

VOLUME 2: CHAPTER 10 - TRANSPORT

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Appendix V2-10.1: Transport Assessment

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Figure V2-10.3: Accident Location Plan

Figure V2-10.4: Construction Vehicle Delivery Routes





10. TRANSPORT

10.1 Executive Summary

- 10.1.1 A review of the transport and access issues associated with the Proposed Development has been undertaken.
- 10.1.2 The Proposed Development would lead to a temporary increase in traffic volumes on the road network within the study areas during the construction phase. Traffic volumes would fall considerably outside the peak period of construction.
- 10.1.3 The assessment has assumed that all of the Sections of the Proposed Development would be constructed at the same time. An assessment of average daily development trips is considered an appropriate method of assessing the impact of the Proposed Development on each Section, as this will account for peaks and troughs during the construction programme. The construction traffic would result in a temporary increase in traffic flows on the road network surrounding the Proposed Development.
- 10.1.4 No link capacity issues are expected on any of the roads assessed due to the additional movements associated with the Proposed Development. The effects of construction traffic are temporary in nature and are transitory.
- 10.1.5 A series of mitigation measures and management plans have been proposed to help mitigate and offset the impacts of the traffic flows from both the construction and operational phases of the Proposed Development.

10.2 Introduction

- 10.2.1 This Chapter considers the likely significant effects on transport and access associated with the construction, operation and dismantling of the Proposed Development.
- 10.2.2 The specific objectives of the Chapter are to:
 - · describe the existing access network and transport baseline;
 - describe the assessment methodology and significance criteria used in completing the impact assessment;
 - describe the potential effects, including direct, indirect and any potential cumulative effects;
 - describe the mitigation measures proposed to address likely significant effects; and
 - assess the residual effects remaining following the implementation of mitigation.
- 10.2.3 A high-level overview of the effects of the traffic movements has been considered in accordance with the Institute of Environmental Assessment (now Institute of Environmental Management and Assessment (IEMA)) Guidelines for the Environmental Assessment of Road Traffic¹. The document is referred to as the IEMA Guidelines in this Chapter.
- 10.2.4 The assessment was undertaken by Pell Frischmann Consultants Limited. A table presenting relevant qualifications and experience of key staff involved in the preparation of this Chapter is included in Appendix V1-5.1: EIA Team, contained within Volume 5 of this EIA Report.
- 10.2.5 The Chapter is supported by a series of figures and **Appendix V2-10.1** that contains the Transport Assessment. These are referenced in the body of the text, where relevant.

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¹ Institute of Environmental Assessment (1993), Guidelines for the Environmental Assessment of Road Traffic



10.3 Scope of Assessment and Methodology

Scope of Assessment

- 10.3.1 The assessment has fully considered the transport and access issues arising from the construction phase (which includes the dismantling and removal of existing OHL) of the Proposed Development. This Chapter considers effects on the following:
 - · direct effects during construction on traffic flows in the surrounding study area;
 - direct effects upon local road users; and
 - effects upon local residents due to an increase in construction traffic.
- 10.3.2 Where the effects meet the criteria set out in the IEMA guidance, a review of the effects on severance, driver delay, pedestrian delay, pedestrian amenity, fear and intimidation and accidents / road safety has been undertaken.
- 10.3.3 The assessment is based on the Proposed Development as described in Volume 1 Chapter 3: Project Description. Given the length of the route of the Proposed Development, which extends for approximately 160 km from Ardmore Substation on Skye to Fort Augustus Substation on the mainland, the route has been split into seven geographically defined 'Sections' to describe more easily the Proposed Development, which are as follows:
 - Section 0: Ardmore to Edinbane;
 - Section 1: Edinbane to North of Sligachan;
 - Section 2: North of Sligachan to Broadford;
 - Section 3: Broadford to Kyle Rhea;
 - Section 4: Kyle Rhea to Loch Cuaich;
 - Section 5: Loch Cuaich to Invergarry; and
 - Section 6: Invergarry to Fort Augustus.
- 10.3.4 This assessment considers the impacts on the study area of each Section separately. As there will be an overlap of construction activities between each of the Sections, the total combined development traffic trips are considered when assessing the impact on each of the Sections study areas.
- 10.3.5 The assessment has assumed that all construction traffic which has been distributed to the A87 (T) in the trip generation for each of the Sections, would travel to the Site via the A82 (T), however in reality there are quarries and borrow pits located on Skye where aggregate materials would be sourced (see Appendix V1-3.3: Preliminary Appraisal of Borrow Pit, Quarry and Temporary Site Compound Areas). This is considered a sufficiently robust assessment.

Policy and Guidance

- 10.3.6 The scope of the assessment has been informed by consultation responses summarised in **Table V2-10.1** and the following guidelines/policies:
 - Scottish Planning Policy (2014);
 - National Planning Framework 3 (2014);
 - Highland-wide Local Development Plan (2012);
 - The West Highlands and Islands Local Development Plan (2019);
 - The Inner Moray Firth Local Development Plan (2015);
 - Onshore Wind Energy Supplementary Guidance (2016);
 - Guidance on the Preparation of Transport Assessments (2014); and



• Road and Transport Guidelines for New Developments (2013).

Extent of the Study Area

- 10.3.7 The highway links assessed as part of this assessment are identified below and shown on Figure V2-10.1:
 - The A863, between Trumpan and A850 (near The Fairy Bridge);
 - The A850, between Dunvegan and Bovre;
 - The A87, between Borve and Invergarry;
 - The A863, between Dunvegan and Sligachan;
 - The B885, between Bracadale and Portree;
 - The B886, between Stein and A850, near The Fairy Bridge;
 - The B8083, between Kilbride and Broadford;
 - The A851, between Armadale and Skulamus;
 - The C1223 (Old Military Road) between Shiel Bridge and Glenelg;
 - Unclassified road linking A863 and A850;
 - · Unclassified road, to the north of Loch Garry;
 - Unclassified road, to the west of the Great Glen Way, Fort Augustus;
 - The A887, between Bun Loyne and Invermoriston;
 - The A82, between Letterfinlay and Invermoriston;
 - And minor roads and tracks used for access such as;
 - The C1239 (signed for Kylerhea) between Kylerhea and A87, north of Ashaig; and
 - The C1227 (Macleod's Terrace), between Stein and Halistra.

Consultation Undertaken

- 10.3.8 The scope of the assessment has been determined through a combination of professional judgement, reference to the relevant guidance documents and consultation with stakeholders through pre-application advice and a formal EIA scoping process. Of particular relevance to this assessment were consultation responses from Transport Scotland as trunk road agency and The Highland Council (THC) as local roads agency.
- 10.3.9 Relevant consultation responses are summarised in Table V2-10.1.

Table V2-10.1: Consultation Responses – Scoping Stage

Organisation	Response	How response has been considered
The Highland Council (THC)	A Transport Assessment (TA), Construction Traffic Management Plan (CTMP) and an Abnormal Load Assessment will be required within the EIAR. The key purpose of a TA is to establish if the traffic generated is significant (and extra-ordinary) and if so to assess the impact on the road infrastructure, residents and travelling public. You will need to provide access for maintenance from the public road and agree that through the permission (and related road authority permissions), but the operational phase traffic volumes will be low and the ongoing maintenance	A TA is provided in Appendix V2-10.1 . A CTMP for Section 0 and Sections 1 – 6 will be provided post consent and is anticipated to form a condition of consent. Examples of information which is contained within the CTMP is provided in the Mitigation part of this Chapter. It is not anticipated that abnormal loads will be required for component delivery to the Site although it may be that plant such as cranes may be abnormal due to their width. This would be confirmed post consent with appropriate reviews and BE16 applications made at the time. The impacts of operational impacts are scoped out as explained in paragraph 10.3.10.

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Organisation	Response	How response has been considered
	transport impact on the wider network can be scoped out.	Access junctions from the public highway will be designed in accordance with THC design standards. The locations of the proposed access points and indicative junction layouts are provided in Appendix V2-10.1 (Annex A).
	The Construction Traffic requires assessment; it cannot be scoped out.	The impacts of construction traffic on the study areas are assessed as part of this Chapter.
	Finally, it must identify the practical measures necessary to mitigate the impact. Mitigation measures required may include; new or improved infrastructure, road safety measures and traffic management. The guidance below provides further information on the required content. Prior to undertaking the TA the scope should be agreed in writing by both the Council's Transport Planning Team and Transport Scotland.	Proposed mitigation measures are provided in the Mitigation part of this Chapter. Discussions were undertaken between the Applicant and THC Transport Planning Team and the key points were distributed via email on 08 February 2022. The traffic count locations and general scope were confirmed with THC via email on 11 April 2022.
	When establishing a scope for the assessment consideration should be given to the use of the public roads in this area can be significantly influenced by tourist traffic.	A list of the assessed road links is provided in Appendix V2-10.1 . The Department for Transport (DfT) traffic information is based on a full year's worth of traffic information which accounts for fluctuations in traffic flows due to tourist traffic. The Automatic Traffic Surveys were undertaken
		in April to May 2022 which are considered as neutral months in THC's Guidance on the Preparation of Transport Assessments guidance document.
	Transport Assessment Methodology 1.Identify all public roads affected by the development. In addition to transportation of all abnormal loads and vehicles (delivery of components) this	The main roads impacted by the Proposed Development are listed in each of the Section's study areas in Appendix V2-10.1 . The locations of the proposed access junctions are presented in Appendix V2-10.1 .
	should also include routes to be used by local suppliers and staff. It is expected that the developer submits a preferred access route for the development. All other access route options should be provided, having been investigated in order to establish their feasibility. This should clearly identify the pros and cons of all the route options and therefore provide a logical selection process to arrive at a preferred route.	
	2.Establish current condition of the roads. This work which should be undertaken by a consulting engineer acceptable to the Council and will involve an engineering appraisal of the routes including the following:	There is ongoing engagement with THC Structures Department with regards to the road structures along the proposed construction traffic route. A condition survey is currently being undertaken, and it is proposed that the condition of the roads
	assessment of structural strength of carriageway including construction depths and road formation where this is likely to be significant in respect of proposed impacts, including non-	will be monitored during the construction phase. Any necessary repairs would be coordinated with the Roads Authority. It is considered that this would form a condition of consent.



Organisation	Response	How response has been considered
	destructive testing and sampling as required; • road surface condition and profile; • assessment of structures and any weight restrictions; • road widths, vertical and horizontal alignment and provision of passing places; and • details of adjacent communities. 3.Determine the traffic generation and distribution of the proposals throughout the construction and operation periods to provide accurate data resulting from the proposed development including: • nos. of light and heavy vehicles including staff travel; • abnormal loads; and	Details of traffic generation and distribution are provided in Appendix V2-10.1 .
	duration of works	
	4.Current traffic flows including use by public transport services, school buses, refuse vehicles, commercial users, pedestrians, cyclists and equestrians.	Details of the composition of traffic flows are provided in Appendix V2-10.1 which also details local pedestrian and cyclist networks.
	5.Impacts of proposed traffic including: • impacts on carriageway, structures, verges etc.;	The impacts of the construction traffic is assessed in the Assessment of Likely Significant Effects part of this Chapter for each of the Section's study areas.
	impacts on other road users; impacts on adjacent communities; swept path and gradient analysis where it is envisaged that transportation of traffic could be problematic; and provision of Trial Runs to be carried out in order to prove the route is achievable and/or to establish the extent of works required to facilitate transportation.	It is proposed that any new access junctions will be designed in accordance with THC design standards which will facilitate turning manoeuvres of construction traffic. It is not anticipated that abnormal loads will be required for component delivery to Site although it may be that plant such as cranes may be abnormal due to their width. This would be confirmed post consent with appropriate reviews and BE16 applications made at the time.
	6.Cumulative impacts with other developments in progress and committed developments including any wind farm, hydro or other energy related projects. When compiling a list of consented projects in the vicinity, including the ongoing expansion of Auchterawe substation, please share this with the Planning Authority for further comment.	Details of the cumulative developments considered within this assessment are provided in Appendix V2-10.1 . Any overlap in construction activities between the Proposed Development and other development in the study area will be mitigated via an overarching Traffic Management and Monitoring Plan which will be agreed with THC.
	7.Proposed mitigation measures to address impacts identified in 5 above, including: • carriageway strengthening;	Proposed mitigation measures are presented in the Part 10.12 - Mitigation in this Chapter.

Organisation	Response	How response has been considered
	strengthening of bridges and culverts;	
	carriageway widening and/or edge strengthening;	
	provision of passing places;	
	road safety measures; and	
	traffic management including measures to be taken to ensure that development traffic does not use routes other than the approved routes.	
	8.Details of residual effects.	Details of residual effects are presented in Part 10.13 - Residual Effects in this Chapter.
	Structure of the TA and Further Consultation	It is not possible to present the TA in the separate requested subsections because some of the Section's study areas are located in more
	Given the geographical extent of the line and associated access works, it is requested that the TA be presented with subsections covering the three operational areas of Highland:	than one of the operation areas.
	1) Ross and Cromarty;	
	2) Skye; and	
	3) Nairn, Lochaber, Badenoch and Strathspey.	
	The TA's and EIA's schedule of mitigation measures should be split into these sub-areas and provide full details of all PRI and other mitigation measures proposed. This will assist with ongoing internal consultation and future monitoring.	The proposed mitigation measures are presented in Part 10.12 - Mitigation of this Chapter. As noted above, it is not possible to present the mitigation in separate sub-sections.
	It would be advantageous that through ongoing dialogue all mitigation measures can be agreed in advance of the application's submission with the EIA providing as much detail as possible, including feasibility drawings detailing the scope of works proposed, and itemised costings for budgeting purposes. This level of detail is required to be included within the EIA and TA, irrespective if all of these road works themselves fall within the scope of the Section 37 application, or are regarded as ancillary works with certain works beyond the adopted road boundary requiring separate planning permission.	The proposed mitigation measures are presented in Part 10.12 - Mitigation part of this Chapter. Further dialogue with THC's Transport Planning Team will be required prior to construction commencing to agree mitigation measures.
	Transport Planning should be copied into any key information or correspondence relating to the future S37 to ensure a consistent overview across the project as a whole and for the three operational areas, vehicles/loading and the routes established.	Consultation was undertaken between SSEN Transmission and members of THC's Transport Planning Team to discuss transport matters with regards to the Proposed Development. Key points discussed during the consultation were relayed by email to the THC Officers on 08 February 2022.

Organisation	Response	How response has been considered
		The traffic count locations and general scope were confirmed with THC via email on 11 April 2022.
	Abnormal Load Assessment A review of the preferred route, to include swept path assessment and inspection and/or assessment of any structures along the route, shall be undertaken. A trial run to demonstrate the suitability of the abnormal load route may be required (this will likely be conditioned by the consent if it is necessary). If abnormal loads are required then early direct consultation with the Councils structures section and the Abnormal Load Team is advised.	It is not anticipated that abnormal loads will be required for component delivery to the Site although it may be that plant such as cranes may be abnormal due to their width. This would be confirmed post consent with appropriate reviews and BE16 applications made at the time.
	Construction Traffic	
	The TA must provide:	
	Estimated volumes of material to be transported for construction and the volume and type of HGV movements generated.	The Applicant has estimated vehicle numbers based on previous experience from the likely material movements, as set out in Appendix V2-10.1 , Annex B.
	Details of the likely routes for HGVs including for bulk material supplies from/to quarries, suppliers and tips.	Distribution details of construction traffic vehicles are presented in Appendix V2-10.1 .
	Details of identified sensitive receptors to the HGV traffic increase such as schools and residential areas.	A Summary of Sensitive Receptors is presented in this Chapter for each Section's study area.
	An assessment of the significance of the increase in the HGV movements along these routes. This can be done either by recent counts or a practical view can be taken using local knowledge and historic count information. We indicated that for most of the local roads the increased volume of HGV construction traffic is likely to be significant and extra-ordinary. Some up to date counts may be required. The traffic is highly variable / seasonal due to the impact of tourism and this needs to be allowed for.	The anticipated increase in HGV movements are presented in the Traffic Impact Summary table for each Section of the Proposed Development.
	An assessment of likely impacts on bridges, culverts and retaining walls along both the abnormal load and the HGV construction routes. Direct consultation is advised with the Council's structures section once the preferred routes have been identified.	Details of the Proposed Development's preferred delivery routes have been provided to THC's Structures team in order to identify any likely impacts on bridges, culverts and retaining walls along the routes to Site. Consultation was undertaken between SSEN Transmission and members of THC's Transport Planning Team to discuss transport matters with regards to the Proposed Development.

Organisation	Response	How response has been considered
	Road Safety An assessment of the impact of the increase in all traffic (but particularly HGV traffic) on road safety shall be made in particular the impact on the safety of more vulnerable road users (those walking, wheeling and cycling). The road traffic collisions and statistics for a 5 year period shall be considered.	Traffic collision data was retrieved from CrashMap for a five year period and the analysis is presented in the Baseline part for each of the Sections of the Proposed Development.
	The extent of the works must be clearly established prior to the Council providing their consultation response to the Scottish Government's Energy Consents Unit (ECU) which will set the Council's position on the application.	Noted.
	The three routes are of pertinent concern: Glenelg, Struan Hill Road and Kinloch Hourn, however there will also be other routes affected. The first step is for SHET to progress a feasibility design for the road mitigation on the three routes. The Kinloch Hourn Road is to be prioritised, followed by the Struan Hill Road albeit an alternative private access solution has been signposted by the Roads Area Manager.	Any improvements along these routes will be agreed with THC Officers at the detailed design stage. All road works would be designed in accordance with THC standards and would be subject to detailed consultation with the Council. Indicative areas and a preliminary appraisal of the potential environmental constraints of public road improvement works is included in Appendix V1-3.4: Preliminary Appraisal of Public Road Improvement Works.
	The solution progressed to date for the Glenelg Road is unlikely to be able to be replicated on either the Kinloch Hourn Road or the Struan Hill Road. The Council has advised that historic structures will be affected on the Kinloch Hourn Road. The Struan Hill Road also cannot be used by forestry vehicles and the Council has advised SHET of a private alternative access solution that forestry used following a nearby river.	
	For the Glenelg route there is a Council appointed consultant (Arrivka) looking at this design already with a tight deadline for a submission for STTS funding (21st March). SHET are to review the Council proposals and advise if any amendments would be needed to accommodate their project. Discussions on the necessity for financial contributions will be ongoing.	All improvements required along these routes with regard to the Proposed Development will be agreed with THC Officers.
	Construction Traffic Management Plan THC Transport Planning will require any application associated with this proposal to submit a CTMP for the prior approval of the Planning Authority.	Details of measures to be included in the CTMP are presented in Appendix V2-10.1 and in the Mitigation part of this Chapter.
	The TA shall include a framework CTMP aimed at minimising the impact of the construction on the public and the public road network including measures to protect the safety of cyclists and pedestrians using the access routes.	

