Good practice measures have also been taken in relation to the design of all other new water crossings. <p>Further Mitigation and Enhancement</p> <p><u>Construction Phase</u></p> <p>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.</p>
	Operational Phases	<p>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.</p>
Chapter 8: Landscape and Visual	Construction and Operational Phase 1	<p>Given the temporary nature of construction effects (Kilfinnan Road and Coire Glas scheme), no specific mitigation has been identified within Chapter 8.</p> <p>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.</p> <p>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.</p> <p><u>Protection of Trees</u></p> <p>Chapter 8 states the following in relation to the protection of trees:</p>

EIA Report Chapter	Development Phase	Proposed Measures
		<p>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, would therefore be essential during construction. Tree protection measures should be in accordance with BS 5837: 2012.</p> <p>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.</p>
	Operational Stage 2	<p>The following measures are proposed to help reduce landscape and visual effects in the longer term:</p> <ul style="list-style-type: none"> • 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. • 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 of 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 Construction	<p>Embedded Mitigation</p> <p>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.</p> <p>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.</p> <p>A number of measures, including those outlined below will be implemented during the construction phase, through the Construction Traffic Management Plan (CTMP), which will be a conditioned requirement attached to the planning permission:</p> <ul style="list-style-type: none"> ▪ All material delivery lorries (dry materials) will be sheeted to reduce dust and stop spillage on public roads; ▪ 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,

EIA Report Chapter	Development Phase	Proposed Measures
		<ul style="list-style-type: none"> ▪ 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. <p>All drivers involved in the works will be required to attend an induction to include:</p> <ul style="list-style-type: none"> ▪ 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. <p>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.</p> <p>Further Mitigation and Enhancement</p> <p>No further mitigation has been considered as a requirement for the construction phase of the Proposed Development.</p>
	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.