Organisation	Response	How response has been considered
	This can include measures such as embargoes on HGV movements at school in/out times, signage, voluntary speed limits, police no waiting cones or temporary traffic orders. It can then be updated and finalised once a contractor is in place prior to commencement of any works. A planning condition will be required. Consultation with the local community and the Roads Operation Management Teams will be required for the detailed content and implementation of the CTMP.	
	Maintenance Agreement and Bond Notwithstanding the above requirements, there will remain a risk of damage to Council maintained roads from development related traffic. In order to protect the interests of the Council, as roads authority, a suitable agreement relating to Section 96 of the Roads (Scotland) Act and appropriate planning legislation - including the provision of an appropriate Road Bond or similar security – is likely to be required.	It is expected that this would form a condition of consent.
	Access onto the Public Road and Visibility The proposal for new or upgraded access onto the public road shall be detailed on dimensioned drawings including radii, surfacing and drainage as well as the required visibility splays in accordance with the Highland Council's Roads and Transport Guidelines for New Developments.	Indicative access junction layouts are provided in Appendix V2-10.1 , Annex A . Junctions will be designed in accordance with THC's Roads and Transport Guidelines for New Developments. Detailed drawings will be provided to THC and the layouts will be agreed with THC prior to the commencement of the Proposed Development.
The Highland Council Access Officer	The project covers a significant extent of power line upgrade, and as such covers a large number of outdoor access routes along it. Some of these are low use remote hill tracks, others more frequently used. THC are progressing through all of the core paths; candidate core paths; public rights of way; wider network paths which are recorded on our database, which will be affected by the works. THC shall share this information with the applicant as soon as it is completed. I will provide a path reference; grid reference; type of path; description and whether the use is high, medium or low.	The information regarding paths was gratefully received from THC. Details of the paths are provided in Appendix V2-10.1 and the Baseline part of this Chapter.
	Access Management Plan Dealing with the impact on existing routes we would require an Access Management Plan to be developed in consultation with the Highland Council as Access Authority and other relevant	An Outline Access Management Plan is provided in Appendix V2-11.1 of Volume 5 of this EIA Report.



Organisation	Response	How response has been considered
	partner organisations such as Nature Scot. This AMP would be included as part of the EIAR submitted with the full application, and is in accordance the Highland Wide Local Development Plan, Policy 77, which covers Outdoor Access.	An Access Management Plan (AMP) would be agreed post consent and is expected to form a condition of consent. Information from the AMP will be included in the Outdoor Access Management Plan as outlined in the Mitigation part of this Chapter and will inform measures being proposed as part of the Outdoor Access Management Plan.
	Effect on Existing Access Routes Included within the AMP we would expect to see how each known access route that was likely to be affected by the project would be dealt with both during construction, and following completion. In some circumstances this may only be whilst cables are being strung across a route, however at the other end the route could be impacted by construction traffic or pylon construction.	Noted.
	Access Improvements These plans will also assist in scrutinising what potential opportunities exist for improving public access though both temporary construction access and permanent maintenance access tracks.	Noted.

Effects Scoped Out

Operational Effects

10.3.10 The potential for the Proposed Development to give rise to traffic impacts would be limited to the construction phase only. No impacts are anticipated during the operational phase as the Proposed Development would not generate any new traffic, apart from during infrequent maintenance activities. On this basis, operational traffic assessment is scoped out of this assessment in its entirety, which THC has agreed with in their response to the Scoping Report².

Method of Baseline Data Collation

Desk Study

- 10.3.11 The desk study included reviews and identification of the following:
 - relevant transport policy;
 - accident data;
 - sensitive locations;
 - any other traffic sensitive receptors in the area (core paths, routes, communities, etc.);
 - Ordnance Survey (OS) plans; and

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² The Highlands Council (02 March 2022), Planning Reference 22/00339/SCOP, Scoping Response to Energy Consents Unit, Paragraph 3.47



• potential origin locations of construction staff and supply locations for construction material to inform extent of local area roads network to be included in the assessment.

Field Survey

- 10.3.12 Field surveys were also undertaken and comprised the following:
 - · collection of traffic flow and speed data.

Method of Assessment

- 10.3.13 The methodology adopted in this assessment involved the following key stages:
 - determine the existing baseline established from desk studies, field survey and consultation;
 - outline the potential effects arising from the works associated with the Proposed Development;
 - evaluate the significance of effects on receptors;
 - · identify any mitigation measures to prevent, minimise, reduce or offset possible significant effects; and
 - · assess residual effects.

Sensitivity of Receptor

- 10.3.14 The IEMA 'Guidelines for Environmental Impact Assessment' (2005) notes that the separate 'Guidelines for the Environmental Assessment of Road Traffic' (1993) document should be used to characterise the environmental traffic and transport effects (off-site effects) and the assessment of significance of major new developments. The guidelines intend to complement professional judgement and the experience of trained assessors.
- 10.3.15 In terms of traffic and transport impacts, the receptors are the users of the roads within the study area and the users of, and residents within, locations through which those roads pass.
- 10.3.16 The IEMA Guidelines includes guidance on how the sensitivity of receptors should be assessed. Using that as a base, professional judgement was used to develop a classification of sensitivity for users based on the characteristics of roads and locations. This is summarised in **Table V2-10.2**.

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Table V2-10.2: Classification of Receptor Sensitivity

Receptor	Sensitivity				
	High	Medium	Low	Negligible	
Users of Roads	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs. Includes roads with traffic control signals, waiting and loading restrictions, traffic calming measures.	Where the road is a local A or B class road, capable of regular use by HGV traffic. Includes roads where there is some traffic calming or traffic management measures.	Where the road is Trunk or A-class, constructed to accommodate significant HGV composition. Includes roads with little or no traffic calming or traffic management measures.	Where roads have no adjacent settlements. Includes new strategic trunk roads that would be little affected by additional traffic and suitable for Abnormal Loads and new strategic trunk road junctions capable of accommodating Abnormal Loads.	
Users/ Residents of Locations	Where a location is a large rural settlement containing a high number of community and public services and facilities.	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.	Where a location is a small rural settlement, few community or public facilities or services.	Where a location includes individual dwellings or scattered settlements with no facilities.	

10.3.17 Where a road passes through a location, users are considered subject to the highest level of sensitivity defined either by the road or local characterisations.

Magnitude of Impact

- 10.3.18 The following rules, also taken from the IEMA Guidelines are used to determine which road links within the study area should be considered for detailed assessment:
 - Rule 1 include highway links where traffic flows are predicted to increase by more than 30 % (or where the number of heavy goods vehicles is predicted to increase by more than 30 %); and
 - Rule 2 include any other specifically sensitive areas where traffic flows are predicted to increase by 10 % or more.
- 10.3.19 Examples of sensitive areas are presented in the IEMA Guidelines as hospitals, churches, schools, historical buildings.
- 10.3.20 The IEMA Guidelines identify the key impacts that are most important when assessing the magnitude of traffic impacts from an individual development; the impacts and levels of magnitude are discussed below:
 - Severance the IEMA Guidelines states that "severance is the perceived division that can occur within a community when it becomes separated by a major traffic artery." Further, "changes in traffic of 30 %, 60 %, and 90 % are regarded as producing 'slight', 'moderate', and 'substantial' [or minor, moderate, and major] changes in severance respectively". However, the Guidelines acknowledge that "the measurement and prediction of severance is extremely difficult". (Para 4.28);
 - Driver delay the IEMA Guidelines note that these delays are likely to be "significant [or major] when the traffic on the network surrounding the development is already at, or close to, the capacity of the system." (Para 4.32);



- Pedestrian delay the delay to pedestrians, as with driver delay, is likely only to be major when the
 traffic on the network surrounding the development is already at, or close to, the capacity of the
 system. An increase in total traffic of approximately 30 % can double the delay experienced by
 pedestrians attempting to cross the road and would be considered major;
- Pedestrian amenity the IEMA Guidelines suggests that a tentative threshold for judging the significance of changes in pedestrian amenity would be where the traffic flow (or its lorry component) is halved or doubled (Para 4.39). It is therefore considered that a change in the traffic flow of -50 % or +100 % would produce a major change in pedestrian amenity;
- Fear and intimidation there are no commonly agreed thresholds for estimating levels of fear and intimidation, from known traffic and physical conditions. However, as the impact is considered to be sensitive to traffic flow, changes in traffic flow of 30 %, 60 % and 90 % are regarded as producing minor, moderate and major changes respectively; and
- Accidents and safety professional judgement would be used to assess the implications of local circumstances, or factors which may elevate or lessen risks of accidents.
- 10.3.21 While not specifically identified as more vulnerable road users, cyclists are considered in similar terms to pedestrians.

Cumulative Effects

- 10.3.22 A sensitivity review is undertaken as part of the cumulative assessment to inform THC of possible issues should the two substation extensions at Broadford and Edinbane (subject to separate planning applications) be constructed at the same time as the Proposed Development.
- 10.3.23 A review of other developments in the area has been undertaken to determine cumulative flows. This is detailed in **Appendix V2-10.1.**

Significance Criteria

- 10.3.24 To determine the overall significance of effects, the results from the receptor sensitivity and magnitude of change assessments are correlated and classified using a scale set out in Table 2.4 of Volume 11, Section 2, Part 5 of the Design Manual for Roads and Bridges (DMRB) and summarised in **Table V2-10.3** below.
- 10.3.25 The DMRB defines the potential changes in effect as follows:
 - Large: These effects are considered to be material in the decision making process;
 - Moderate: These effects may be important but are not likely to be material factors in decision making.
 The cumulative effects of such factors may influence decision-making if they lead to an increase in the overall adverse effect on a receptor;
 - Slight: These effects may be raised as local factors. They are unlikely to be critical in the decisionmaking process, but are important in improving the subsequent design of the project; and
 - Neutral: No effects or those that are imperceptible.



Table V2-10.3: Significance of Effects

Receptor Sensitivity	Magnitude of Impact				
Sensitivity	Major	Moderate	Minor	Negligible	
High	Large	Large / Moderate	Moderate / Slight	Slight	
Medium	Large / Moderate	Moderate	Slight	Slight / Neutral	
Low	Moderate / Slight	Slight	Slight	Slight / Neutral	
Negligible	Slight	Slight	Slight / Neutral	Neutral	

10.3.26 In terms of the EIA Regulations, effects would be considered of significance where they are assessed to be Large or Moderate. Where an effect could be one of Large / Moderate or Moderate / Slight, professional judgement would be used to determine which significance criterion should be applicable.

Limitations and Assumptions

- 10.3.27 The assessment is based upon average traffic flows over the duration of each of the Sections of the Proposed Development (i.e. Sections 0 to 6). During the construction period, activities at the site may fluctuate between one day and another and it is not possible to develop fully a day-by-day traffic flow estimate as no Principal Contractor has been appointed and external factors can impact upon activities on a day-by-day basis (weather conditions, availability of materials, time of year, etc).
- 10.3.28 Please note that variances may occur in the calculations due to rounding. These variances are not considered significant.

10.4 Section 0: Ardmore to Edinbane

Extent of the Study Area

- 10.4.1 Strategic access to the Proposed Development within Section 0 is available from the A82 (T) and A87 (T).
- 10.4.2 The extent of the study area for Section 0 is as follows:
 - C1227 (Macleod's Terrace) between Stein and Halistra;
 - B886 between A850 / B886 junction and Stein;
 - A850 between Dunvegan and Borve;
 - A863 between Sligachan and Dunvegan;
 - A87 (T) between Invergarry and Borve; and
 - A82 (T) between Letterfinlay and Invergarry.
- 10.4.3 The extent of Section 0 study area is illustrated in Appendix V2-10.1 of this EIA Report.

Baseline

Existing Traffic Conditions

10.4.4 Construction of the Proposed Development within Section 0 would likely be undertaken utilising tracked excavators and rock breaking equipment, accessed from existing access tracks. Access junctions to the tracks will be in the form of existing and upgraded (where required) bellmouth junctions, which would be designed and



- constructed to THC design standards. The use of helicopters for the delivery of materials is likely to be utilised throughout this Section to minimise vehicular access to each pole location.
- 10.4.5 In order to assess the impact of the construction traffic on the Section 0 study area, traffic data was collected by means of Automatic Traffic Count (ATC) surveys and by obtaining existing traffic data from the Department for Traffic (DfT) database. Further details of the locations of the count sites as well as the source of the traffic information which is used within the Section 0 study area is presented in **Appendix V2-10.1**.
- 10.4.6 The count sites used in the study area for Section 0 are as follows:
 - B886, approximately 2.5 km north of B886 / A850 junction;
 - Unclassified road linking A863 and A850;
 - A850, South of Fairy Bridge;
 - A850, East of Dunvegan;
 - A863, Kilmuir;
 - A850, Edinbane;
 - A87, South of Portree;
 - A87, West of Broadford;
 - A87, Broadford;
 - A87, Broadford Aerodrome;
 - A87, Kyle of Lochalsh;
 - A87, Near Keppoch;
 - A87, West of Bunloinn;
 - A87, South of Bunloinn; and
 - A82, Laggan.
- 10.4.7 The traffic counters allowed the traffic flows to be split into vehicle classes. The data was summarised into Cars / Light good vehicles (LGVs) and Heavy goods vehicles (HGVs) (all goods vehicles >3.5 tonnes gross maximum weight). A summary of the results for the average 24-hour daily period is provided in **Table V2-10.4**.

Table V2-10.4: 2022 Existing Traffic Conditions (Average Two Way Flows) - Section 0

Ref. No.	Survey Location	Car & LGV	HGV	Total
ATC 1	B886, approximately 2.5 km north of B886 / A850 junction*	442	146	588
ATC 2	Unclassified road linking A863 and A850 *	362	117	479
DfT. 1	A850, South of Fairy Bridge*	961	22	983
DfT. 2	A850, East of Dunvegan*	1117	30	1147
DfT. 3	A863, Kilmuir*	1194	39	1233
DfT. 4	A850, Edinbane*	1326	52	1378
DfT. 8	A87, South of Portree	3221	214	3435
DfT. 9	A87, West of Broadford	3205	199	3404



Ref. No.	Survey Location	Car & LGV	HGV	Total
DfT. 11	A87, Broadford	6596	194	6790
DfT. 12	A87, Broadford Aerodrome	3866	201	4068
DfT. 14	A87, Kyle of Lochalsh	4681	213	4893
DfT. 15	A87, Near Keppoch	3458	365	3823
DfT. 17	A87, West of Bunloinn	2137	181	2318
DfT. 18	A87, South of Bunloinn	1460	77	1537
DfT. 20	A82, Laggan	4072	263	4334

10.4.8 The ATC sites used to provide traffic volume data were also used to collect speed statistics. The two-way five-day average and 85th percentile speeds observed at the count locations which are within the Section 0 study area are summarised below in **Table V2-10.5**. It should be noted that no speed survey information was available from the DfT count points.

Table V2-10.5: 2022 Existing Traffic Conditions (Speed Summary) - Section 0

Ref. No.	Survey Location	Mean Speed (mph)	85th %ile Speed (mph)	Speed Limit (mph)
ATC 1	B886, approximately 2.5 km north of B886 / A850 junction	37	45	60 mph
ATC 2	Unclassified road linking A863 and A850	39	47	60 mph

10.4.9 The speed survey data indicates that there is compliance with current speed limits on the links assessed.

Accident Review

- 10.4.10 During the five-year period between 01 January 2016 and 31 December 2020, the following accident data was recorded along roads which are within the Section 0 study area (as presented in **Figure V2-10.3**):
 - a total of six accidents were recorded on roads within the Section 0 study area, of which six were recorded as slight;
 - five of the accidents occurred along the A850 and one accident occurred on the A863; and
 - one incident was recorded along the A850, involving three vehicles which included an HGV.

Cycle and Pedestrian Network

- 10.4.11 A review of the online core path mapping available on THC's online mapping facility and information received from THC indicates that Stein to Gillen (SL10.01) Core Path which comprises a track located in the vicinity of Section 0 of the Proposed Development.
- 10.4.12 A number of wider paths would also be affected by the Proposed Development which includes:
 - a hill path which crosses at the rear of Lusta crofts;

^{*} Survey locations lies within the locality of Section 0

- TRANSMISSION
 - an old disused single track road which crosses the proposed OHL; and
 - Feorlig to Ben Aketil Wind Farm hill track.
 - 10.4.13 A review of Sustrans' map of the National Cycle Network indicates that there are no National Cycle Network routes in the vicinity of the Proposed Development within Section 0.

Future Year Baseline

- 10.4.14 Construction of the Skye Reinforcement Project is expected to commence in 2024, if consent is granted, and the total construction of the Proposed Development (Section 0 − 6) is anticipated to take approximately three years to construct and a further seven months for dismantling works associated with the existing OHL, depending on weather conditions and ecological considerations.
- 10.4.15 To assess the likely effects during the construction and typical operational phases, base year flows were forecast by applying a National Road Traffic Forecast (NRTF) low growth factor to the 2022 flows, as set out in **Table V2-10-4**. The NRTF low growth factor for 2022 to 2024 is 1.011.
- 10.4.16 The estimated Future Baseline Flows are shown in **Table V2-10.6**. This will be used in the Construction Peak Traffic Impact Assessment.

Table V2-10.6: Future Baseline Flows (2024 Flows) - Section 0

Ref. No.	Survey Location	Car / LGV	HGV	Total
ATC 1	B886, approximately 2.5 km north of B886 / A850 junction*	447	148	594
ATC 2	Unclassified road linking A863 and A850 *	366	118	484
DfT. 1	A850, South of Fairy Bridge*	971	23	994
DfT. 2	A850, East of Dunvegan*	1129	30	1159
DfT. 3	A863, Kilmuir*	1207	39	1246
DfT. 4	A850, Edinbane*	1340	53	1393
DfT. 8	A87, South of Portree	3257	216	3473
DfT. 9	A87, West of Broadford	3240	201	3442
DfT. 11	A87, Broadford	6669	196	6865
DfT. 12	A87, Broadford Aerodrome	3909	204	4112
DfT. 14	A87, Kyle of Lochalsh	4732	215	4947
DfT. 15	A87, Near Keppoch	3496	369	3865
DfT. 17	A87, West of Bunloinn	2161	183	2343
DfT. 18	A87, South of Bunloinn	1477	77	1554
DfT. 20	A82, Laggan	4116	266	4382

Please note minor variances due to rounding may occur



Summary of Sensitive Receptors

10.4.17 A summary of the sensitive receptors within the Section 0 study area is presented in **Table V2-10.7**.

Table V2-10.7: Summary of Sensitive Receptors – Section 0

Receptor	Sensitivity	Justification
A82 (T) / A87 (T) Road Users	Low	Where the road is Trunk or A-class, constructed to accommodate significant HGV composition.
A863 Road Users	Medium	Where the road is a local A or B class road, capable of regular use by HGV traffic.
A850 Road Users	Medium	Where the road is a local A or B class road, capable of regular use by HGV traffic.
B886 Road Users	Medium	Where the road is a local A or B class road, capable of regular use by HGV traffic.
Minor Roads and Access Tracks Road Users (including C1227 (Macleod's Terrace))	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs.
Invergarry Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Shiel Bridge Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.
Inverinate Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.
Dornie Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Auchtertyre Residents	Low	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Kyle of Lochalsh Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Kyleakin Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Breakish / Harrapool Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Broadford Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Sconser Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.
Sligachan Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.

^{*} Survey locations lie within the locality of Section 0



K.	Α	N	5	M	1.5	5	N

Receptor	Sensitivity	Justification
Portree Residents	High	Where a location is a large rural settlement containing a high number of community and public services and facilities.
Residents along the A850	Negligible	Where a location includes individual dwellings or scattered settlements with no facilities.
Edinbane Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Dunvegan Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Residents along the B886	Negligible	Where a location includes individual dwellings or scattered settlements with no facilities.
Core Paths	High	Minor path used by walkers and cyclists, not constructed to accommodate HGV traffic flows.

- 10.4.18 Where a road passes through a location, users are considered subject to the highest level of sensitivity defined by either the road or location characteristics.
- 10.4.19 Based on the examples of sensitive areas (e.g. hospitals, churches, schools, historical buildings), as outlined in the Magnitude of Effect section (paragraph 10.3.19) earlier in this Chapter, the following areas are considered sensitive and will be subject to 'Rule 2' of the IEMA Guidelines which requires a full assessment of effects if the locations are subject to an increase in 10 % of traffic:
 - Invergarry;
 - Dornie;
 - Auchtertyre;
 - Kyle of Lochalsh;
 - Broadford;
 - · Sconser;
 - Portree;
 - Edinbane;
 - Dunvegan; and
 - Core Paths.
- 10.4.20 All other locations within the study area are subject to 'Rule 1' and are assessed if traffic flows (or HGV flows) on highway links increase by more than 30 %.

Assessment of Likely Significant Effects

Construction Effects

10.4.21 Traffic generation for Section 0 is presented in Appendix V2-10.1 and has been estimated by SSEN Transmission, based upon their experience from similar projects. For the purpose of this assessment, it has been estimated that the construction will take up to sixteen months. A summary table of the estimated construction traffic is presented in Appendix V2-10.1 which outlines the average vehicle trips associated with Section 0 construction activities.

- TRANSMISSION
 - 10.4.22 As it is assumed that all seven Sections would be constructed concurrently, in order to assess the impact of the Proposed Development, construction trips associated with Sections 1, 2, 3, 4, 5 and 6 are expected to impact road links on the Section 0 study area and must therefore also be considered.
 - 10.4.23 The construction traffic was compared against the future baseline traffic to estimate the increase in traffic associated with the Proposed Development. **Table V2-10.8** illustrates the potential traffic impact of construction activity.

Table V2-10.8: Traffic Impact Summary - Section 0

					ı		1
Ref. No.	Survey Location	Car / LGV	HGV	Total	Car / LGV % Increase	HGV % Increase	Total % Increase
ATC 1	B886, approxima tely 2.5 km north of B886 / A850 junction*	457	149	605	2.23%	0.64%	1.83%
ATC 2	Unclassifie d road linking A863 and A850*	369	118	487	0.81%	0.25%	0.67%
DfT. 1	A850, South of Fairy Bridge*	979	24	1003	0.82%	3.38%	0.88%
DfT. 2	A850, East of Dunvegan*	1137	31	1168	0.70%	2.57%	0.75%
DfT. 3	A863, Kilmuir*	1210	40	1249	0.25%	0.76%	0.26%
DfT. 4	A850, Edinbane*	1356	54	1410	1.19%	2.92%	1.25%
DfT. 8	A87, South of Portree	3349	231	3580	2.83%	6.85%	3.08%
DfT. 9	A87, West of Broadford	3808	359	4166	17.51%	78.13%	21.06%
DfT. 11	A87, Broadford	7244	366	7611	8.63%	86.63%	10.86%
DfT. 12	A87, Broadford Aerodrome	4484	374	4858	14.73%	83.55%	18.13%
DfT. 14	A87, Kyle of Lochalsh	5308	385	5693	12.16%	79.13%	15.07%
DfT. 15	A87, Near Keppoch	4072	539	4611	16.46%	46.10%	19.29%



Ref. No.	Survey Location	Car / LGV	HGV	Total	Car / LGV % Increase	HGV % Increase	Total % Increase
DfT. 17	A87, West of Bunloinn	2850	416	3266	31.93%	127.48%	39.38%
DfT. 18	A87, South of Bunloinn	2122	291	2413	43.72%	275.17%	55.26%
DfT. 20	A82, Laggan	4898	534	5432	18.99%	101.02%	23.96%

- 10.4.24 The total traffic movements are not predicted to increase by more than 30 % at the survey locations which are located within the locality of Section 0.
- 10.4.25 On road links within the Section 0 study area, total traffic movements are expected to increase by more than 30 % along the A87 to the west of Bunloinn (DfT 17) and to the south of Bunloinn (DfT 18) which amounts to 923 and 859 trips, respectively. Assuming that deliveries arrive within a 10-hour window daily, in order to be robust, these amount to approximately 92 and 86 trips per hour, respectively, or less than two trips per minute on each road link.
- 10.4.26 The total HGV traffic movements are expected to increase by over 30 % on the A87 and A82 road links at the following locations:
 - A87, west of Broadford (DfT 9) which sees an increase in HGVs by 157 HGVs per day which equates to 16 HGVs per hour (8 inbound trips and 8 outbound trips);
 - A87 at the following count locations Broadford (DfT 11), Bradford Aerodome (DfT 12), Kyle of Lochalsh (DfT 14) and Near Kennoch (DfT 15) which sees an increase in HGVs by 170 HGVs per day which equates to 17 HGVs per hour (9 inbound HGV trips and 9 outbound HGV trips);
 - A87, west of Bunloinn (DfT 17) which sees an increase in HGVs by 233 HGVs per day which equates to 23 HGVs per hour (12 inbound HGV trips and 12 outbound HGV trips);
 - A87, South of Bunloinn (DfT 18) which sees an increase in HGVs by 213 HGVs per day which equates to 21 HGVs per hour (11 inbound HGV trips and 11 outbound HGV trips); and
 - A82, Laggan (DfT 20) which sees an increase in HGVs by 268 HGVs per day which equates to 27 HGVs per hour (14 inbound HGV trips and 14 outbound HGV trips).
- 10.4.27 The increases in HGV flows listed above are not considered significant in terms of overall total flows.
- 10.4.28 **Table V2-10.8** suggests that traffic passing through the following sensitive locations (examples in paragraph 10.3.19) would increase by more than 10% (Rule 2) and so road users passing through these locations and residents of these locations should be assessed further:
 - Broadford;
 - Kyle of Lochalsh;
 - Auchtertyre;
 - Dornie: and
 - Invergarry.

^{*} Survey locations lie within the locality of Section 0

- 10.4.29 The results in **Table V2-10.8** suggest that the increase in either total flows or HGVs exceed 30% (Rule 1) for the following receptors:
 - Users of A82 (T) and A87 (T);
 - · Inverinate residents; and
 - Shiel Bridge residents.
- 10.4.30 In summary, the following receptors are being brought forward for overall assessment:
 - users of A82 (T) and A87 (T);
 - Broadford residents;
 - Kyle of Lochalsh residents;
 - · Auchtertyre residents;
 - Dornie residents;
 - Inverinate residents;
 - Shiel Bridge residents; and
 - Invergarry residents.
- 10.4.31 It should be noted that the effects of Core Path Users and Minor Roads and Access Tracks Road Users are also included in the further assessment, as these are located in the vicinity of Section 0 which would see a greater increase in construction traffic, and as such will be included in the further assessment.
- 10.4.32 It should also be noted the construction phase is transitory in nature.
- 10.4.33 A review of existing road capacity has been undertaken using the DRMB, Volume 15, Part 5 "The NESA Manual". The theoretical road capacity has been estimated for each of the road links for a 12-hour period that makes up the study area. The results are summarised in **Table V2-10.9**.

Table V2-10.9: 2024 Daily Traffic Capacity Review Summary - Section 0

Ref. No.	Survey Location	2024 Baseline Flow	Theoretical Capacity	2024 Base + Development Flows	2024 Base + Development Used Capacity %	Spare Road Capacity %
ATC 1	B886, approximately 2.5 km north of B886 / A850 junction*	594	3360	605	18%	82%
ATC 2	Unclassified road linking A863 and A850 *	484	3360	487	15%	85%
DfT. 1	A850, South of Fairy Bridge*	994	19200	1003	5%	95%
DfT. 2	A850, East of Dunvegan*	1159	19200	1168	6%	94%
DfT. 3	A863, Kilmuir*	1246	19200	1249	7%	93%
DfT. 4	A850, Edinbane*	1393	21600	1410	7%	93%
DfT. 8	A87, South of Portree	3473	21600	3580	17%	83%



K.	Α	N	5	M	1.5	5	N

Ref. No.	Survey Location	2024 Baseline Flow	Theoretical Capacity	2024 Base + Development Flows	2024 Base + Development Used Capacity %	Spare Road Capacity %
DfT. 9	A87, West of Broadford	3442	21600	4166	19%	81%
DfT. 11	A87, Broadford	6865	21600	7611	35%	65%
DfT. 12	A87, Broadford Aerodrome	4112	19200	4858	25%	75%
DfT. 14	A87, Kyle of Lochalsh	4947	28800	5693	20%	80%
DfT. 15	A87, Near Keppoch	3865	21600	4611	21%	79%
DfT. 17	A87, West of Bunloinn	2343	19200	3266	17%	83%
DfT. 18	A87, South of Bunloinn	1554	21600	2413	11%	89%
DfT. 20	A82, Laggan	4382	21600	5432	25%	75%

10.4.34 The results indicate there are no road capacity issues with the Proposed Development and ample spare capacity exists within the trunk and local road network to accommodate the construction phase traffic.

10.5 Section 1: Edinbane to North of Sligachan

Extent of the Study Area

- 10.5.1 Strategic access to the Proposed Development in Section 1 is available from the A82 (T) and A87 (T).
- 10.5.2 The extent of the study area for Section 1 is as follows:
 - B885 between the site access point and Bracadale, with traffic only accessing the Site from Bracadale.
 No access to the Site will be available from Portree via the B885;
 - A850 between Dunvegan and Borve;
 - · A863 between Sligachan and Dunvegan;
 - A87 (T) between Invergarry and Sligachan; and
 - A82 (T) between Letterfinlay and Invergarry.
- 10.5.3 The extent of the Section 1 study area is illustrated in Appendix V2-10.1 of this EIA Report.

Baseline

Existing Traffic Conditions

10.5.4 The Proposed Development within Section 1 would be accessed from a combination of new and existing access tracks. Access junctions to the tracks would be in the form of existing, new and temporary bellmouth junctions which would be designed and constructed to THC design standards. The locations of the access points to Section 1 of the Proposed Development are shown **Appendix V2-10.1**.

^{*} Survey locations lies within the locality of Section 0

- TRANSMISSION
 - 10.5.5 In order to assess the impact of the construction traffic on the Section 1 study area, traffic data was collected from existing traffic data from the DfT database. Further details of the locations of the count sites as well as the source of the traffic information which is used within the Section 1 study area is presented in Appendix V2-10.1.
 - 10.5.6 The count sites used in the study area for Section 1 are as follows:
 - A863, Ose
 - A863, North of Drynoch
 - · A863, East of Drynoch
 - A87, South of Portree
 - A87, West of Broadford
 - A87, Broadford
 - A87, Broadford Aerodrome
 - A87, Kyle of Lochalsh
 - A87, Near Keppoch
 - A87, West of Bunloinn
 - A87, South of Bunloinn
 - A82, Laggan
 - 10.5.7 The traffic counters allowed the traffic flows to be split into vehicle classes. The data was summarised into LGVs and HGVs (all goods vehicles >3.5 tonnes gross maximum weight). A summary of the results for the average 24-hour daily period is provided in **Table V2-10.10**.

Table V2-10.10: 2022 Existing Traffic Conditions (Average Two Way Flows) - Section 1

Ref. No.	Survey Location	Car & LGV	HGV	Total
DfT. 5	A863, Ose*	818	14	832
DfT. 6	A863, North of Drynoch*	558	66	624
DfT. 7	A863, East of Drynoch*	1186	67	1253
DfT. 8	A87, South of Portree*	3221	214	3435
DfT. 9	A87, West of Broadford	3205	199	3404
DfT. 11	A87, Broadford	6596	194	6790
DfT. 12	A87, Broadford Aerodrome	3866	201	4068
DfT. 14	A87, Kyle of Lochalsh	4681	213	4893
DfT. 15	A87, Near Keppoch	3458	365	3823
DfT. 17	A87, West of Bunloinn	2137	181	2318
DfT. 18	A87, South of Bunloinn	1460	77	1537
DfT. 20	A82, Laggan	4072	263	4334



* Survey locations lies within the locality of Section 1

10.5.8 It should be noted no speed survey information was available from the DfT count points.

Accident Review

- 10.5.9 During the five-year period between 01 January 2016 and 31 December 2020, the following accident data was recorded along roads which are within the vicinity of Section 1 (as presented in **Figure V2-10.3**):
 - a total of 35 accidents were recorded on roads within the vicinity of Section 1, of which 28 were recorded as slight, six were recorded as serious and one fatality was recorded;
 - the accident which was recorded as fatal occurred approximately 4 km along the A87 to the northwest of Sligachan and involved four vehicles which included a HGV;
 - a total of two incidents involving motorcycles were recorded;
 - one incident involving a motorcycle was recorded as a three-vehicle collision, including cars, and was recorded as serious;
 - a separate incident involving a motorcycle and a car occurred along the A863 and was recorded as slight:
 - five incidents involving pedestrian casualties were recorded. All of these incidents were recorded along
 the A87 in Portree between the A87 / Bridge Road priority junction and A87 / Struan Road priority
 junction. A total of four incidents were recorded as slight and one incident was recorded as serious.
 One of the incidents which was recorded as slight, also involved a HGV, while all of the other incidents
 also involved cars; and
 - a total of four incidents involved HGVs, of which two incidents were recorded as slight, one incident was recorded as serious and one was recorded as a fatality, which has been described above.

Cycle and Pedestrian Network

- 10.5.10 A review of the online core path mapping available on THCs online mapping facility and information received from THC indicates that Loch Caroy to Glen Vic Askill (SL28.01) comprising track is located in the vicinity of the Proposed Development within Section 1.
- 10.5.11 A wider access path located at Edinbane Wind Farm access road and a Public Right of Way (PRoW) close to the B885 Glen Vicaskill route are also located in the vicinity of the Proposed Development. A review of Sustrans' map of the National Cycle Network indicates that there are no National Cycle Network routes in the vicinity of the Proposed Development within Section 1.

Future Baseline

- 10.5.12 Construction of the Skye Reinforcement Project is expected to commence in 2024, if consent is granted, and the total construction of the Proposed Development (Section 0 − 6) is anticipated to take approximately three years to construct and a further seven months for dismantling works associated with the existing OHL.
- 10.5.13 To assess the likely effects during the construction and typical operational phases, base year flows were forecast by applying a NRTF low growth factor to the 2022 flows in **Table V2-10.10**. The NRTF low growth factor for 2022 to 2024 is 1.011.
- 10.5.14 The estimated Future Baseline Flows are shown in **Table V2-10.11**. This will be used in the Construction Peak Traffic Impact Assessment.



Table V2-10.11: Future Baseline Flows (2024 Flows) - Section 1

Ref. No.	Survey Location	Car / LGV	HGV	Total
DfT. 5	A863, Ose*	827	14	841
DfT. 6	A863, North of Drynoch*	564	67	631
DfT. 7	A863, East of Drynoch*	1199	68	1267
DfT. 8	A87, South of Portree*	3257	216	3473
DfT. 9	A87, West of Broadford	3240	201	3442
DfT. 11	A87, Broadford	6669	196	6865
DfT. 12	A87, Broadford Aerodrome	3909	204	4112
DfT. 14	A87, Kyle of Lochalsh	4732	215	4947
DfT. 15	A87, Near Keppoch	3496	369	3865
DfT. 17	A87, West of Bunloinn	2161	183	2343
DfT. 18	A87, South of Bunloinn	1477	77	1554
DfT. 20	A82, Laggan	4116	266	4382

Summary of Sensitive Receptors

10.5.15 A summary of the sensitive receptors within the Section 1 study area is presented in **Table V2-10.12**.

Table V2-10.12: Summary of Sensitive Receptors – Section 1

Receptor	Sensitivity	Justification
A82 (T) / A87 (T) Road Users	Low	Where the road is Trunk or A-class, constructed to accommodate significant HGV composition.
A863 Road Users	Medium	Where the road is a local A or B class road, capable of regular use by HGV traffic.
Minor Roads and Access Tracks Road Users	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs.
Invergarry Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Shiel Bridge Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.
Inverinate Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.

^{*} Survey locations lies within the locality of Section 1



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Receptor	Sensitivity	Justification
Dornie Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Auchtertyre Residents	Low	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Kyle of Lochalsh Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Kyleakin Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Breakish / Harrapool Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Broadford Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Sconser Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.
Core Paths	High	Minor path used by walkers and cyclists, not constructed to accommodate HGV traffic flows.

- 10.5.16 Where a road passes through a location, users are considered subject to the highest level of sensitivity defined by either the road or location characteristics.
- 10.5.17 Based on the examples of sensitive areas (e.g. hospitals, churches, schools, historical buildings), as outlined in the Magnitude of Effect section earlier in this Chapter (paragraph 10.3.19, the following areas are considered sensitive and will be subject to 'Rule 2' of the IEMA Guidelines which requires a full assessment of effects if the locations are subject to an increase in 10 % of traffic:
 - Invergarry;
 - Dornie;
 - Auchtertyre;
 - · Kyle of Lochalsh;
 - Broadford;
 - Sconser; and
 - Core Paths.
- 10.5.18 All other locations within the study area are subject to 'Rule 1' and are assessed if traffic flows (or HGV flows) on highway links increase by more than 30 %.

Assessment of Likely Significant Effects

Construction Effects

- 10.5.19 Traffic generation for Sections 1 to 6 is presented in **Appendix V2-10.1** and have been estimated by SSEN Transmission based upon their experience from similar projects.
- 10.5.20 As it is assumed that all seven Sections would be constructed concurrently, in order to assess the impact of the Proposed Development, construction trips associated with Sections 0, 2, 3, 4, 5 and 6 which are expected to impact road links on the Section 1 study area must also be considered.



10.5.21 The construction traffic was compared against the future baseline traffic to estimate the increase in traffic associated with the Proposed Development. **Table V2-10.13** illustrates the potential traffic impact of construction activity.

Table V2-10.13: Traffic Impact Summary - Section 1

Ref. No.	Survey Location	Car / LGV	HGV	Total	Car / LGV % Increase	HGV % Increase	Total % Increase
DfT. 5	A863, Ose*	829	15	845	0.35%	7.02%	0.47%
DfT. 6	A863, North of Drynoch*	702	118	821	24.48%	76.11%	29.97%
DfT. 7	A863, East of Drynoch*	1337	119	1456	11.52%	74.95%	14.94%
DfT. 8	A87, South of Portree*	3349	231	3580	2.83%	6.85%	3.08%
DfT. 9	A87, West of Broadford	3808	359	4166	17.51%	78.13%	21.06%
DfT. 11	A87, Broadford	7244	366	7611	8.63%	86.63%	10.86%
DfT. 12	A87, Broadford Aerodrome	4484	374	4858	14.73%	83.55%	18.13%
DfT. 14	A87, Kyle of Lochalsh	5308	385	5693	12.16%	79.13%	15.07%
DfT. 15	A87, Near Keppoch	4072	539	4611	16.46%	46.10%	19.29%
DfT. 17	A87, West of Bunloinn	2850	416	3266	31.93%	127.48%	39.38%
DfT. 18	A87, South of Bunloinn	2122	291	2413	43.72%	275.17%	55.26%
DfT. 20	A82, Laggan	4898	534	5432	18.99%	101.02%	23.96%

Please note minor variances due to rounding may occur.

- 10.5.22 The total traffic movements are not predicted to increase by more than 30 % at the survey locations which are located within the locality of Section 1.
- 10.5.23 The total HGV traffic movements are expected to increase significantly on the A863 to the north and east of Drynoch (DfT 6 and DfT 7), respectively, within the Section 1 locality. Whilst the increases are statistically significant, it is generally caused by the relatively low HGV flows on the A863. This road would see an additional 51 HGV journeys per day which equates to approximately 5 HGV trips per hour, assuming a 10-hour delivery window in order to be robust, which is not considered significant in terms of overall traffic flows.
- 10.5.24 On road links within the Section 1 study area, total traffic movements are expected to increase by more than 30 % along the A87 to the west of Bunloinn (DfT 17) and to the south of Bunloinn (DfT 18) which amounts to 923 and 859 trips, respectively. Assuming that deliveries arrive within a 10-hour window daily on the study network, in order to be robust, these amount to approximately 92 and 86 trips per hour, respectively, or less than two trips per minute on each road link.

^{*} Survey locations lies within the locality of Section 1



- 10.5.25 The total HGV traffic movements are expected to increase by over 30 % on the A87 and A82 road links at the following locations:
 - A87, west of Broadford (DfT 9) which sees an increase in HGVs by 157 HGVs per day which equates to 16 HGVs per hour (8 inbound trips and 8 outbound trips);
 - A87 at the following count locations Broadford (DfT 11), Bradford Aerodome (DfT 12), Kyle of Lochalsh (DfT 14) and Near Keppoch (DfT 15) which sees an increase in HGVs by 170 HGVs per day which equates to 17 HGVs per hour (9 inbound HGV trips and 9 outbound HGV trips);
 - A87, west of Bunloinn (DfT 17) which sees an increase in HGVs by 233 HGVs per day which equates to 23 HGVs per hour (12 inbound HGV trips and 12 outbound HGV trips);
 - A87, South of Bunloinn (DfT 18) which sees an increase in HGVs by 200 HGVs per day which equates to 20 HGVs per hour (11 inbound HGV trips and 11 outbound HGV trips); and
 - A82, Laggan (DfT 20) which sees an increase in HGVs by 268 HGVs per day which equates to 27 HGVs per hour (14 inbound HGV trips and 14 outbound HGV trips).
- 10.5.26 The increases in HGV flows listed above are not considered significant in terms of overall total flows.
- 10.5.27 **Table V2-10.13** suggests that traffic passing through the following sensitive locations (paragraph 10.3.19) would increase by more than 10 % and so should be assessed further:
 - Invergarry;
 - Dornie;
 - Auchtertyre;
 - · Kyle of Lochalsh; and
 - Broadford.
- 10.5.28 The results in **Table V2-10.13** suggests that the increase in either total flows or HGVs exceed 30 % (Rule 1) for the following receptors:
 - Users of A863;
 - Users of A82 (T) and A87 (T);
 - · Inverinate residents; and
 - Shiel Bridge residents.
- 10.5.29 In summary, the following receptors are being brought forward for overall assessment:
 - Users of A863;
 - Users of A82 (T) and A87 (T);
 - Broadford Residents;
 - Kyle of Lochalsh Residents;
 - Auchtertyre Residents;
 - Dornie Residents;
 - Inverinate Residents;
 - Shiel Bridge Residents; and
 - Invergarry Residents.
- 10.5.30 It should be noted that the effects of Core Path Users and Minor Roads and Access Tracks Road Users are also included in the further assessment, as these are located in the vicinity of Section 1 which would see a greater increase in construction traffic. It should also be noted the construction phase is transitory in nature.



10.5.31 A review of existing road capacity has been undertaken using the DRMB, Volume 15, Part 5 "The NESA Manual". The theoretical road capacity has been estimated for each of the road links for a 12-hour period that makes up the study area. The results are summarised in **Table V2-10.14**.

Table V2-10.14: 2024 Daily Traffic Capacity Review Summary - Section 1

Ref. No.	Survey Location	2024 Baseline Flow	Theoretical Capacity	2024 Base + Development Flows	2024 Base + Development Used Capacity %	Spare Road Capacity %
DfT. 5	A863, Ose*	841	19200	845	4%	96%
DfT. 6	A863, North of Drynoch*	631	19200	821	4%	96%
DfT. 7	A863, East of Drynoch*	1267	21600	1456	7%	93%
DfT. 8	A87, South of Portree*	3473	21600	3580	17%	83%
DfT. 9	A87, West of Broadford	3442	21600	4166	19%	81%
DfT. 11	A87, Broadford	6865	21600	7611	35%	65%
DfT. 12	A87, Broadford Aerodrome	4112	19200	4858	25%	75%
DfT. 14	A87, Kyle of Lochalsh	4947	28800	5693	20%	80%
DfT. 15	A87, Near Keppoch	3865	21600	4611	21%	79%
DfT. 17	A87, West of Bunloinn	2343	19200	3266	17%	83%
DfT. 18	A87, South of Bunloinn	1554	21600	2413	11%	89%
DfT. 20	A82, Laggan	4382	21600	5432	25%	75%

Please note minor variances due to rounding may occur.

10.5.32 The results indicate there are no road capacity issues with the Proposed Development and ample spare capacity exists within the trunk and local road network to accommodate construction phase traffic.

10.6 Section 2: North of Sligachan to Broadford

Extent of the Study Area

- 10.6.1 Strategic access to the Proposed Development within Section 2 is available from the A82 (T) and A87 (T).
- 10.6.2 The extent of the study area for Section 2 is as follows:
 - A82 (T) between Letterfinlay and Invergarry; and
 - A87 (T) between Invergarry and Sligachan.

^{*} Survey locations lies within the locality of Section 1

10.6.3 The extent of Section 2 study area is illustrated in Appendix V2-10.1 of this EIA Report.

Baseline

Existing Traffic Conditions

- 10.6.4 The Proposed Development within Section 2 would be accessed from a combination of new and existing access tracks. Access junctions to the tracks would be in the form of existing, new and temporary bellmouth junctions which would be designed and constructed to THC design standards. The locations of the access points to Section 2 of the Proposed Development are shown in **Appendix V2-10.1**.
- 10.6.5 A section of underground cable (approximately 1.8 km) would be required to be installed under the A87 between Sligachan and Sconser. The construction of this part of the Proposed Development would be facilitated by single lane closures along the A87 and appropriate traffic management procedures would enable traffic movements in both directions.
- 10.6.6 In order to assess the impact of the construction traffic on the Section 2 study area, traffic data was collected by means of ATC surveys and by obtaining existing traffic data from the DfT database. Further details of the locations of the count sites as well as the source of the traffic information which is used within the Section 2 study area is presented in in Appendix V2-10.1.
- 10.6.7 The count sites used in the study area for Section 2 are as follows:
 - A87, West of Broadford
 - A87, Broadford
 - A87, Broadford Aerodrome
 - A87, Kyle of Lochalsh
 - A87, Near Keppoch
 - A87, West of Bunloinn
 - A87, South of Bunloinn
 - A82, Laggan
- 10.6.8 The traffic counters allowed the traffic flows to be split into vehicle classes. The data was summarised into LGVs and HGVs (all goods vehicles >3.5 tonnes gross maximum weight). A summary of the results for the average 24-hour daily period is provided in **Table V2-10.15**.

Table V2-10-15: 2022 Existing Traffic Conditions (Average Two Way Flows) - Section 2

Ref. No.	Survey Location	Car & LGV	HGV	Total
DfT. 9	A87, West of Broadford*	3205	199	3404
DfT. 11	A87, Broadford	6596	194	6790
DfT. 12	A87, Broadford Aerodrome	3866	201	4068
DfT. 14	A87, Kyle of Lochalsh	4681	213	4893
DfT. 15	A87, Near Keppoch	3458	365	3823
DfT. 17	A87, West of Bunloinn	2137	181	2318
DfT. 18	A87, South of Bunloinn	1460	77	1537



Ref. No.	Survey Location	Car & LGV	HGV	Total
DfT. 20	A82, Laggan	4072	263	4334

10.6.9 It should be noted that no speed survey information was available from the DfT count points.

Accident Review

- 10.6.10 During the five-year period between 01 January 2016 and 31 December 2020, the following accident data was recorded along roads which are within the vicinity of Section 2 (as presented in **Figure V2-10.3**):
 - a total of 29 accidents were recorded on roads within the vicinity of Section 2, of which 24 were recorded as slight, four were recorded as serious and one fatality was recorded;
 - the fatal accident involved a pedestrian and a car, and occurred approximately 1.3 km to the north-east of Sligachan;
 - one slight incident involved a cyclist and a motorcycle, and occurred along the A87, Sligachan;
 - a separate incident involving a pedestrian was recorded along the A87, near Sconser. The incident involved a car and was recorded as a slight accident;
 - HGVs were involved in five separate incidents, of which, four were recorded as slight and one was recorded as serious; and
 - there are three separate locations where two accidents were recorded in close proximity to each other.

Cycle and Pedestrian Network

- 10.6.11 A review of the online core path mapping available on THC's online mapping facility and information received from THC indicates that Luib Hill Track (SL03.01), is located in the vicinity of the Proposed Development within Section 2.
- 10.6.12 There are a number of PRoWs which are also located in the vicinity of the Proposed Development which include:
 - PRoW HSL23 Sligachan to Braes route, which is also part of the unofficial Skye Trail route;
 - PRoW HSL46 Luib to Loch Slappin; and
 - PRoW HSL44 Strollamus to Torrin.
- 10.6.13 A review of Sustrans' map of the National Cycle Network indicates that there are no National Cycle Network routes in the vicinity of the Proposed Development within Section 2.
- 10.6.14 The Skye Cycle Way project is proposed to create a safe path between Skye Bridge and Broadford. It is proposed that the route will comprise mainly of the old road running along the A87 and will subsequently pass through Breakish in order to link with other proposed safe links.3 An update on the status of the project was presented in 19 August 2022.

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^{*} Survey locations lies within the locality of Section 2

³ Broadford and Strath Community Company (2022) Available at: https://www.broadfordandstrath.org/project/skye-cycle-way/ Accessed 25 August 2022



Future Year Baseline

- 10.6.15 Construction of the Skye Reinforcement Project is expected to commence in 2024, if consent is granted, and the total construction of the Proposed Development (Section 0-6) is anticipated to take approximately three years and seven months.
- 10.6.16 To assess the likely effects during the construction and typical operational phase, base year flows were forecast by applying a NRTF low growth factor to the 2022 flows in **Table V2-10.15**. The NRTF low growth factor for 2022 to 2024 is 1.011.
- 10.6.17 The estimated Future Baseline Flows are shown in **Table V2-10.16**. This will be used in the Construction Peak Traffic Impact Assessment.

Table V2-10.16: Future Baseline Flows (2024 Flows) - Section 2

Ref. No.	Survey Location	Car / LGV	HGV	Total
DfT. 9	A87, West of Broadford*	3240	201	3442
DfT. 11	A87, Broadford	6669	196	6865
DfT. 12	A87, Broadford Aerodrome	3909	204	4112
DfT. 14	A87, Kyle of Lochalsh	4732	215	4947
DfT. 15	A87, Near Keppoch	3496	369	3865
DfT. 17	A87, West of Bunloinn	2161	183	2343
DfT. 18	A87, South of Bunloinn	1477	77	1554
DfT. 20	A82, Laggan	4116	266	4382

Please note minor variances due to rounding may occur.

10.6.18 A summary of the sensitive receptors within the Section 2 study area is presented in Table V2-10.17.

Table V2-10.17: Summary of Sensitive Receptors – Section 2

Receptor	Sensitivity	Justification
A82 (T) / A87 (T) Road Users	Low	Where the road is Trunk or A-class, constructed to accommodate significant HGV composition.
Minor Roads and Access Tracks Road Users	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs.
Invergarry Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Shiel Bridge Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.
Inverinate Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.

^{*} Survey locations lies within the locality of Section 2 Summary of Sensitive Receptors



Receptor	Sensitivity	Justification
Dornie Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Auchtertyre Residents	Low	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Kyle of Lochalsh Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Kyleakin Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Breakish / Harrapool Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Broadford Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Sconser Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.
Core Paths	High	Minor path used by walkers and cyclists, not constructed to accommodate HGV traffic flows.

- 10.6.19 Where a road passes through a location, users are considered subject to the highest level of sensitivity defined by either the road or location characteristics.
- 10.6.20 Based on the examples of sensitive areas (e.g. hospitals, churches, schools, historical buildings), as outlined in the Magnitude of Effect section earlier in this Chapter (paragraph 10.3.19), the following areas are considered sensitive and will be subject to 'Rule 2' of the IEMA Guidelines which requires a full assessment of effects if the locations are subject to an increase in 10% of traffic:
 - Invergarry;
 - Dornie;
 - Auchtertyre;
 - · Kyle of Lochalsh;
 - Broadford;
 - Sconser; and
 - Core Paths.
- 10.6.21 All other locations within the study area are subject to 'Rule 1' and are assessed if traffic flows (or HGV flows) on highway links increase by more than 30 %.

Assessment of Likely Significant Effects

- 10.6.22 Traffic generation for Sections 1 to 6 is presented in **Appendix V2-10.1** and have been estimated by SSEN Transmission based upon their experience from similar projects.
- 10.6.23 As it is assumed that all seven Sections would be constructed concurrently, in order to assess the impact of the Proposed Development, construction trips associated with Sections 0, 1, 3, 4, 5 and 6 which are expected to impact road links on the Section 2 study area must also be considered.



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10.6.24 The construction traffic was compared against the future baseline traffic to estimate the increase in traffic associated with the Proposed Development. **Table V2-10.18** illustrates the potential traffic impact of construction activity.

Table V2-10.18: Traffic Impact Summary - Section 2

Ref. No.	Survey Location	Car / LGV	HGV	Total	Car / LGV % Increase	HGV % Increase	Total % Increase
DfT. 9	A87, West of Broadford*	3808	359	4166	17.51%	78.13%	21.06%
DfT. 11	A87, Broadford	7244	366	7611	8.63%	86.63%	10.86%
DfT. 12	A87, Broadford Aerodrome	4484	374	4858	14.73%	83.55%	18.13%
DfT. 14	A87, Kyle of Lochalsh	5308	385	5693	12.16%	79.13%	15.07%
DfT. 15	A87, Near Keppoch	4072	539	4611	16.46%	46.10%	19.29%
DfT. 17	A87, West of Bunloinn	2850	416	3266	31.93%	127.48%	39.38%
DfT. 18	A87, South of Bunloinn	2122	291	2413	43.72%	275.17%	55.26%
DfT. 20	A82, Laggan	4898	534	5432	18.99%	101.02%	23.96%

Please note minor variances due to rounding may occur.

- 10.6.25 The total traffic movements are not predicted to increase by more than 30 % at the survey locations which are located within the locality of Section 2.
- 10.6.26 The total HGV traffic movements would increase significantly on the A87, to the west of Broadford (DfT 9). Whilst this increase is statistically significant, it is generally caused by the relatively low HGV flows on the A87 to the west of Broadford which would see an additional increase in HGVs by 157 HGVs per day which equates to 16 HGVs per hour (8 inbound trips and 8 outbound trips).
- 10.6.27 On road links within the Section 2 study area, total traffic movements are expected to increase by more than 30 % along the A87 to the west of Bunloinn (DfT 17) and to the south of Bunloinn (DfT 18) which amounts to 923 and 859 trips, respectively, which amounts to approximately 92 and 86 trip per hour, respectively, or less than two trips per minute on each road link.
- 10.6.28 The total HGV traffic movements are expected to increase by over 30 % on the A87 and A82 road links at the following locations:
 - A87 at the following count locations Broadford (DfT 11), Bradford Aerodome (DfT 12), Kyle of Lochalsh (DfT 14) and Near Keppoch (DfT 15) which sees an increase in HGVs by 170 HGVs per day which equates to 17 HGVs per hour (9 inbound HGV trips and 9 outbound HGV trips);
 - A87, west of Bunloinn (DfT 17) which sees an increase in HGVs by 233 HGVs per day which equates to 23 HGVs per hour (12 inbound HGV trips and 12 outbound HGV trips);
 - A87, South of Bunloinn (DfT 18) which sees an increase in HGVs by 213 HGVs per day which equates to 21 HGVs per hour (11 inbound HGV trips and 11 outbound HGV trips); and

^{*} Survey locations lies within the locality of Section 2

- TRANSMISSION
 - A82, Laggan (DfT 20) which sees an increase in HGVs by 268 HGVs per day which equates to 27 HGVs per hour (14 inbound HGV trips and 14 outbound HGV trips).
 - 10.6.29 The increases in HGV flows listed above are not considered significant in terms of overall total flows.
 - 10.6.30 **Table V2-10.18** suggests that traffic passing through the following sensitive locations (examples in paragraph 10.3.19) will increase by more than 10 % and so road users passing through these locations and residents of these locations should be assessed further:
 - Invergarry;
 - Dornie;
 - Auchtertyre;
 - Kyle of Lochalsh; and
 - Broadford.
 - 10.6.31 The results in **Table V2-10.18** suggests that the increase in either total flows of HGVs exceed 30 % (Rule 1) for the following receptors:
 - Users of A82 (T) and A87 (T);
 - · Inverinate Residents; and
 - · Shiel Bridge Residents.
 - 10.6.32 In summary, the following receptors are being brought forward for overall assessment:
 - Users of A82 (T) and A87 (T);
 - · Broadford Residents;
 - · Kyle of Lochalsh Residents;
 - · Auchtertyre Residents;
 - Dornie Residents:
 - Inverinate Residents;
 - · Shiel Bridge Residents; and
 - · Invergarry Residents.
 - 10.6.33 It should be noted that the effects of Core Path Users and Minor Roads and Access Tracks Road Users are also included in the further assessment, as these are located in the vicinity of Section 2 which would see a greater increase in construction traffic. It should also be noted the construction phase is transitory in nature.
 - 10.6.34 A review of existing road capacity has been undertaken using the DRMB, Volume 15, Part 5 "The NESA Manual". The theoretical road capacity has been estimated for each of the road links for a 12-hour period that makes up the study area. The results are summarised in **Table V2-10.19**.

Table V2-10.19: 2024 Daily Traffic Capacity Review Summary - Section 2

Ref. No.	Survey Location	2024 Baseline Flow	Theoretical Capacity	2024 Base + Development Flows	2024 Base + Development Used Capacity %	Spare Road Capacity %
DfT. 9	A87, West of Broadford*	3442	21600	4166	19%	81%
DfT. 11	A87, Broadford	6865	21600	7611	35%	65%



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Ref. No.	Survey Location	2024 Baseline Flow	Theoretical Capacity	2024 Base + Development Flows	2024 Base + Development Used Capacity %	Spare Road Capacity %
DfT. 12	A87, Broadford Aerodrome	4112	19200	4858	25%	75%
DfT. 14	A87, Kyle of Lochalsh	4947	28800	5693	20%	80%
DfT. 15	A87, Near Keppoch	3865	21600	4611	21%	79%
DfT. 17	A87, West of Bunloinn	2343	19200	3266	17%	83%
DfT. 18	A87, South of Bunloinn	1554	21600	2413	11%	89%
DfT. 20	A82, Laggan	4382	21600	5432	25%	75%

Please note minor variances due to rounding may occur.

- 10.6.35 The results indicate there are no road capacity issues with the Proposed Development and ample spare capacity exists within the trunk and local road network to accommodate construction phase traffic.
- 10.6.36 The percentage spare road capacity along the A87 suggests that the single lane closures which is proposed to facilitate construction of an underground cable to the east of Sligachan should not cause any capacity issues along the route.

10.7 Section 3: Broadford to Kyle Rhea

Extent of the Study Area

- 10.7.1 Strategic access to the Proposed Development within Section 3 is available from the A82 (T) and A87 (T).
- 10.7.2 The extent of the study area for Section 3 is as follows:
 - C1239 (Signed for Kylerhea) between Kylerhea and A87, north of Ashaig;
 - B8083 between Swordale and Broadford;
 - A851 between Isleornsay and Skulamus;
 - A87 (T) between Invergarry and Dunan; and
 - A82 (T) between Letterfinlay and Invergarry.
- 10.7.3 The extent of Section 3 study area is illustrated in Appendix V2-10.1.

Baseline

Existing Traffic Conditions

10.7.4 The Proposed Development within Section 3 would be accessed from a combination of new and existing access tracks. Access junctions to the tracks would be in the form of existing, new and temporary bellmouth junctions which will be designed and constructed to THC design standards. The locations of the access points to Section 3 of the Proposed Development are shown in **Appendix V2-10.1**.

^{*} Survey locations lies within the locality of Section 2

- TRANSMISSION
 - 10.7.5 In order to assess the impact of the construction traffic on the Section 3 study area, traffic data was collected from existing traffic data from the DfT database. Further details of the locations of the count sites as well as the source of the traffic information which is used within the Section 3 study area is presented in Appendix V2-10.1.
 - 10.7.6 The count sites used in the study area for Section 3 are as follows:
 - · A87, West of Broadford
 - . B8083, South of Broadford
 - A87, Broadford
 - A87, Broadford Aerodrome
 - A851, Duisdealmor
 - A87, Kyle of Lochalsh
 - A87, Near Keppoch
 - A87, West of Bunloinn
 - A87, South of Bunloinn
 - A82, Laggan
 - 10.7.7 The traffic counters allowed the traffic flows to be split into vehicle classes. The data was summarised into LGVs and HGVs (all goods vehicles >3.5 tonnes gross maximum weight). A summary of the results for the average 24-hour daily period is provided in **Table V2-10.20**.

Table V2-10.20: 2022 Existing Traffic Conditions (Average Two Way Flows) - Section 3

Ref. No.	Survey Location	Car & LGV	HGV	Total
DfT. 9	A87, West of Broadford	3205	199	3404
DfT. 10	B8083, South of Broadford*	947	30	977
DfT. 11	A87, Broadford*	6596	194	6790
DfT. 12	A87, Broadford Aerodrome*	3866	201	4068
DfT. 13	A851, Duisdealmor*	1560	39	1598
DfT. 14	A87, Kyle of Lochalsh	4681	213	4893
DfT. 15	A87, Near Keppoch	3458	365	3823
DfT. 17	A87, West of Bunloinn	2137	181	2318
DfT. 18	A87, South of Bunloinn	1460	77	1537
DfT. 20	A82, Laggan	4072	263	4334

10.7.8 It should be noted no speed survey information was available from the DfT count points.

^{*} Survey locations lies within the locality of Section 3



Accident Review

- 10.7.9 During the five-year period between 01 January 2016 and 31 December 2020, the following accident data was recorded along roads which are within vicinity of Section 3 (as presented in **Figure V2-10.3**):
 - a total of thirteen accidents were recorded on roads within the Section 3 study area, of which ten were recorded as slight, two were recorded as serious and one fatality was recorded;
 - five of the accidents were recorded along the A851, one along Old Corry and seven were recorded along the A87;
 - the fatal accident involved a single vehicle (car) incident approximately 250 m to the south of the Old Corry / A87 priority junction;
 - a slight accident was recorded along Old Corry, in the vicinity of the Old Corry / A87 priority junction and involved a bicycle and a car; and
 - a slight accident was recorded near Crowlin Bar, Broadford and involved a pedestrian and HGV.

Cycle and Pedestrian Network

- 10.7.10 A review of the online core path mapping available on THC's online mapping facility and information received from THC indicates that Core Path Broadford to Suardale (SL03.04) comprises track and is located in the vicinity of the Proposed Development within Section 3.
- 10.7.11 A wider access path which links Harrapool to Heaste public road, a candidate core path which starts at the A851 gate, and a number of wider access forest roads are also located within the vicinity of the Proposed Development.
- 10.7.12 A review of Sustrans' map of the National Cycle Network indicates that there are no National Cycle Network routes in the vicinity of the Proposed Development within Section 3.

Future Baseline

- 10.7.13 Construction of the Skye Reinforcement Project is expected to commence in 2024, if consent is granted, and the total construction of the Proposed Development (Section 0 6) is anticipated to take approximately three years and seven months.
- 10.7.14 To assess the likely effects during the construction and typical operational phase, base year flows were forecast by applying a NRTF low growth factor to the 2022 flows in **Table V2-10.20**. The NRTF low growth factor for 2022 to 2024 is 1.011.
- 10.7.15 The estimated Future Baseline Flows are shown in **Table V2-10.21**. This will be used in the Construction Peak Traffic Impact Assessment.



Table V2-10-21: Future Baseline Flows (2024 Flows) - Section 3

Ref. No.	Survey Location	Car / LGV	HGV	Total
DfT. 9	A87, West of Broadford	3240	201	3442
DfT. 10	B8083, South of Broadford*	958	30	988
DfT. 11	A87, Broadford*	6669	196	6865
DfT. 12	A87, Broadford Aerodrome*	3909	204	4112
DfT. 13	A851, Duisdealmor*	1577	39	1616
DfT. 14	A87, Kyle of Lochalsh	4732	215	4947
DfT. 15	A87, Near Keppoch	3496	369	3865
DfT. 17	A87, West of Bunloinn	2161	183	2343
DfT. 18	A87, South of Bunloinn	1477	77	1554
DfT. 20	A82, Laggan	4116	266	4382

Summary of Sensitive Receptors

10.7.16 A summary of the sensitive receptors within the Section 3 study area is presented in Table V2-10.22.

^{*} Survey locations lies within the locality of Section 3



Table V2-10.22: Summary of Sensitive Receptors - Section 3

Receptor	Sensitivity	Justification
A82 (T) / A87 (T) Road Users	Low	Where the road is Trunk or A-class, constructed to accommodate significant HGV composition.
B8083, South of Broadford	Medium	Where the road is a local A or B class road, capable of regular use by HGV traffic.
A851, Duisdealmor	Medium	Where the road is a local A or B class road, capable of regular use by HGV traffic.
Minor Roads and Access Tracks Road Users (including C1239 (signed for Kylerhea))	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs.
Invergarry Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Shiel Bridge Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.
Inverinate Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.
Dornie Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Auchtertyre Residents	Low	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Kyle of Lochalsh Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Kyleakin Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Breakish / Harrapool Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Broadford Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Core Paths	High	Minor path used by walkers and cyclists, not constructed to accommodate HGV traffic flows.

- 10.7.17 Where a road passes through a location, users are considered subject to the highest level of sensitivity defined by either the road or location characteristics.
- 10.7.18 Based on the examples of sensitive areas (e.g. hospitals, churches, schools, historical buildings), as outlined in the Magnitude of Effect section earlier in this Chapter (paragraph 10.3.19, the following areas are considered sensitive and will be subject to 'Rule 2' of the IEMA Guidelines which requires a full assessment of effects if the locations are subject to an increase in 10 % of traffic:
 - Invergarry;
 - Dornie;
 - Auchtertyre;

- TRANSMISSION
 - · Kyle of Lochalsh;
 - · Broadford; and
 - · Core Paths.
 - 10.7.19 All other locations within the study area are subject to 'Rule 1' and are assessed if traffic flows (or HGV flows) on highway links increase by more than 30 %.

Assessment of Likely Significant Effects

Construction Effects

- 10.7.20 Traffic generation for Sections 1 to 6 is presented in **Appendix V2-10.1** and have been estimated by SSEN Transmission based upon their experience from similar projects.
- 10.7.21 As it is assumed that all seven Sections will be constructed concurrently, in order to assess the impact of the Proposed Development, construction trips associated with Sections 0, 1, 2, 4, 5 and 6 which are expected to impact road links on the Section 3 study area must also be considered.
- 10.7.22 The construction traffic was compared against the future baseline traffic to estimate the increase in traffic associated with the Proposed Development. Table V2-10.23 illustrates the potential traffic impact of construction activity.

Table V2-10.23: Traffic Impact Summary - Section 3

Ref. No.	Survey Location	Car / LGV	HGV	Total	Car / LGV % Increase	HGV % Increase	Total % Increase
DfT. 9	A87, West of Broadford	3808	359	4166	17.51%	78.13%	21.06%
DfT. 10	B8083, South of Broadford*	962	33	995	0.48%	8.94%	0.74%
DfT. 11	A87, Broadford*	7244	366	7611	8.63%	86.63%	10.86%
DfT. 12	A87, Broadford Aerodrome*	4484	374	4858	14.73%	83.55%	18.13%
DfT. 13	A851, Duisdealmor*	1593	48	1641	1.05%	21.55%	1.55%
DfT. 14	A87, Kyle of Lochalsh	5308	385	5693	12.16%	79.13%	15.07%
DfT. 15	A87, Near Keppoch	4072	539	4611	16.46%	46.10%	19.29%
DfT. 17	A87, West of Bunloinn	2850	416	3266	31.93%	127.48%	39.38%
DfT. 18	A87, South of Bunloinn	2122	291	2413	43.72%	275.17%	55.26%
DfT. 20	A82, Laggan	4898	534	5432	18.99%	101.02%	23.96%

Please note minor variances due to rounding may occur.

10.7.23 The total traffic movements are not predicted to increase by more than 30 % at the survey locations which are located within vicinity of Section 3.

^{*} Survey locations lies within the locality of Section 3



- TRANSMISSION
 - 10.7.24 The total HGV traffic movements would increase significantly on the A87 at Broadford (DfT 11) and Bradford Aerodome (DfT 12), with an increase in HGVs by 170 HGVs per day which equates to 17 HGVs per hour (9 inbound HGV trips and 9 outbound HGV trips) which is not considered significant in overall traffic flow terms.
 - 10.7.25 On road links within the Section 3 study area, total traffic movements are expected to increase by more than 30 % along the A87 to the west of Bunloinn (DfT 17) and to the south of Bunloinn (DfT 18) which amounts to 923 and 859 trips, respectively, which amounts to approximately 92 and 86 trip per hour, respectively, or less than two trips per minute on each road link.
 - 10.7.26 The total HGV traffic movements are expected to increase by over 30 % on the A87 and A82 road links at the following locations:
 - A87, west of Broadford (DfT 9) which sees an increase in HGVs by 157 HGVs per day which equates to 16 HGVs per hour (8 inbound trips and 8 outbound trips);
 - A87 at the following count locations Kyle of Lochalsh (DfT 14) and Near Keppoch (DfT 15) which
 sees an increase in HGVs by 170 HGVs per day which equates to 17 HGVs per hour (9 inbound HGV
 trips and 9 outbound HGV trips);
 - A87, west of Bunloinn (DfT 17) which sees an increase in HGVs by 233 HGVs per day which equates to 23 HGVs per hour (12 inbound HGV trips and 12 outbound HGV trips);
 - A87, South of Bunloinn (DfT 18) which sees an increase in HGVs by 213 HGVs per day which equates to 20 HGVs per hour (11 inbound HGV trips and 11 outbound HGV trips); and
 - A82, Laggan (DfT 20) which sees an increase in HGVs by 268 HGVs per day which equates to 27 HGVs per hour (14 inbound HGV trips and 14 outbound HGV trips).
 - 10.7.27 The increases in HGV flows listed above are not considered significant in terms of overall total flows.
 - 10.7.28 **Table V2-10.23** suggests that traffic passing through the following sensitive locations (examples in paragraph 10.3.19) would increase by more than 10 % (Rule 2) and so road users passing through these locations and residents of these locations should be assessed further:
 - Invergarry;
 - Dornie;
 - Auchtertyre;
 - · Kyle of Lochalsh; and
 - Broadford.
 - 10.7.29 The results in **Table V2-10.23** suggests that the increase in either total flows or HGVs exceed 30 % (Rule 1) for the following receptors:
 - Users of A82 (T) and A87 (T);
 - Inverinate Residents; and
 - Shiel Bridge Residents.
 - 10.7.30 In summary, the following receptors are being brought forward for overall assessment:
 - Users of A82 (T) and A87 (T);
 - Broadford Residents;
 - Kyle of Lochalsh Residents;
 - Auchtertyre Residents;
 - Dornie Residents;
 - Inverinate Residents;



- · Shiel Bridge Residents; and
- Invergarry Residents.
- 10.7.31 It should be noted that the effects of Core Path Users and Minor Roads and Access Tracks Road Users are also included in the further assessment, as these are located in the vicinity of Section 3 which would see a greater increase in construction traffic. It should also be noted the construction phase is transitory in nature.
- 10.7.32 A review of existing road capacity has been undertaken using the DRMB, Volume 15, Part 5 "The NESA Manual". The theoretical road capacity has been estimated for each of the road links for a 12-hour period that makes up the study area. The results are summarised in **Table V2-10.24**.

Table V2-10.24: 2024 Daily Traffic Capacity Review Summary - Section 3

Ref. No.	Survey Location	2024 Baseline Flow	Theoretical Capacity	2024 Base + Development Flows	2024 Base + Development Used Capacity %	Spare Road Capacity %
DfT. 9	A87, West of Broadford	3442	21600	4166	19%	81%
DfT. 10	B8083, South of Broadford*	988	3360	995	30%	70%
DfT. 11	A87, Broadford*	6865	21600	7611	35%	65%
DfT. 12	A87, Broadford Aerodrome*	4112	19200	4858	25%	75%
DfT. 13	A851, Duisdealmor*	1616	21600	1641	8%	92%
DfT. 14	A87, Kyle of Lochalsh	4947	28800	5693	20%	80%
DfT. 15	A87, Near Keppoch	3865	21600	4611	21%	79%
DfT. 17	A87, West of Bunloinn	2343	19200	3266	17%	83%
DfT. 18	A87, South of Bunloinn	1554	21600	2413	11%	89%
DfT. 20	A82, Laggan	4382	21600	5432	25%	75%

10.7.33 The results indicate there are no road capacity issues with the Proposed Development and ample spare capacity exists within the trunk and local road network to accommodate construction phase traffic.

10.8 Section 4: Kyle Rhea to Loch Cuaich

Extent of Study Area

- 10.8.1 Strategic access to the Proposed Development within Section 4 is available from the A82 (T) and A87 (T).
- 10.8.2 The extent of the study area for Section 4 is as follows:
 - C1223, (Old Military Road) between Shiel Bridge and Skye Ferry;
 - A87 (T) between Invergarry and Skye Bridge; and

^{*} Survey locations lies within the locality of Section 3



- A82 (T) between Letterfinlay and Invergarry.
- 10.8.3 The extent of Section 4 study area is illustrated in Appendix V2-10.1.

Baseline

Existing Traffic Conditions

- 10.8.4 The Proposed Development in Section 4 would be accessed from a combination of new and existing access tracks. Access junctions to the tracks would be in the form of existing, new and temporary bellmouth junctions which will be designed and constructed to THC design standards. The locations of the access points to Section 4 of the Proposed Development are shown in **Appendix V2-10.1**.
- 10.8.5 In order to assess the impact of the construction traffic on the Section 4 study area, traffic data was collected by means of ATC surveys and by obtaining existing traffic data from the DfT database. Further details of the locations of the count sites as well as the source of the traffic information which is used within the Section 4 study area is presented in in **Appendix V2-10.1**.
- 10.8.6 The count sites used in the study area for Section 4 are as follows:
 - C1223 (Old Military Road);
 - Unclassified road, to the north of Loch Garry;
 - A87, Kyle of Lochalsh;
 - A87, Near Keppoch;
 - U/C Skye Ferry;
 - A87, West of Bunloinn;
 - · A87, South of Bunloinn;
 - · A887, East of Bunloinn; and
 - A82, Laggan.
- 10.8.7 The traffic counters allowed the traffic flows to be split into vehicle classes. The data was summarised into LGVs and HGVs (all goods vehicles >3.5 tonnes gross maximum weight). A summary of the results for the average 24-hour daily period is provided in **Table V2-10.25**.

Table V2-10-25: 2022 Existing Traffic Conditions (Average Two Way Flows) - Section 4

Ref. No.	Survey Location	Car & LGV	HGV	Total
ATC 3	C1223 (Old Military Road)*	450	155	604
ATC 4	Unclassified road, to the north of Loch Garry	138	76	213
DfT. 14	A87, Kyle of Lochalsh*	4681	213	4893
DfT. 15	A87, Near Keppoch*	3458	365	3823
DfT. 16	Unclassified road, Skye Ferry*	91	0	91
DfT. 17	A87, West of Bunloinn	2137	181	2318
DfT. 18	A87, South of Bunloinn	1460	77	1537
DfT. 19	A887, East of Bunloinn	880	147	1027

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Ref. No.	Survey Location	Car & LGV	HGV	Total
DfT. 20	A82, Laggan	4072	263	4334

10.8.8 The ATC sites used to provide traffic volume data were also used to collect speed statistics. The two-way five-day average and 85th percentile speeds observed at the count locations which are within the Section 4 study area are summarised below in **Table V2-10.26**. It should be noted that no speed survey information was available from the DfT count points.

Table V2-10-26: 2022 Existing Traffic Conditions (Speed Summary - Section 4

Ref. No.	Survey Location	Mean Speed (mph)	85th %ile Speed (mph)	Speed Limit (mph)
ATC 3	C1223 (Old Military Road)	32	39	60 mph
ATC 4	Unclassified road, to the north of Loch Garry	31	41	60 mph

10.8.9 The speed survey data indicates that there is compliance with current speed limits on the road links assessed.

Accident Review

- 10.8.10 During the five-year period between 01 January 2016 and 31 December 2020, the following accident data was recorded along roads which are in the vicinity of Section 4 (as presented in **Figure V2-10.3**):
 - a total of 28 accidents were recorded on roads within the Section 4 study area, of which 20 were recorded as slight, seven as serious and one fatality was recorded;
 - the fatal accident involved a single vehicle (car) incident which was recorded approximately 400 m to the east of Village Hall bus stops, to the east of Balmacara Square;
 - a total of five accidents involving motorcycles were recorded, of which three accidents were recorded as serious and two accidents were recorded as slight;
 - a total of three accidents were recorded which involved HGV, of which two incidents were recorded as slight and one was recorded as serious; and
 - four accidents were recorded within 300 m of each other, to the west of Waterfall River Shiel. Three of these incidents involved motorcycles (which have been included in the above information) and the other accident was a single vehicle accident involving a car.

Cycle and Pedestrian Network

- 10.8.11 A review of the online core path mapping available on THC's online mapping facility and information from THC indicates that the following Core Paths are located within the vicinity of the Proposed Development within Section 4:
 - Glen Bernera to Ardintoul to Ferry Circular Route (SL12.05) (PRoW HSL77) comprising track;
 - Gleann Beag to Torr Beag (SL12.02) (PRoW HSL54) comprising track; and
 - Corran to Glen Arnisdale (SL12.07) (PRoW HSL88) comprising track / grass / stone.
- 10.8.12 Other PRoWs which are also located in the vicinity of the Proposed Development include:
 - PRoW HSL78 route to Ardintoul point;

^{*} Survey locations lies within the locality of Section 4

- TRANSMISSION
 - PRoW HSL20 Gleann Beag to Glen Dubh Lochann;
 - PRoW HL13 / HL16 Glen Dubh to Kinloch Hourns paths;
 - PRoW HL7 Kinloch Hourn to Glen Loyne path; and
 - PRoW HL8 Glen Quoich to Allbeith.
 - 10.8.13 There are also a number of wider access paths which comprise of hill paths in the vicinity of the Proposed Development.
 - 10.8.14 A review of Sustrans' map of the National Cycle Network indicates that there are no National Cycle Network routes in the vicinity of the Proposed Development within Section 4.

Future Baseline

- 10.8.15 Construction of the Skye Reinforcement Project is expected to commence in 2024, if consent is granted, and the total construction of the Proposed Development (Section 0-6) is anticipated to take approximately three years and seven months.
- 10.8.16 To assess the likely effects during the construction and typical operational phase, base year flows were forecast by applying a NRTF low growth factor to the 2022 flows in **Table V2-10.26**. The NRTF low growth factor for 2022 to 2024 is 1.011.
- 10.8.17 The estimated Future Baseline Flows are shown in **Table V2-10.27**. This will be used in the Construction Peak Traffic Impact Assessment.

Table V2-10.27: Future Baseline Flows (2024 Flows) - Section 4

Ref. No.	Survey Location	Car / LGV	HGV	Total
ATC 3	C1223 (Old Military Road)*	455	156	611
ATC 4	Unclassified road, to the north of Loch Garry	139	77	216
DfT. 14	A87, Kyle of Lochalsh*	4732	215	4947
DfT. 15	A87, Near Keppoch*	3496	369	3865
DfT. 16	Unclassified road, Skye Ferry*	92	0	92
DfT. 17	A87, West of Bunloinn	2161	183	2343
DfT. 18	A87, South of Bunloinn	1477	77	1554
DfT. 19	A887, East of Bunloinn	890	149	1038
DfT. 20	A82, Laggan	4116	266	4382

Please note minor variances due to rounding may occur.

Summary of Sensitive Receptors

10.8.18 A summary of the sensitive receptors within the Section 4 study area is presented in Table V2-10.28.

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^{*} Survey locations lies within the locality of Section 4



Table V2-10.28: Summary of Sensitive Receptors - Section 4

Receptor	Sensitivity	Justification
A82 (T) / A87 (T) Road Users	Low	Where the road is Trunk or A-class, constructed to accommodate significant HGV composition.
C1223 (Old Military Road)*	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs.
Unclassified road, to the north of Loch Garry	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs.
Unclassified road, Skye Ferry	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs.
Minor Roads and Access Tracks Road Users	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs.
Glenelg Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.
Invermoriston Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.
Invergarry Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Shiel Bridge Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.
Inverinate Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.
Dornie Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Auchtertyre Residents	Low	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Kyle of Lochalsh Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Core Paths	High	Minor path used by walkers and cyclists, not constructed to accommodate HGV traffic flows.

- 10.8.19 Where a road passes through a location, users are considered subject to the highest level of sensitivity defined by either the road or location characteristics.
- 10.8.20 Based on the examples of sensitive areas (e.g. hospitals, churches, schools, historical buildings), as outlined in the Magnitude of Effect section earlier in this Chapter (paragraph 10.3.19), the following areas are considered sensitive and will be subject to 'Rule 2' of the IEMA Guidelines which requires a full assessment of effects if the locations are subject to an increase in 10 % of traffic:
 - Glenelg;
 - Invergarry;
 - Dornie;
 - Auchtertyre;

- TRANSMISSION
 - · Kyle of Lochalsh; and
 - · Core Paths.
 - 10.8.21 All other locations within the study area are subject to 'Rule 1' and are assessed if traffic flows (or HGV flows) on highway links increase by more than 30 %.

Assessment of Likely Significant Effects

Construction Effects

- 10.8.22 Traffic generation for Sections 1 to 6 is presented in **Appendix V2-10.1** and have been estimated by SSEN Transmission, based upon their experience from similar projects.
- 10.8.23 As it is assumed that all seven Sections will be constructed concurrently, in order to assess the impact of the Proposed Development, construction trips associated with Sections 0, 1, 2, 3, 5 and 6 which are expected to impact road links on the Section 4 study area must also be considered.
- 10.8.24 The construction traffic was compared against the future baseline traffic to estimate the increase in traffic associated with the Proposed Development. **Table V2-10.29** illustrates the potential traffic impact of construction activity.

Table V2-10.29: Traffic Impact Summary - Section 4

Ref. No.	Survey Location	Car / LGV	HGV	Total	Car / LGV % Increase	HGV % Increase	Total % Increase
ATC 3	C1223 (Old Military Road)*	512	192	704	12.55%	22.77%	15.16%
ATC 4	Unclassified road, to the north of Loch Garry	209	120	329	50.24%	56.40%	52.42%
DfT. 14	A87, Kyle of Lochalsh*	5308	385	5693	12.16%	79.13%	15.07%
DfT. 15	A87, Near Keppoch*	4072	539	4611	16.46%	46.10%	19.29%
DfT. 16	Unclassified road, Skye Ferry*	98	3	101	6.45%	**100.00%	9.81%
DfT. 17	A87, West of Bunloinn	2850	416	3266	31.93%	127.48%	39.38%
DfT. 18	A87, South of Bunloinn	2122	291	2413	43.72%	275.17%	55.26%
DfT. 19	A887, East of Bunloinn	1074	255	1329	20.69%	71.42%	27.96%
DfT. 20	A82, Laggan	4898	534	5432	18.99%	101.02%	23.96%

Please note minor variances due to rounding may occur.

^{*} Survey locations lies within the locality of Section 4

^{**} Assumed based on 0 baseline HGV flow and an increase of 3 construction traffic movements



- 10.8.25 Along roads that lie within the locality of Section 4, it is anticipated that HGV movements at the A87 at Kyle of Lochalsh (DfT 14) and near Keppoch (DfT 15) as well as the unclassified road at Skye Ferry (DfT 16) would increase by over 30 %, resulting in increases of 79.13 %, 46.10 % and over 100 %, respectively. While the increases are statistically significant, it is generally caused by the relatively low HGV flows on the A87 and unclassified road which sees an increase in HGV traffic of 170 and 3 daily movements (or on average 17 and less than one hourly movements) on the A87 and unclassified road, respectively, which are not considered significant in terms of overall flows.
- 10.8.26 On road links within the Section 4 study area, total traffic movements are expected to increase by more than 30 % along the unclassified road, to the north of Loch Garry (ATC4), the A87 to the west of Bunloinn (DfT 17) and to the south of Bunloinn (DfT 18) which amounts to 113, 923 and 859 trips, respectively, which amounts to approximately 11, 92 and 86 trip per hour, respectively, or less than two trips per minute on each road link.
- 10.8.27 The total HGV traffic movements are expected to increase by over 30% on the A87 and A82 road links at the following locations:
 - Unclassified road, to the north of Loch Garry (ATV 4) which sees an increase in HGVs by 43 HGVs per day which equates to approximately four HGVs per hour (2 inbound HGV trips and 2 outbound HGV trips);
 - A87, west of Bunloinn (DfT 17) which sees an increase in HGVs by 233 HGVs per day which equates to 23 HGVs per hour (12 inbound HGV trips and 12 outbound HGV trips);
 - A87, South of Bunloinn (DfT 18) which sees an increase in HGVs by 213 HGVs per day which equates to 21 HGVs per hour (11 inbound HGV trips and 11 outbound HGV trips);
 - A887, East of Bunloinn (DfT 19) which sees an increase in HGVs by 106 HGVs per day which equates to 11 HGVs per hour (6 inbound HGV trips and 6 outbound HGV trips); and
 - A82, Laggan (DfT 20) which sees an increase in HGVs by 268 HGVs per day which equates to 27 HGVs per hour (14 inbound HGV trips and 14 outbound HGV trips).
- 10.8.28 The increases in HGV flows listed above are not considered significant in terms of overall total flows.
- 10.8.29 **Table V2-10.29** suggests that traffic passing through the following sensitive locations (examples in paragraph 10.3.19) would increase by more than 10 % (Rule 2) and so road users passing through these locations and residents of these locations should be assessed further:
 - Glenelg;
 - Invergarry;
 - Dornie;
 - · Auchtertyre; and
 - Kyle of Lochalsh.
- 10.8.30 The results in **Table V2-10.29** suggests that the increase in either total flows or HGVs exceed 30 % (Rule 1) for the following receptors:
 - · Unclassified road, to the north of Loch Garry;
 - · Unclassified road Skye Ferry; and
 - Users of A82 (T) and A87 (T).
- 10.8.31 In summary, the following receptors are being brought forward for overall assessment:
 - Users of A82 (T) and A87 (T);
 - Glenelg residents;
 - Unclassified road, to the north of Loch Garry;

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 - · Unclassified road Skye Ferry;
 - Kyle of Lochalsh residents;
 - · Auchtertyre residents;
 - · Dornie residents;
 - Inverinate residents;
 - · Shiel Bridge residents;
 - Invermoriston residents; and
 - Invergarry residents.
 - 10.8.32 It should be noted that the effects of Core Path Users and Minor Roads and Access Tracks Road Users are also included in the further assessment, as these are located in the vicinity of Section 4 which would see a greater increase in construction traffic. It should also be noted the construction phase is transitory in nature.
 - 10.8.33 A review of existing road capacity has been undertaken using the DRMB, Volume 15, Part 5 "The NESA Manual". The theoretical road capacity has been estimated for each of the road links for a 12-hour period that makes up the study area. The results are summarised in **Table V2-10.30**.

Table V2-10.30: 2024 Daily Traffic Capacity Review Summary - Section 4

Ref. No.	Survey Location	2024 Baseline Flow	Theoretical Capacity	2024 Base + Development Flows	2024 Base + Development Used Capacity %	Spare Road Capacity %
ATC 3	C1223 (Old Military Road)*	611	3360	704	21%	79%
ATC 4	Unclassified road, to the north of Loch Garry	216	3360	329	10%	90%
DfT. 14	A87, Kyle of Lochalsh*	4947	28800	5693	20%	80%
DfT. 15	A87, Near Keppoch*	3865	21600	4611	21%	79%
DfT. 16	U/C Skye Ferry*	92	9600	101	1%	99%
DfT. 17	A87, West of Bunloinn	2343	19200	3266	17%	83%
DfT. 18	A87, South of Bunloinn	1554	21600	2413	11%	89%
DfT. 19	A887, East of Bunloinn	1038	21600	1329	6%	94%
DfT. 20	A82, Laggan	4382	21600	5432	25%	75%

10.8.34 The results indicate there are no road capacity issues with the Proposed Development and ample spare capacity exists within the trunk and local road network to accommodate construction phase traffic.

^{*} Survey locations lies within the locality of Section 4



10.9 Section 5: Loch Cuaich to Invergarry

Extent of the Study Area

- 10.9.1 Strategic access to the Proposed Development within Section 5 is available from A887 (T), A82 (T) and A87 (T).
- 10.9.2 The extent of the study area for Section 5 Broadford to Kyle Rhea is as follows:
 - A887 (T) between Bun Loyne and Invermoriston.
 - A87 (T) between Invergarry and The Cluaine Inn; and
 - A82 (T) between Letterfinlay and Invergarry.
- 10.9.3 The extent of Section 5 study area is illustrated in **Appendix V2-10.1**.

Baseline

Existing Traffic Conditions

- 10.9.4 The Proposed Development within Section 5 would be accessed from a combination of new and existing access tracks. Access junctions to the tracks would be in the form of existing, new and temporary bellmouth junctions which would be designed and constructed to THC design standards. The locations of the access points to Section 5 of the Proposed Development are shown in **Appendix V2-10.1**.
- 10.9.5 In order to assess the impact of the construction traffic on the Section 5 study area, traffic data was collected by means of ATC surveys and by obtaining existing traffic data from the DfT database. Further details of the locations of the count sites as well as the source of the traffic information which is used within the Section 5 study area is presented in in **Appendix V2-10.1**.
- 10.9.6 The count sites used in the study area for Section 5 are as follows:
 - · Unclassified road, to the north of Loch Garry
 - A87, West of Bunloinn;
 - A87, South of Bunloinn;
 - A887, East of Bunloinn; and
 - A82, Laggan.
- 10.9.7 The traffic counters allowed the traffic flows to be split into vehicle classes. The data was summarised into LGVs and HGVs (all goods vehicles >3.5 tonnes gross maximum weight). A summary of the results for the average 24-hour daily period is provided in **Table V2-10.31**.



Table V2-10.31: 2022 Existing Traffic Conditions (Average Two Way Flows) - Section 5

Ref. No.	Survey Location	Car & LGV	HGV	Total
ATC 4	Unclassified road, to the north of Loch Garry*	138	76	213
DfT. 17	A87, West of Bunloinn*	2137	181	2318
DfT. 18	A87, South of Bunloinn*	1460	77	1537
DfT. 19	A887, East of Bunloinn*	880	147	1027
DfT. 20	A82, Laggan	4072	263	4334

10.9.8 The ATC sites used to provide traffic volume data were also used to collect speed statistics. The two-way five-day average and 85th percentile speeds observed at the count locations which are within the Section 5 study area are summarised below in **Table V2-10.32**. It should be noted that no speed survey information was available from the DfT count points.

Table V2-10.32: 2022 Existing Traffic Conditions (Speed Summary) - Section 5

Ref. No.	Survey Location	Mean Speed (mph)	85th %ile Speed (mph)	Speed Limit (mph)
ATC 4	Unclassified road, to the north of Loch Garry	31	41	60 mph

10.9.9 The speed survey data indicates that there is compliance with current speed limits on the links assessed.

Accident Review

- 10.9.10 During the five-year period between 01 January 2016 and 31 December 2020, the following accident data was recorded along road links which are within the vicinity of Section 5 (as presented in **Figure V2-10.3**):
 - a total of 56 accidents were recorded on roads within the Section 5 study area, of which 38 were recorded as slight,16 as serious and two recorded as fatal;
 - a total of 37 accidents were recorded along the A87, seven were recorded along the A887 and 12 were recorded along the A82;
 - the accident which resulted in a fatality along the A87 occurred on the bridge between Glen Garry
 Viewpoint West and Glen Garry Viewpoint East. The incident was a one vehicle accident involving a
 car;
 - the fatal accident which occurred along the A82which involved a motorcycle was a multi vehicle
 collision involving two other vehicles including a car and a bus. The incident occurred on a bend
 approximately 1 km to the south west of Laggan;
 - a total of 12 incidents involved motorcycles, of which eight were recorded as slight, three were recorded as serious and one was recorded as fatal;
 - · a total of five accidents involved HGVs, of which were recorded as slight; and
 - two accidents occurred to the south of the bridge crossing the River Moriston, along the A887 of which
 one was recorded as slight and one was recorded as serious. The bridge is narrow and cannot

^{*} Survey locations lies within the locality of Section 5

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accommodate two-way flows, as such northbound traffic flows give way to southbound traffic crossing the bridge.

Cycle and Pedestrian Network

- 10.9.11 A review of the online core path mapping available on THC's online mapping facility and information received from THC indicates that Core Path Aldernaig Burn to Loch Lundie (LO11.02) (PRoW HL32) comprising track is located in the vicinity of the Proposed Development within Section 5.
- 10.9.12 There are a number of wider access paths which include forest roads and the Tomdoun to Loch Loyne path, as well as ProW HL20 Kingie to Glen Loyne.
- 10.9.13 NCR 78 which forms part of The Caledonia Way and comprises a combination of both traffic-free and on-road cycle route is located within the vicinity of Section 5 of the Proposed Development.

Future Baseline

- 10.9.14 Construction of the Skye Reinforcement Project is expected to commence in 2024, if consent is granted, and the total construction of the Proposed Development (Section 0 6) is anticipated to take approximately three years and seven months.
- 10.9.15 To assess the likely effects during the construction and typical operational phase, base year flows were forecast by applying a NRTF low growth factor to the 2022 flows in **Table V2-10.32**. The NRTF low growth factor for 2022 to 2024 is 1.011.
- 10.9.16 The estimated Future Baseline Flows are shown in **Table V2-10.33**. This will be used in the Construction Peak Traffic Impact Assessment.

Table V2-10-33: Future Baseline Flows (2024 Flows) - Section 5

Ref. No.	Survey Location	Car / LGV	HGV	Total
ATC 4	Unclassified road, to the north of Loch Garry*	139	77	216
DfT. 17	A87, West of Bunloinn*	2161	183	2343
DfT. 18	A87, South of Bunloinn*	1477	77	1554
DfT. 19	A887, East of Bunloinn*	890	149	1038
DfT. 20	A82, Laggan	4116	266	4382

Please note minor variances due to rounding may occur.

Summary of Sensitive Receptors

10.9.17 A summary of the sensitive receptors within the Section 5 study area is presented in Table V2-10.34.

^{*} Survey locations lies within the locality of Section 5



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Table V2-10.34: Summary of Sensitive Receptors - Section 5

Receptor	Sensitivity	Justification
A82 (T) / A87 (T) Road Users	Low	Where the road is Trunk or A-class, constructed to accommodate significant HGV composition.
Unclassified road, to the north of Loch Garry	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs.
Minor Roads and Access Tracks Road Users	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs.
Invermoriston Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.
Invergarry Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.
Core Paths	High	Minor path used by walkers and cyclists, not constructed to accommodate HGV traffic flows.

- 10.9.18 Where a road passes through a location, users are considered subject to the highest level of sensitivity defined by either the road or location characteristics.
- 10.9.19 Based on the examples of sensitive areas (e.g. hospitals, churches, schools, historical buildings), as outlined in the Magnitude of Effect section earlier in this Chapter (paragraph 10.3.19, the following areas are considered sensitive and will be subject to 'Rule 2' of the IEMA Guidelines which requires a full assessment of effects if the locations are subject to an increase in 10 % of traffic:
 - · Invergarry; and
 - · Core Paths.
- 10.9.20 All other locations within the study area are subject to 'Rule 1' and are assessed if traffic flows (or HGV flows) on highway links increase by more than 30 %.

Assessment of Likely Significant Effects

Construction Effects

- 10.9.21 Traffic generation for Sections 1 to 6 is presented in **Appendix V2-10.1** and have been estimated by SSEN Transmission, based upon their experience from similar projects.
- 10.9.22 As it is assumed that all seven Sections would be constructed concurrently, in order to assess the impact of the Proposed Development, construction trips associated with Sections 0, 1, 2, 3, 4 and 6 which are expected to impact road links on the Section 5 study area must also be considered.
- 10.9.23 The construction traffic was compared against the future baseline traffic to estimate the increase in traffic associated with the Proposed Development. Table V2-10.35 illustrates the potential traffic impact of construction activity.



Table V2-10.35: Traffic Impact Summary - Section 5

Ref. No.	Survey Location	Car / LGV	HGV	Total	Car / LGV % Increase	HGV % Increase	Total % Increase
ATC 4	Unclassified road, to the north of Loch Garry*	209	120	329	50.24%	56.40%	52.42%
DfT. 17	A87, West of Bunloinn*	2850	416	3266	31.93%	127.48%	39.38%
DfT. 18	A87, South of Bunloinn*	2122	291	2413	43.72%	275.17%	55.26%
DfT. 19	A887, East of Bunloinn*	1074	255	1329	20.69%	71.42%	27.96%
DfT. 20	A82, Laggan	4898	534	5432	18.99%	101.02%	23.96%

- 10.9.24 The total traffic movements are expected to increase by over 30 % at the unclassified road, to the north of Loch Garry (ATC 4) and along the A87 to the west (DfT 17) and south of Bunloinn (DfT 18). The total traffic flows are expected to increase by 113, 923 and 859 movements, respectively, which sees an hourly increase of approximately 11, 92 and 86 trips per hour, respectively, or less than two trips per minute on each road link.
- 10.9.25 HGV trips are expected to increase by over 30% on all road links within the Section 5 study area and are described as follows:
 - unclassified road, to the north of Loch Garry (ATC 4) which sees an increase in HGVs by 43 HGVs per day which equates to approximately four HGVs per hour (2 inbound HGV trips and 2 outbound HGV trips);
 - A87, West of Bunloinn (DfT 17) which sees an increase in HGVs by 233 HGVs per day which equates to 23 HGVs per hour (12 inbound HGV trips and 12 outbound HGV trips);
 - A87, South of Bunloinn (DfT 18) which sees an increase in HGVs by 213 HGVs per day which equates to 21 HGVs per hour (11 inbound HGV trips and 11 outbound HGV trips);
 - A887, East of Bunloinn (DfT 19) which sees an increase in HGVs by 106 HGVs per day which equates to 11 HGVs per hour (6 inbound HGV trips and 6 outbound HGV trips); and
 - A82, Laggan (DfT 20) which sees an increase in HGVs by 268 HGVs per day which equates to 27 HGVs per hour (14 inbound HGV trips and 14 outbound HGV trips).
- 10.9.26 The increases in HGV flows listed above are not considered significant in terms of overall total flows.
- 10.9.27 **Table V2-10.35** suggests that traffic passing through the following sensitive locations (examples in paragraph 10.3.19) will increase by more than 10 % (Rule 2) and so road users passing through these locations and residents of these locations should be assessed further:
 - Invergarry.
- 10.9.28 The results in **Table V2-10.35** suggest that the increase in either total flows or HGVs exceed 30 % (Rule 1) for the following receptors:
 - Users of A82 (T), A887 (T) and A87 (T);

^{*} Survey locations lies within the locality of Section 5

- TRANSMISSION
 - Users of Unclassified road to the north of Loch Garry; and
 - · Invermoriston Residents.

10.9.29 In summary, the following receptors are being brought forward for overall assessment:

- Users of A82 (T), A887 (T) and A87 (T);
- Users of Unclassified road to the north of Loch Garry;
- Invermoriston Residents; and
- Invergarry Residents.
- 10.9.30 It should be noted that the effects of Core Path Users and Minor Roads and Access Tracks Road Users are also included in the further assessment, as these are located in the vicinity of Section 5 which would see a greater increase in construction traffic. It should also be noted the construction phase is transitory in nature.
- 10.9.31 A review of existing road capacity has been undertaken using the DRMB, Volume 15, Part 5 "The NESA Manual". The theoretical road capacity has been estimated for each of the road links for a 12-hour period that makes up the study area. The results are summarised in **Table V2-10.36**.

Table V2-10.36: 2024 Daily Traffic Capacity Review Summary - Section 5

Ref. No.	Survey Location	2024 Baseline Flow	Theoretical Capacity	2024 Base + Development Flows	2024 Base + Development Used Capacity %	Spare Road Capacity %
ATC 4	Unclassified road, to the north of Loch Garry*	216	3360	329	10%	90%
DfT. 17	A87, West of Bunloinn*	2343	19200	3266	17%	83%
DfT. 18	A87, South of Bunloinn*	1554	21600	2413	11%	89%
DfT. 19	A887, East of Bunloinn*	1038	21600	1329	6%	94%
DfT. 20	A82, Laggan	4382	21600	5432	25%	75%

Please note minor variances due to rounding may occur.

10.9.32 The results indicate there are no road capacity issues with the Proposed Development and ample spare capacity exists within the trunk and local road network to accommodate construction phase traffic.

10.10 Section 6: Invergarry to Fort Augustus

Extent of the Study Area

10.10.1 Strategic access to the Proposed Development within Section 6 is available from the A82 (T).

10.10.2 The extent of the study area for Section 6 is as follows:

- A82 (T) between Letterfinlay and Fort Augustus; and
- Unclassified road, to the west of Great Glen Way, Fort Augustus.

^{*} Survey locations lies within the locality of Section 5

10.10.3 The extent of Section 6 study area is illustrated in Appendix V2-10.1.

Baseline

Existing Traffic Conditions

- 10.10.4 The Proposed Development within Section 6 would be accessed from a combination of new and temporary and existing access tracks. The locations of the access tracks to Section 6 of the Proposed Development are shown in **Appendix V2-10.1**.
- 10.10.5 In order to assess the impact of the construction traffic on the Section 6 study area, traffic data was collected by means of ATC surveys and by obtaining existing traffic data from the DfT database. Further details of the locations of the count sites as well as the source of the traffic information which is used within the Section 6 study area is presented in **Appendix V2-10.1**.
- 10.10.6 The count sites used in the study area for Section 6 are as follows:
 - Unclassified road, to the west of Great Glen Way;
 - A82, Laggan;
 - · A82, Aberchalder; and
 - A82, South of Invermoriston.
- 10.10.7 The traffic counters allowed the traffic flows to be split into vehicle classes. The data was summarised into LGVs and HGVs (all goods vehicles >3.5 tonnes gross maximum weight). A summary of the results for the average 24-hour daily period is provided in **Table V2-10.37**.

Table V2-10.37: 2022 Existing Traffic Conditions (Average Two Way Flows) - Section 6

Ref. No.	Survey Location	Car & LGV	HGV	Total
ATC 5	Unclassified road, to the west of Great Glen Way*	329	71	400
DfT. 20	A82, Laggan*	4072	263	4334
DfT. 21	A82, Aberchalder*	2923	198	3121
DfT. 22	A82, South of Invermoriston*	2608	183	2791

Please note minor variances due to rounding may occur.

10.10.8 The ATC sites used to provide traffic volume data were also used to collect speed statistics. The two-way five-day average and 85th percentile speeds observed at the count locations which are within the Section 6 study area are summarised below in **Table V2-10-38**. It should be noted that no speed survey information was available from the DfT count points.

^{*} Survey locations lies within the locality of Section 6



Table V2-10.38: 2022 Existing Traffic Conditions (Speed Summary) - Section 6

Ref. No.	Survey Location	Mean Speed (mph)	85th %ile Speed (mph)	Speed Limit (mph)
ATC 5	Unclassified road, to the west of Great Glen Way, Fort Augustus	25	31	30 mph

10.10.9 The speed information shown in Table V2-10.38 indicates that the 85th percentile speed recorded at the unclassified road to the west of Great Glen Way, Fort Augustus exceeds the speed limit at that location. This indicates that traffic management measures may be required at this location and that Police Scotland may wish to consider enforcement spot checks in this area.

Accident Review

- 10.10.10 During the five-year period between 01 January 2016 and 31 December 2020, the following accident data was recorded along the road links which are within the vicinity of Section 6 (as presented in Figure V2-10.3):
 - a total of 23 accidents were recorded on roads within Section 6 of which 16 were recorded as slight and seven as serious.
 - a total of six accidents involved motorcycles of which three incidents were recorded as serious and three incidents were recorded as slight;
 - the fatal accident which involved a motorcycle was a multi vehicle collision involving two other vehicles including a car and a bus. The incident occurred on a bend approximately 1 km to the south-west of Laggan;
 - one recorded accident involved HGVs, which was classified as a slight accident; and
 - a total of two incidents involved buses, both of which were recorded as slight accidents...

Cycle and Pedestrian Network

- 10.10.11A review of the online core path mapping available on THC's online mapping facility and information received from THC indicates that the following Core Paths are located in the vicinity of the Proposed Development within Section 6:
 - Aldernaig Burn to Loch Lundie (LO11.02) (PRoW HL32);
 - Bridge of Oich to Loch Lundie (IN16.09); and
 - Bridge of Oich to Torr Dhuin (IN16.10).
- 10.10.12NCR 78 which forms part of The Caledonia Way and comprises a combination of both traffic-free and on-road cycle route is located within the vicinity of Section 6 of the Proposed Development.

Future Baseline

- 10.10.13Construction of the Skye Reinforcement Project is expected to commence in 2024, if consent is granted, and the total construction of the Proposed Development (Section 0-6) is anticipated to take approximately three years and seven months.
- 10.10.14To assess the likely effects during the construction and typical operational phases, base year flows were forecast by applying a NRTF low growth factor to the 2022 flows in Table V2-10.38. The NRTF low growth factor for 2022 to 2024 is 1.011.
- 10.10.15The estimated Future Baseline Flows are shown in Table V2-10.39. This will be used in the Construction Peak Traffic Impact Assessment.



Table V2-10.39: Future Baseline Flows (2024 Flows) - Section 6

Ref. No.	Survey Location	Car / LGV	HGV	Total
ATC 5	Unclassified road, to the west of Great Glen Way*	333	71	404
DfT. 20	A82, Laggan*	4116	266	4382
DfT. 21	A82, Aberchalder*	2955	200	3156
DfT. 22	A82, South of Invermoriston*	2637	185	2822

Summary of Sensitive Receptors

10.10.16A summary of the sensitive receptors within the Section 6 study area is presented in Table V2-10.40.

Table 10.40: Summary of Sensitive Receptors - Section 6

Receptor	Sensitivity	Justification				
A82 (T) / A87 (T) Road Users	Low	Where the road is Trunk or A-class, constructed to accommodate significant HGV composition.				
Road Users of Unclassified road, to the west of Great Glen Way*	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs.				
Minor Roads and Access Tracks Road Users	High	Where the road is a minor rural road, not constructed to accommodate frequent use by HGVs.				
Invermoriston Residents	Low	Where a location is a small rural settlement, few community or public facilities or services.				
Fort Augustus Residents	High	Where a location is a large rural settlement containing a high number of community and public services and facilities.				
Invergarry Residents	Medium	Where a location is an intermediate sized rural settlement, containing some community or public facilities and services.				
Core Paths	High	Minor path used by walkers and cyclists, not constructed to accommodate HGV traffic flows.				

- 10.10.17Where a road passes through a location, users are considered subject to the highest level of sensitivity defined by either the road or location characteristics.
- 10.10.18Based on the examples of sensitive areas (e.g. hospitals, churches, schools, historical buildings), as outlined in the Magnitude of Effect section earlier in this Chapter (paragraph 10.3.19, the following areas are considered sensitive and will be subject to 'Rule 2' of the IEMA Guidelines which requires a full assessment of effects if the locations are subject to an increase in 10 % of traffic:
 - Fort Augustus;
 - Invergarry; and

^{*} Survey locations lies within the locality of Section 6



Core Paths.

- 10.10.19All other locations within the study area are subject to 'Rule 1' and are assessed if traffic flows (or HGV flows) on highway links increase by more than 30 %.
 - Assessment of Likely Significant Effects

Construction Effects

- 10.10.20Traffic generation for Sections 1 to 6 is presented in **Appendix V2-10.1** and have been estimated by SSEN Transmission, based upon their experience from similar projects.
- 10.10.21As it is assumed that all seven Sections would be constructed concurrently, in order to assess the impact of the Proposed Development, construction trips associated with Sections 0, 1, 2, 3, 4 and 5 which are expected to impact road links on the Section 6 study area must also be considered.
- 10.10.22The construction traffic was compared against the future baseline traffic to estimate the increase in traffic associated with the Proposed Development. Table V2-10.41 illustrates the potential traffic impact of construction activity.

Table V2-10.41: Traffic Impact Summary - Section 6

Ref. No.	Survey Location	Car / LGV	HGV	Total	Car / LGV % Increase	HGV % Increase	Total % Increase
ATC 5	Unclassified road, to the west of Great Glen Way*	458	197	655	37.69%	176.04%	62.09%
DfT. 20	A82, Laggan*	4898	534	5432	18.99%	101.02%	23.96%
DfT. 21	A82, Aberchalder*	3081	264	3345	4.25%	31.94%	6.00%
DfT. 22	A82, South of Invermoriston*	2762	310	3073	4.76%	67.84%	8.89%

Please note minor variances due to rounding may occur.

- 10.10.23The total traffic flows are expected to increase by over 30 % at the unclassified road, to the west of Great Glen Way (ATC 5). The total flows are expected to increase by 251 movements which equates to approximately 25 movements per hour which is not considered significant in terms of overall flows.
- 10.10.24HGV trips are expected to increase by over 30 % on all links within the Section 6 study area and are described as follows:
 - Unclassified road, to the west of Great Glen Way (ATC 5) which sees an increase in HGVs by 125
 HGVs per day which equates to over 12 HGVs per hour (6 inbound HGV trips and 6 outbound HGV
 trips);
 - A82, Laggan (DfT 20) which sees an increase in HGVs by 268 HGVs per day which equates to 27 HGVs per hour (14 inbound HGV trips and 14 outbound HGV trips);
 - A82, Aberchalder (DfT 21) which sees an increase in HGVs by 64 HGVs per day which equates to approximately 6 HGV trips per hour (3 inbound HGV trips and 3 outbound HGV trips); and

^{*} Survey locations lies within the locality of Section 6

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 - A82, south of Invermoriston (DfT 22) which sees an increase in HGVs by 125 HGVs per day which
 equates to over 12 HGVs per hour (6 inbound HGV trips and 6 outbound HGV trips).
 - 10.10.25The increases in HGV flows listed above are not considered significant in terms of overall total flows.
 - 10.10.26**Table V2-10.41** suggests that traffic passing through the following sensitive locations (examples in paragraph 10.3.19) will increase by more than 10 % (Rule 2) and so road users passing through these locations and residents of these locations should be assessed further:
 - Fort Augustus; and
 - Invergarry.
 - 10.10.27The results in **Table V2-10.41** suggests that the increase in either total flows or HGVs exceed 30 % (Rule 1) for the following receptors:
 - Users of A82 (T);
 - · Unclassified road, to the west of Great Glen Way; and
 - Invermoriston residents.
 - 10.10.28In summary, the following receptors are being brought forward for overall assessment:
 - Users of A82 (T);
 - Unclassified road, to the west of Great Glen Way;
 - · Invermoriston residents;
 - · Fort Augustus residents; and
 - Invergarry residents.
 - 10.10.29It should be noted that the effects of Core Path Users and Minor Roads and Access Tracks Road Users are also included in the further assessment, as these are located in the vicinity of Section 6 which would see a greater increase in construction traffic. It should also be noted the construction phase is transitory in nature.
 - 10.10.30A review of existing road capacity has been undertaken using the DRMB, Volume 15, Part 5 "The NESA Manual". The theoretical road capacity has been estimated for each of the road links for a 12-hour period that makes up the study area. The results are summarised in **Table V2-10.42**.

Table V2-10.42: 2024 Daily Traffic Capacity Review Summary - Section 6

Ref. No.	Survey Location	2024 Baseline Flow	Theoretical Capacity	2024 Base + Development Flows	2024 Base + Development Used Capacity %	Spare Road Capacity %
ATC 5	Unclassified road, to the west of Great Glen Way*	404	3360	655	19%	81%
DfT. 20	A82, Laggan*	4382	21600	5432	25%	75%
DfT. 21	A82, Aberchalder*	3156	21600	3345	15%	85%
DfT. 22	A82, South of Invermoriston*	2822	19200	3073	16%	84%

^{*} Survey locations lies within the locality of Section 6

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- 10.10.31The results indicate there are no road capacity issues with the Proposed Development and ample spare capacity exists within the trunk and local road network to accommodate construction phase traffic.
- 10.11 Overall Construction Phase Effects Section 0 6
- 10.11.1 The significance of the predicted construction effects has been determined for the whole of the Proposed Development. The assessment has been based on the rules and thresholds outlined in **Table V2-10.2** and paragraph 10.3.20, and, the sensitive receptors which were identified as exceeding the assessment thresholds based on Rules 1 or 2, as outlined in 10.3.18.
- 10.11.2 **Table V2-10.43** summarises the significance on the receptors for the construction phase identified for each of the assessed Sections.

Table V2-10.43: Overall Construction Phase Effects (Sections 0 - 6)

Applicable Section Study Area	Receptors	Severa nce	Driver Delay	Pedestria n Delay	Amenity	Fear	Accidents & Safety
0-5/0- 6/4-5	Users of A87 (T) / A82 (T) / A887 (T)	Slight	Slight	Slight	Moderate / Slight	Moderate / Slight	Moderate / Slight
0 - 1	Users of A863	Slight	Slight	Slight	Moderate	Moderate	Moderate
4	Glenelg Residents	Slight	Slight	Slight	Slight	Slight	Slight
4 & 5	Users of the unclassified road to the north of Loch Garry	Large	Large	Large / Moderate	Large	Large	Large
4	Unclassifie d road Skye Ferry	Slight	Slight	Slight	Moderate /Slight	Moderate /Slight	Moderate /Slight
6	Users of the unclassified road to the west of Great Glen Way	Large	Large	Large / Moderate	Large	Large	Large
0 - 3	Broadford Residents	Slight / Neutral	Slight / Neutral	Slight / Neutral	Moderate	Moderate	Moderate
0 - 4	Kyle of Lochalsh Resident	Slight / Neutral	Slight / Neutral	Slight / Neutral	Moderate	Moderate	Moderate
0 - 4	Auchtertyre Resident	Neutral	Neutral	Neutral	Slight	Slight	Slight
0 - 4	Dornie Residents	Slight / Neutral	Slight / Neutral	Slight / Neutral	Slight	Slight	Slight



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Applicable Section Study Area	Receptors	Severa nce	Driver Delay	Pedestria n Delay	Amenity	Fear	Accidents & Safety
0 - 4	Inverinate Residents	Neutral	Neutral	Neutral	Slight	Slight	Slight
0 - 4	Shiel Bridge Residents	Neutral	Neutral	Neutral	Slight	Slight	Slight
0 - 6	Invergarry Residents	Slight / Neutral	Slight / Neutral	Slight / Neutral	Large / Moderate	Large / Moderate	Large / Moderate
6	Fort Augustus Residents	Slight	Slight	Slight	Moderate / Slight	Moderate / Slight	Moderate / Slight
4 - 6	Invermorist on Residents	Slight / Neutral	Slight / Neutral	Slight / Neutral	Slight	Slight	Slight
0 - 6	Road Users of Minor Roads and Access Tracks	Large	Large	Large / Moderate	Large	Large	Large
0 - 6	Core Paths	Large	Slight	Large / Moderate	Large	Large	Large

- 10.11.3 The assessment of significance shows that the following receptors would experience significant effects prior to the application of mitigation measures:
 - users of C1223 (Old Military Road);
 - users of the unclassified road to the north of Loch Garry;
 - users of the unclassified road to the west of Great Glen Way;
 - · road users of minor roads and access tracks; and
 - · Core Paths.
- 10.11.4 It should be noted that the effects of the construction period are transitory in nature.

10.12 Mitigation

Mitigation During Construction

Construction Traffic Management Plan

- 10.12.1 The following measures would be implemented through a Construction Traffic Management Plan (CTMP) during the construction phase and will apply to all Sections of the Proposed Development i.e. Sections 0 6.

 The CTMP would be agreed with THC and Transport Scotland prior to construction works commencing:
 - where possible the detailed design process would minimise the volume of material to be imported to Site to help reduce HGV numbers;
 - the use of helicopters for the delivery of materials from identified laydown areas is proposed to be
 utilised in Section 0, and within more remote parts of the line (e.g. part of Section 3) to minimise
 vehicular access where practicable;



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 - a Site worker transport and travel arrangement plan, including transport modes to and from the worksite (including pick up and drop off times);
 - all materials delivery lorries (dry materials) should be sheeted to reduce dust and stop spillage on public roads;
 - specific training and disciplinary measures should be established to ensure the highest standards are maintained to prevent construction vehicles from carrying mud and debris onto the carriageway;
 - wheel cleaning facilities may be established at the Site entrance, depending the views of THC;
 - normal site working hours would be limited to between the following hours:
 - March to September 07:00 to 19:00 Weekdays and 07:00 to 16:00 Weekends
 - October to February 07:30 to 17:00 Weekdays and 08:00 to 16:00 Weekends;
 - appropriate traffic management measures would be put in place on the A87 and A82 to avoid conflict with general traffic, subject to the agreement of the roads authority, this includes single lane closures along the A87 to facilitate underground cable works to the east of Sligachan. Typical measures would include HGV turning and crossing signs and / or banksmen at the Site access and warning signs, as well as temporary traffic LGV on the A87 to enable traffic flows in both directions in the area affected by the installation of underground cables. Where possible, construction traffic would avoid using the B885, to the east and this would be highlighted to drivers through signage;
 - provide construction updates on the project website and or a newsletter to be distributed to residents within an agreed distance of the Site;
 - adoption of a voluntary speed limit of 20 mph for all construction vehicles travelling through local villages and towns;
 - adoption of a maximum speed limit of 15 mph for all construction vehicles travelling on private roads and tracks;
 - all drivers would be required to attend an induction to include:
 - a tool box talk safety briefing;
 - · the need for appropriate care and speed control;
 - a briefing on driver speed reduction agreements (to slow Site traffic at sensitive locations through the villages); and
 - identification of the required access routes and the controls to ensure no departure from these routes.
 - 10.12.2 THC and Transport Scotland may require an agreement to cover the cost of abnormal wear and tear on roads within the study area. Video footage of the pre-construction phase condition of the construction vehicles route would be recorded to provide a baseline of the state of the road prior to any construction work commencing. This baseline would inform any change in the road condition during the construction stage of the Proposed Development. Any necessary repairs would be coordinated with the Roads Authority. Any damage caused by traffic associated with the Proposed Development, during the construction period that would be hazardous to public traffic, would be repaired immediately.
 - 10.12.3 Any damage to road infrastructure caused directly by construction traffic would be made good, and street furniture that is removed on a temporary basis would be fully reinstated.
 - 10.12.4 There would be a regular road edge review and any debris and mud would be removed from the public carriageway to keep the road clean and safe during the initial months of construction activity, until the construction junction and immediate access track works are complete.
 - 10.12.5 Overhead and underground high voltage crossing points will be identified prior to the commencement of construction activities and appropriate actions will be undertaken to highlight these



Access Improvements

10.12.6 All access junctions will be designed and constructed in accordance with THC design standards.

Passing Places

- 10.12.7 The provision and proposed locations of passing places will be discussed with THC during the recommencement stages of the works. Layby improvement works will ensure that expanded or new laybys on single carriageway sections will be suitable for two HGV and will accord with THC standards.
- 10.12.8 The locations and number of enhanced laybys will be agreed during a site visit with THC.
- 10.12.9 It should be noted that passing places would not be used by drivers of construction vehicles as a place to wait or as a place to park. Local residents would be able to report any instances of inappropriate driving or use of passing places to the project community liaison officer.
- 10.12.10 The Proposed Development is supportive of THC's proposals to upgrade the C1223 (Old Military Road) and will provide contributions with other sources for this to be upgraded. The detailed design of the improvements will be agreed with THC and a funding package developed from this.

Public Information

10.12.11 SSEN Transmission would also ensure information was distributed through its communication team via the project website, local newsletters and social media.

Outdoor Access Management Plan

- 10.12.12 Consideration would be given to pedestrians and cyclists alike due to potential interactions between construction traffic and users of core paths and other paths. These measures would be formulated into an Outdoor Access Management Plan (see Appendix V2-11.1: Draft Outdoor Access Management Plan in Volume 5 of this EIA Report).
- 10.12.13 The Principal Contractor would ensure that speed limits are always adhered to by their drivers and associated subcontractors. This is particularly important within close proximity to the core path and at crossing points. Advisory speed limit signage would also be installed on approaches to areas where core path users may interact with construction traffic.
- 10.12.14 Signage would be installed on the Site exit that makes drivers aware of local speed limits and reminding drivers of the potential presence of pedestrians and cyclists in the area. This would also be emphasised in weekly toolbox talks.
- 10.12.15 The British Horse Society has made recommendations on the interactions between HGV traffic and horses. Horses are normally nervous of large vehicles, particularly when they do not often meet them. Horses are flighty animals and will run away in panic if really frightened. Riders will do all they can to prevent this but, should it happen, it could cause a serious accident for other road users, as well as for the horse and rider.
- 10.12.16 The main factors causing fear in horses in this situation are:
 - · something approaching them, which is unfamiliar and intimidating;
 - · a large moving object, especially if it is noisy;
 - lack of space between the horse and the vehicle;
 - the sound of air brakes; and



- anxiety on the part of the rider.
- 10.12.17 The British Horse Society recommends the following actions that will be included in the Site training for all HGV staff:
 - on seeing riders approaching, drivers must slow down and stop, minimising the sound of air brakes, if possible;
 - if the horse still shows signs of nervousness while approaching the vehicle, the engine should be shut down (if it is safe to do so);
 - the vehicle should not move off until the riders are well clear of the back of the HGV;
 - if drivers are wishing to overtake riders, please approach slowly or even stop in order to give riders time to find a gateway or lay by where they can take refuge and create sufficient space between the horse and the vehicle. Because of the position of their eyes, horses are very aware of things coming up behind them; and
 - all drivers delivering to the Site must be patient. Riders will be doing their best to reassure their horses while often feeling a high degree of anxiety themselves.

Operational Phase Mitigation

10.12.18 Site entrance roads would be well maintained and monitored during the operational life of the development.

Regular maintenance would be undertaken to keep the Site access track drainage systems fully operation and to ensure there are no run-off issues onto the public road network.

10.13 Residual Effects

- 10.13.1 An evaluation of the predicted residual effects of the increase in traffic on the study area roads used for construction traffic has been undertaken. The summary of this assessment is provided in **Table V2-10.46**.
- 10.13.2 The assessment confirms that the predicted residual effects (i.e. after the implementation of mitigation) would be minor in nature and they would not be significant. The construction traffic effects are transitory in nature. There are no long-lasting detrimental transport or access issues associated with the construction phase of the Proposed Development.

10.14 Cumulative Effects

- 10.14.1 A review of the consented developments to be included in the cumulative assessment is presented in Appendix V2-10.1. Although only consented schemes are considered as committed developments and are included in the assessment of cumulative effects, the proposed extensions to Broadford and Edinbane Substations are closely linked with the Proposed Development, and it is anticipated that they will be constructed in the same time period. As a consequence, construction traffic associated with the extensions to the Substations has been included in the following combined sensitivity review.
- 10.14.2 Indicative traffic information for the construction works associated with the extension of the Substations was provided by SSEN Transmission, as the trips associated with the Substation developments are currently being progressed. In line with the approach taken to calculate the average daily trips for the Proposed Development, the total trips associated with the construction works associated with the extensions of the Substations was divided by the anticipated construction programme length for each of the Substation developments. This is anticipated to be 24 months for Edinbane Substation and 20 months for Broadford Substation.
- 10.14.3 The average traffic flows for both sites are presented in **Table V2-10.44** and compared to the future baseline year in **Table V2-10.45**.



Table V2-10.444: Combined Sensitivity Review Average Daily Traffic Summary

Ref. No.	Survey Location	Skye Reinfo	rcement	Edinbane Substation			Broadford Substation		Total	
		Cars & LGV	HGV	Cars & LGV	HGV	Cars & LGV	HGV	Cars & LGV	HGV	
ATC 1	B886	10	1					10	1	
ATC 2	Unclassified road linking A863 and A850	3	0					3	0	
ATC 3	C1223 (Old Military Road)	57	36					57	36	
ATC 4	Unclassified road, to the north of Loch Garry	70	43					70	43	
ATC 5	Unclassified road, to the west of Great Glen Way	125	125					125	125	
DfT. 1	A850, South of Fairy Bridge	8	1					8	1	
DfT. 2	A850, East of Dunvegan	8	1					8	1	
DfT. 3	A863, Kilmuir	3	0					3	0	
DfT. 4	A850, Edinbane	16	2	253	46			269	48	
DfT. 5	A863, Ose	3	1					3	1	
DfT. 6	A863, North of Drynoch	138	51					138	51	
DfT. 7	A863, East of Drynoch	138	51					138	51	
DfT. 8	A87, South of Portree	92	15	253	46			345	61	
DfT. 9	A87, West of Broadford	567	157	253	46			820	204	
DfT. 10	B8083, South of Broadford	5	3			303	56	308	59	
DfT. 11	A87, Broadford	576	170	253	46	303	56	1,132	272	
DfT. 12	A87, Broadford Aerodrome	576	170	253	46	303	56	1,132	272	
DfT. 13	A851, Duisdealmor	17	8					17	8	

Ref. **Survey Location** Edinbane Broadford Total Skye Reinforcement Substation Substation No. HGV **HGV HGV** Cars Cars Cars **HGV** Cars LGV LGV LGV LGV A87, Kyle of **DfT. 14** 576 170 253 46 303 56 1,132 272 Lochalsh **DfT. 15** 253 272 A87, Near Keppoch 576 170 46 303 56 1,132 **DfT. 16** U/C Skye Ferry 6 3 6 3 A87, West of DfT. 17 690 233 253 303 56 1,246 335 46 Bunloinn A87, South of **DfT. 18** 646 213 253 46 303 56 1,202 315 **Bunloinn** A887, East of **DfT. 19** 184 106 184 106 **Bunloinn** DfT. 20 A82, Laggan 782 268 253 46 303 56 1,338 370 DfT. 21 A82, Aberchalder* 125 64 125 64 A82, South of DfT. 22 125 125 125 125 Invermoriston

Table V2-10.45: Combined Scheme Sensitivity Traffic Impact Summary

Ref. No.	Survey Location	Cars & LGV	HGV	Total	Cars & LGV	HGV	Total
ATC 1	B886	457	149	605	2.23%	0.64%	1.83%
ATC 2	Unclassified road linking A863 and A850	369	118	487	0.81%	0.25%	0.67%
ATC 3	C1223 (Old Military Road)	512	192	704	12.55%	22.77%	15.16%
ATC 4	Unclassified road, to the north of Loch Garry	209	120	329	50.24%	56.40%	52.42%
ATC 5	Unclassified road, to the west of Great Glen Way	458	197	655	37.69%	176.04%	62.09%
DfT. 1	A850, South of Fairy Bridge	979	24	1,003	0.82%	3.38%	0.88%
DfT. 2	A850, East of Dunvegan	1,137	31	1,168	0.70%	2.57%	0.75%

Please note minor variances due to rounding may occur.



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Ref. No.	Survey Location	Cars & LGV	HGV	Total	Cars & LGV	HGV	Total
DfT. 3	A863, Kilmuir	1,210	40	1,249	0.25%	0.76%	0.26%
DfT. 4	A850, Edinbane	1,609	101	1,709	20.04%	90.81%	22.72%
DfT. 5	A863, Ose	829	15	845	0.35%	7.02%	0.47%
DfT. 6	A863, North of Drynoch	702	118	821	24.48%	76.11%	29.97%
DfT. 7	A863, East of Drynoch	1,337	119	1,456	11.52%	74.95%	14.94%
DfT. 8	A87, South of Portree	3,602	277	3,879	10.59%	28.30%	11.69%
DfT. 9	A87, West of Broadford	4,060	405	4,465	25.31%	101.12%	29.75%
DfT. 10	B8083, South of Broadford	1,266	88	1,354	32.17%	194.52%	37.09%
DfT. 11	A87, Broadford	7,800	468	8,269	16.97%	138.54%	20.45%
DfT. 12	A87, Broadford Aerodrome	5,041	476	5,516	28.96%	133.62%	34.14%
DfT. 13	A851, Duisdealmor	1,593	48	1,641	1.05%	21.55%	1.55%
DfT. 17	A87, West of Bunloinn	3,406	518	3,924	57.67%	183.22%	67.47%
DfT. 18	A87, South of Bunloinn	2,678	393	3,071	81.39%	406.69%	97.61%
DfT. 19	A887, East of Bunloinn	1,074	255	1,329	20.69%	71.42%	27.96%
DfT. 20	A82, Laggan	5,455	636	6,090	32.51%	139.41%	38.98%
DfT. 21	A82, Aberchalder*	3,081	264	3,345	4.25%	31.94%	6.00%
DfT. 22	A82, South of Invermoriston	2,762	310	3,073	4.76%	67.84%	8.89%

Please note minor variances due to rounding may occur.

- 10.14.4 The combined traffic flows indicate a large increase in traffic flows throughout the road network, however, there would be more than sufficient road capacity to accommodate this.
- 10.14.5 It is anticipated that any effects of these three developments being constructed at the same time would be addressed in an overarching Traffic Management and Monitoring Plan for all three developments.



10.15 Summary and Conclusions

- 10.15.1 The Proposed Development would lead to a temporary increase in traffic volumes on the road network within the study areas during the construction phase. Traffic volumes would fall considerably outside the peak period of construction.
- 10.15.2 For the purpose of this assessment, it is assumed that all of the Sections of the Proposed Development are being constructed at the same time. An assessment of average daily development trips is considered an appropriate method of assessing the impact of the Proposed Development on each Section, as this will account for peaks and troughs during the construction programme. The construction traffic would result in a temporary increase in traffic flows on the road network surrounding the Proposed Development.
- 10.15.3 No link capacity issues are expected on any of the roads assessed due to the additional movements associated with the Proposed Development. The effects of construction traffic are temporary in nature and are transitory.
- 10.15.4 A series of mitigation measures and management plans have been proposed to help mitigate and offset the impacts of the traffic flows from both the construction and operational phases of the Proposed Development.



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Table V2-10.466: Summary of Potential Significant Effects of the Proposed Development (Sections 0 – 6)

Likely Significant Effect	Mitigation Proposed	Means of Implementation	Outcome / Residual Effect							
Construction Phase	Construction Phase									
Severance	CTMP proposals	Via a condition of consent. CTMP to be agreed with Council Officers prior to construction activities commencing.	Not significant							
Driver delay	CTMP proposals and improved signage	Via a condition of consent. CTMP to be agreed with Council Officers prior to construction activities commencing.	Not significant							
Pedestrian delay	CTMP and Outdoor Access Management Plan proposals	Via a condition of consent. CTMP and PMP to be agreed with Council Officers prior to construction activities commencing.	Not significant							
Pedestrian amenity	CTMP and Outdoor Access Management Plan proposals	Via a condition of consent. CTMP and PMP to be agreed with Council Officers prior to construction activities commencing.	Not significant							
Fear and intimidation	CTMP and Outdoor Access Management Plan proposals	Via a condition of consent. CTMP and PMP to be agreed with Council Officers prior to construction activities commencing.	Not significant							
Accidents and safety	CTMP Proposals and Access Junction Design to THC standards.	CTMP Proposals, improved signage and develop signage strategy and agree works with THC. Construction of THC compliant access junctions.	Not significant							